

ComDat Antennas	Specifications		S Series	T Series	D Series
	dB Gain	FAA TSO	ComDat 248/2480	ComDat 268/2680	ComDat Data
Avidyne - Data Link					
Orbcomm		C37d C38d	248-10	268-10	
VHF/Orbcomm		C37d C38d	248-30	268-30	
GPS/Orbcomm	17.0 dB	C144	2480-101		
GPS/Orbcomm	26.5 dB	C144	2480-100	2680-100	
GPS/VHF/Orbcomm	17.0 dB	C144	2480-301		
GPS/VHF/Orbcomm	26.5 dB	C144	2480-300	2680-300	
GPS/VHF/SAT-ENT/WX	26.5 dB	C144		2680-400	
GPS/VHF/Orbcomm/SAT-ENT/WX	26.5 dB	C144		2680-500	
Chelton Flight Systems - GPS					
GPS	40.0 dB	C144			405-100
GPS/Orbcomm	40.0 dB	C144	2480-104	2680-104	
GPS/VHF	40.0 dB	C144	2480-204	2680-204	
GPS/VHF/Orbcomm	40.0 dB	C144	2480-304	2680-304	
GPS/VHF/SAT-ENT/WX	40.0 dB	C144		2680-404	
GPS/VHF/Orbcomm/SAT-ENT/WX	40.0 dB	C144		2680-504	
FreeFlight - GPS Systems					
GPS	40.0 dB	C144			405-100
GPS/VHF	40.0 dB	C144	2480-204	2680-204	
Garmin - GPS Systems					
GPS	17.0 dB	C129a			405-26
GarminAT	26.5 dB	C144			405-200
GarminAT	26.5 dB	C144			401-220
VHF (GPS Filtered)		C37d C38d	248-5	268-5	
GarminAT/Orbcomm (GDL 49)	26.5 dB	C144	2480-100	2680-100	
GPS/Orbcomm (GDL 49)	17.0 dB	C144	2480-101		
GarminAT/VHF	26.5 dB	C144	2480-200	2680-200	
GPS/VHF	17.0 dB	C129a	2480-201		
SAT-ENT/WX/VHF		C37d C38d		2680-206	
GarminAT/VHF/Orbcomm (GDL 49)	26.5 dB	C144	2480-300	2680-300	
GPS/VHF/Orbcomm (GDL 49)	17.0 dB	C129a	2480-301		
GarminAT/VHF/SAT-ENT/WX	26.5 dB	c144		2680-400	
GarminAT/VHF/Orbcomm/SAT-ENT/WX	26.5 dB	c144		2680-500	
Globalstar - Satellite Communications					
Globalstar	29.0 dB	c144			480-1
Honeywell - FIS and GPS Systems					
FIS (KDR 510)		C37d C38d	248-180		
GPS	26.5 dB	C144			405-200
GPS	26.5 dB	C144			401-220
VHF (GPS Filtered)		C37d C38d	248-5	268-5	
SAT-ENT/WX/VHF		C37d C38d		2680-206	
GPS/Orbcomm	26.5 dB	C144	2480-100	2680-100	
GPS/VHF	26.5 dB	C144	2480-200	2680-200	
GPS/VHF/Orbcomm	26.5 dB	C144	2480-300	2680-300	
GPS/VHF/SAT-ENT/WX	26.5 dB	C144		2680-400	
GPS/VHF/Orbcomm/SAT-ENT/WX	26.5 dB	C144		2680-500	
Iridium - Satellite Communication					
Iridium	Passive	C144			490-1
Orbcomm - LEO/WX Data Link					
Orbcomm		C37d C38d	248-10	268-10	
VHF/Orbcomm		C37d C38d	248-30	268-30	
GPS/Orbcomm	26.5 dB	C144	2480-100	2680-100	
GPS/Orbcomm	17.0 dB	C144	2480-101		
GPS/VHF/Orbcomm	26.5 dB	C144	2480-300	2680-300	
GPS/VHF/Orbcomm	17.0 dB	C129a	2480-301		
Sirius - WX/Satellite Entertainment					
SAT-ENT/WX/VHF		C37d C38d		2680-206	
GPS/WX/Entertainment	26.5 dB	C144			401-420
Universal - GPS Systems					
GPS	26.5 dB	C144			405-200
GPS	26.5 dB	C144			401-5-B
VHF (GPS Filtered)		C37d C38d	248-5	268-5	
GPS/Orbcomm	26.5 dB	C144	2480-100	2680-100	
GPS/VHF	26.5 dB	C144	2480-200	2680-200	
GPS/VHF/Orbcomm	26.5 dB	C144	2480-300	2680-300	
WSI - WX/Weather Satellite					
WSI	27.0 dB	STC			1530-1
WSI/VHF	27.0 dB	C37d C38d	2480-205	2680-205	
XM - WX/Satellite Entertainment					
XM/Weather		STC			420-1
XM/VHF/Weather		C37d C38d	2480-206	2680-206	
GPS/WX/Entertainment	26.5 dB	C144			401-420

Application Notes:
 CI 248-30, CI 2480-300, -301, -304
 CI 268-30, CI 2680-300, -301, -304, -500, -504

Requires Avidyne Flightmax DC50 Antenna Coupler

Avidyne, Flightmax DC50, Chelton Flight Systems, FreeFlight, Garmin, GDL49, Globalstar, Honeywell, KDR510, Iridium, Orbcomm, Sirius, Universal, WSI, XM and ComDat are trademarks and/or registered trademarks of their respective parent companies or corporations.
 Applications listed are for reference only. Applicability of installations is at the discretion of the installer of FAA approved authority.

What is ComDat?

ComDat stands for Communications / Data, and represents a new series of antennas made exclusively by Comant. These antennas acquire data for some of the newest aviation systems being offered, such as Orbcomm, Iridium, WSI, XM Satellite Radio, as well as GPS and VHF.

How are ComDat antennas different?

ComDat antennas combine many of these new antenna requirements into one, reducing the number of antennas an aircraft requires in order to utilize services such as Orbcomm or GPS. Plus, most ComDat antennas are packaged in Comant's new 248/2480 radome shell, offering a sleek, low drag package that is as tough as it is good looking.

How are ComDat antennas the same?

ComDat antennas share Comant's standard VHF (CI 121) and teardrop GPS (CI 405 series) footprints, making them virtual drop-ins for installation ease.

Why is the concept of combining antennas important?

With the proliferation of new systems like Orbcomm or WSI, etc., there is simply not enough room on aircraft (especially smaller GA aircraft) to accommodate more antennas. Airframe builders like Cessna, Piper and Cirrus must offer these new systems to their customers, and are demanding that the required antennas be combined with other systems in order to save space and reduce drag.

This sounds simple. Why hasn't it been done before?

Various antenna frequencies can interfere with each other. For example, VHF can interfere with GPS, rendering GPS useless. That's why separate VHF and GPS antennas must be at least three feet apart when mounted on an aircraft. In the case of the combined GPS/VHF ComDat, Comant has patented an integrated third-order notch filter, removing the harmful VHF harmonics that interfere with GPS reception.

What makes the CI 248-5 VHF a ComDat antenna? How is it different from other VHF antennas?

The ComDat CI 248-5 VHF antenna contains an integrated GPS notch filter. This eliminates the need for this stand-alone VHF to be three feet away from a GPS antenna, making more room available on the airframe. For example, single engine Cessna aircraft have both VHF antennas, and the GPS antenna on the wing above the cockpit. Installing a VHF/GPS combination and a CI 248-5 in this area will eliminate the need for in-line notch filters on the coax.

How does the VHF/GPS/Orbcomm ComDat work? Does it have three connectors?

Comant has worked closely with Avidyne in the development of these models. As with other combination ComDat antennas, this version has just two connectors. Comant developed a wide-band VHF antenna that operates over the VHF/Orbcomm frequencies. Avidyne developed a specialized switch that allows VHF communications (Com 2 suggested) when required, and Orbcomm transmit/receive when activated.

What else is new in the ComDat line?

Comant has developed a 40dB amplifier that will work with Chelton Flight Systems, Trimble, and FreeFlight. It's available as a stand-alone 405 Series or in combination with VHF and/or Orbcomm. We have also developed a 17dB amplifier for Garmin, and FIS antenna for Honeywell's KDR510, and Iridium antennas.

Can we get WSI or XM antennas from Comant?

Although manufactured by Comant, currently these antennas are available exclusively from their designated suppliers.

Are ComDat GPS antennas approved for Category 1 NPA's, or ILS?

ComDat antennas are TSO'd to C129a or C144. Comant is working closely with Honeywell and Garmin to assure that ComDat antennas are approved and listed in installation manuals for their GPS systems. In almost every case, the FAA currently allows ComDat antenna installations by citing Advisory Circular 20-41A for the substitution of TSO equipment for functionally similar TSO approved equipment.

COMDAT™ VHF Communications

Frequency 118-137 MHz

Model CI 248-5 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts
Harmonic Rejection	80 dB typical

Mechanical	
Weight	0.52 lbs. maximum
Height	17" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	350 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

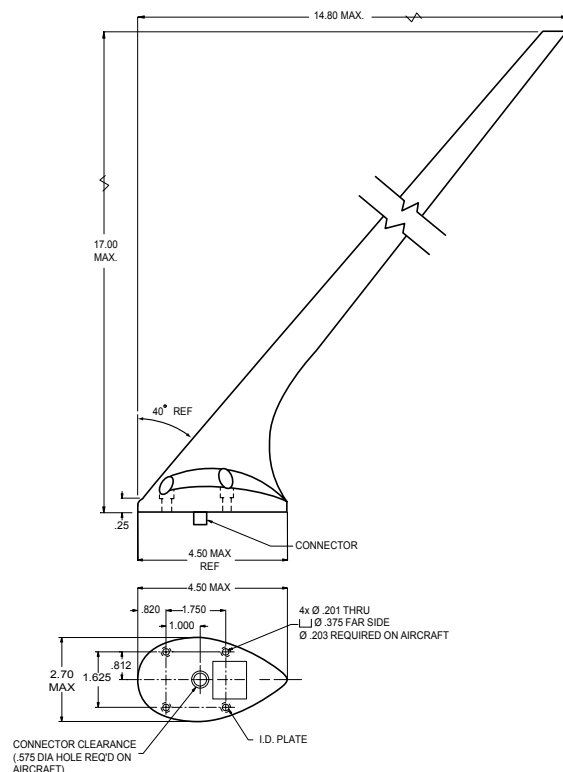
Order Options	
Connector	
BNC	Standard
Color	
White	Standard



This sleek new design was developed for Cessna's 182 and 182T aircraft. Impressive with its low-drag and good looks, the CI 248-5 has been credited with adding 2 to 3 Knots on certain aircraft. The first totally new look in VHF antennas in decades, the CI 248-5 was tested to some of the most rigorous requirements outlined in RCTA DO-160D. Rated to 350 Knots for most high powered twins, the antenna is also certified for helicopter applications.

Truly unique, the CI 248-5 is the only VHF antenna with a built-in notch filter, this allows the CI248-5 to be placed in close proximity to GPS antennas without interference issues.

P/N CI 248-5



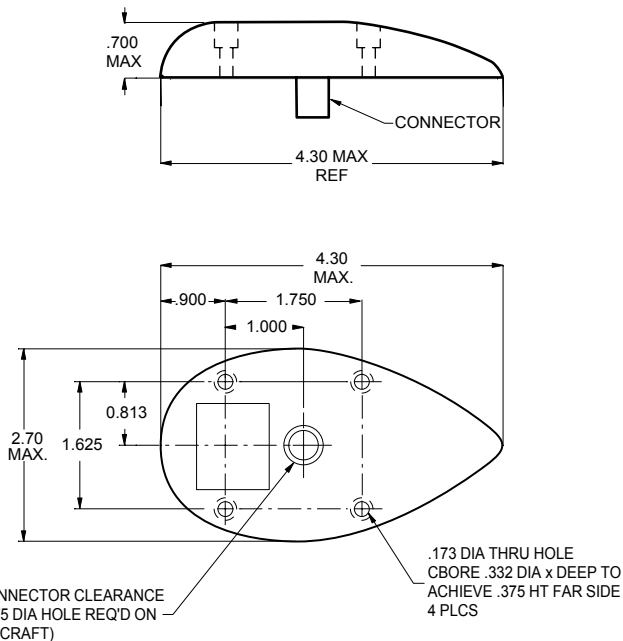
COMDAT™ GPS

Frequency 1575.42 MHz 17dB Gain



Active GPS antenna designed for airborne applications for aircraft up to 600 knots. All 405 series antennas offer DC grounding and have passed rigorous Lightning Direct Effects testing as prescribed in DO-160C. Teardrop footprint allows for drop-in replacement in many popular VHF footprints. The CI 405-26 was specifically designed for use with Garmin™ GPS receivers. Available in many standard formats as listed. Additional designs with various gain and filter configurations are available.

P/N CI 405-26



Model CI 405-26 GPS

Electrical	
Frequency	1575.42 ± 2 MHz
Polarization	RHCP
Axial Ratio (Boresight)	3 dB maximum
Power Handling	1 Watt
Radiation Coverage (Gain)	-1.0 dBic ≤ θ < 75° -2.5 dBic ≤ θ < 80° -4.5 dBic ≤ θ < 85° -7.5 dBic ≤ θ = 90° (horizon) +5.0 dBic (nominal) @ θ = 0° (zenith)

Amplifier	
Voltage	5VDC
Nominal Gain	17dB ± 3 dB
Noise Figure	3.0 dB maximum
Impedance	50 OHMS
VSWR	2.0:1 maximum output
Out of Band Rejection	35 dB minimum @ 626 MHz
Power Handling	50 mA maximum
Lightning	DC grounded

Mechanical	
Weight	0.3 lbs. maximum
Height	0.75" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	TNC (female)
Footprint	Teardrop (compatible to standard VHF)

Environmental	
Temperature	-55° C to +85° C
Altitude	55,000'
Air Speed	600 Knots TAS

Federal Specifications	
RTCA Environmental	DO-160D
FAA TSO	C129a
RTCA MOPS	DO-208

Order Options

Connector	
BNC	CI 405-26

Color	
White	Standard

COMDAT™ GPS/Data Link Combination

Frequency 1575.42 MHz 26.5dB Gain 137-150.5 MHz

Model CI 2480-100 GPS/ Data Link Combination

GPS Electrical	
Frequency	1575.42 ± 3 MHz
Polarization	RHCP
Axial Ratio (Boresight)	3 dB maximum
Power Handling	1 Watt
Radiation Coverage (Gain)	-1.0 dBic ≤ θ < 75° -2.5 dBic ≤ θ < 80° -4.5 dBic ≤ θ < 85° -7.5 dBic ≤ θ = 90° (horizon) +5.0 dBic (nominal) @ θ = 0° (zenith)

Amplifier	
Voltage	5VDC
Gain	26.5 dB
Noise Figure	3.0 dB maximum
Impedance	50 OHMS
VSWR	2.0:1 maximum output
Out of Band Rejection	35 dB minimum @ 1626 MHz
Power Handling	50 mA maximum
Lightning	DC grounded

Data Link Electrical	
Frequency	137 to 150.5 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power Rating	50 Watts
VHF Harmonic Rejection	80 dB typical

Mechanical	
Weight	0.6 lbs. maximum
Height	17.0" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order option

Environmental	
Temperature	-55° C to +85° C
Altitude	55,000'
Air Speed	350 Knots TAS

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFXXSXXXXXXXXXX[C]
FAA TSO	C37d, C38d, C144
RTCA MOPS	DO-186A, DO-228

Order Options

Connector	
BNC	Data link port
TNC	GPS port

Color	
White	Standard

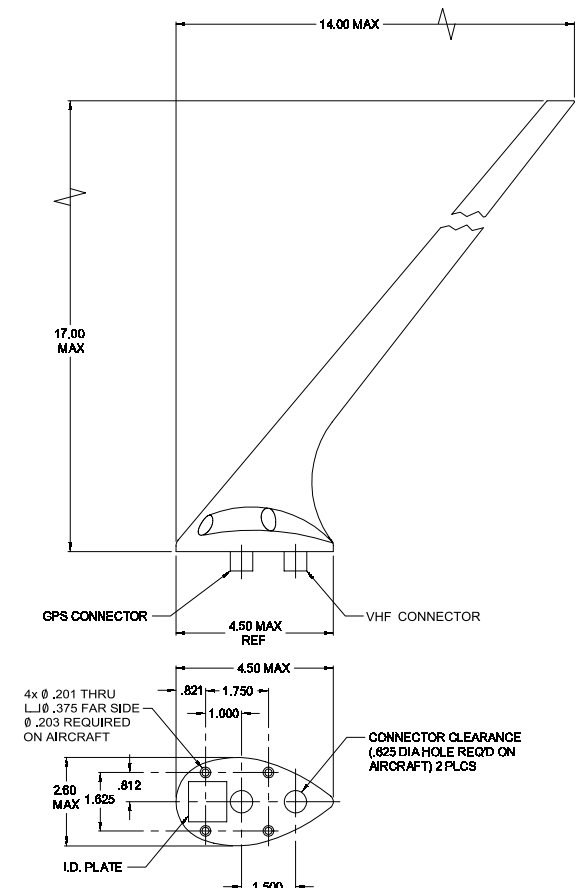
Gasket	
Gasket	C248006-2



Unique in concept and design, the CI 2480-100 ties the newest avionics systems into a simple, sleek antenna package. Using the CI 248 radome, this antenna provides GPS for Honeywell Bendix-King™ receivers and ORBCOMM™ Data Link Capability in a single footprint that matches standard VHF antenna configurations. This means the antenna offers nearly a "drop-in" installation process for your avionics technician.

The ORBCOMM™ LEO satellite constellation brings real time weather and e-mail within easy reach of any pilot. Plus, the CI 2480-100 GPS amplifier is specifically built for Honeywell Bendix-King™ receivers, providing optimum GPS performance.

P/N CI 2480-100



COMDAT™ GPS/Data Link Combination

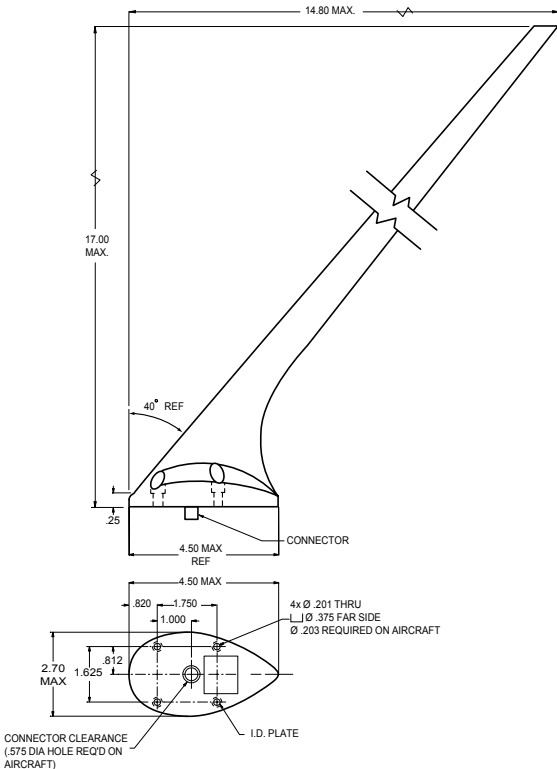
Frequency 1575.42 MHz 17dB Gain 118-150 MHz



Unique in concept and design, the CI 2480-101 ties the newest avionics systems into a simple, sleek antenna package. Using the CI 248 radome, this antenna provides GPS for Garmin™ receivers and ORBCOMM™ Data Link Capability in a single footprint that matches standard VHF antenna configurations. This means the antenna offers nearly a "drop-in" installation process for your avionics technician.

The ORBCOMM™ LEO satellite constellation brings real time weather and e-mail within easy reach of any pilot. Plus, the CI 2480-101 GPS amplifier is specifically built for Garmin™ receivers, providing optimum GPS performance.

P/N CI 2480-101



Model **CI 2480-101 VHF/ GPS Combination**

GPS Electrical

Frequency	1575.42 ± 3 MHz
Polarization	RHCP
Axial Ratio (Boresight)	3 dB maximum
Power Handling	1 Watt
Radiation Coverage (Gain)	-1.0 dBic ≤ Ø < 75° -2.5 dBic ≤ Ø < 80° -4.5 dBic ≤ Ø < 85° -7.5 dBic ≤ Ø = 90° (horizon) +5.0 dBic (nominal) @ Ø = 0° (zenith)

Amplifier

Voltage	5VDC
Gain	17dB ± 3 dB
Noise Figure	2.0 dB maximum/3.8 dB maximum
Impedance	50 OHMS
VSWR	2.0:1 maximum output
Out of Band Rejection	35 dB minimum @ 1626 MHz
Power Handling	20 mA maximum
Lightning	DC grounded

Data Link Electrical

Frequency	137 to 150.5 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power Rating	50 Watts
VHF Harmonic Rejection	80 dB typical

Mechanical

Weight	0.6 lbs. maximum
Height	17.0" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order option

Environmental

Temperature	-55° C to +85° C
Altitude	55,000'
Air Speed	350 Knots TAS

Federal Specifications

RTCA Environmental	DO-160D
Environmental	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)]
Category	XRFXXSXXXXXXXX[XX]C
FAA TSO	C37d, C38d, C144
RTCA MOPS	DO-228

Order Options

Connector

BNC	Data link port
TNC	GPS port

Color

White	Standard
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Gasket

Gasket	C248006-2
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COMDAT™ VHF/GPS Combination

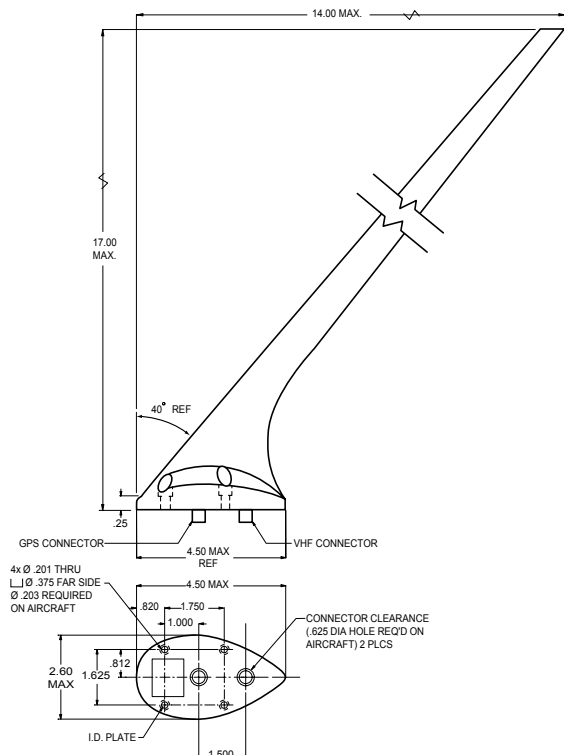
Frequency 1575.42 MHz 26.5dB Gain 118-137 MHz

Model	CI 2480-200 VHF/ GPS Combination
GPS Electrical	
Frequency	1575.42 ± 3 MHz
Polarization	RHCP
Axial Ratio (Boresight)	3 dB maximum
Power Handling	1 Watt
Radiation Coverage (Gain)	-1.0 dBic ≤ Ø < 75° -2.5 dBic ≤ Ø < 80° -4.5 dBic ≤ Ø < 85° -7.5 dBic ≤ Ø = 90° (horizon) +5.0 dBic (nominal) @ Ø = 0° (zenith)
Amplifier	
Voltage	5VDC
Gain	26.5 dB
Noise Figure	2.0 dB maximum
Impedance	50 OHMS
VSWR	2.0:1 maximum output
Out of Band Rejection	35 dB minimum @ 1626 MHz
Power Handling	50 mA maximum
Lightning	DC grounded
Data Link Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power Rating	50 Watts
VHF Harmonic Rejection	80 dB typical
Mechanical	
Weight	0.6 lbs. maximum
Height	17.0" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order option
Environmental	
Temperature	-55° C to +85° C
Altitude	55,000'
Air Speed	350 Knots TAS
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFXXSXXXXXXXXXX[XX]C
FAA TSO	C37d, C38d, C144
RTCA MOPS	DO-186A, DO-228
Order Options	
Connector	
BNC	VHF port
TNC	GPS port
Color	
White	Standard
Gasket	
Gasket	C248006-2 cork



All new design shares the popular CI 248 style. Combines both GPS and VHF Com functions in a single footprint. Same 4-hole mounting dimensions as popular VHF antennas. Provides separate connections—TNC for GPS and BNC for communication. Requires no other accessories for connection to panel-mount or handheld GPS/Comm receiver/transceiver "combos." Features a built-in notch filter for excellent performance in a single package, and a GPS amplifier designed specifically for Bendix-King™ GPS receivers. This patented design is perfect for helicopter applications, and has been tested under the toughest RTCA DO-160D environmental conditions.

P/N CI 2480-200



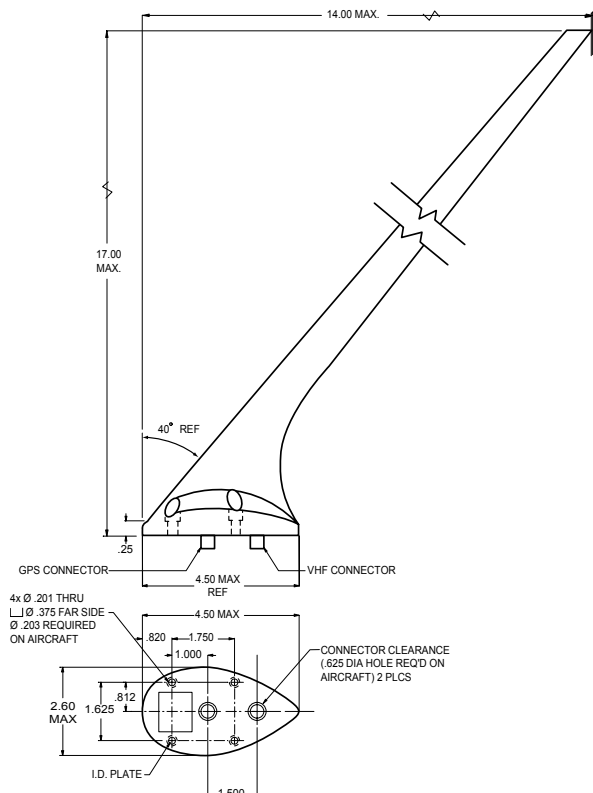
COMDAT™ VHF/GPS Combination

Frequency 1575.42 MHz 17dB Gain 118-137 MHz



All new design shares the popular CI 248 style. Combines both GPS and VHF Com functions in a single footprint. Same 4-hole mounting dimensions as popular VHF antennas. Provides separate connections—TNC for GPS and BNC for communication. Requires no other accessories for connection to panel-mount or handheld GPS/Comm receiver/transceiver "combos." Features a built-in notch filter for excellent performance in a single package, and a GPS amplifier designed specifically for Garmin™ GPS receivers. This patented design is perfect for helicopter applications, and has been tested under the toughest RTCA DO-160D environmental conditions.

P/N CI 2480-201



Model CI 2480-201 VHF/GPS Combination

GPS Electrical	
Frequency	1575.42 ± 3 MHz
Polarization	RHCP
Axial Ratio (Boresight)	3 dB maximum
Power Handling	1 Watt
Radiation Coverage (Gain)	-1.0 dBic ≤ Ø < 75° -2.5 dBic ≤ Ø < 80° -4.5 dBic ≤ Ø < 85° -7.5 dBic ≤ Ø = 90° (horizon) +5.0 dBic (nominal) @ Ø = 0° (zenith)

Amplifier	
Voltage	5vdc
Gain	17dB ± 3 dB
Noise Figure	2.0 dB maximum/ 3.8 dB maximum
Impedance	50 OHMS
VSWR	2.0:1 maximum output
Out of Band Rejection	35 dB minimum @ 1626 MHz
Power Handling	50 mA maximum
Lightning	DC grounded

VHF Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power Rating	50 Watts
VHF Harmonic Rejection	80 dB typical

Mechanical	
Weight	0.6 lbs. maximum
Height	17.0" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order option

Environmental	
Temperature	-55° C to +85° C
Altitude	55,000'
Air Speed	350 Knots TAS

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[F2X]ACB[S(L)U(F)T(C,C1,R)] XRFXXSXXXXXXXX[XX]C
FAA TSO	C37b, C38d, C129a
RTCA MOPS	DO-208

Order Options	
Connector	
BNC	VHF port
TNC	GPS port

Color	
White	Standard

Gasket	
Gasket	C248006-2 cork

COMDAT™ VHF/GPS/ Orbcomm

Frequency 1575.42 MHz 26.5dB Gain 118-137 MHz 137-150.5 MHz

Model	CI 2480-300	
	VHF/GPS/Orbcomm	
GPS Electrical		
Frequency	1575.42 ± 3 MHz	
Polarization	RHCP	
Axial Ratio (Boresight)	3 dB maximum	
Power Handling	1 Watt	
Radiation Coverage (Gain)	-1.0 dBic ≤ θ < 75° -2.5 dBic ≤ θ < 80° -4.5 dBic ≤ θ < 85° -7.5 dBic ≤ θ = 90° (horizon) +5.0 dBic (nominal) @ θ = 0° (zenith)	
Amplifier		
Voltage	5VDC	
Gain	26.5 dB	
Noise Figure	2.0 dB maximum	
Impedance	50 OHMS	
VSWR	2.0:1 maximum output	
Out of Band Rejection	35 dB minimum @ 1626 MHz	
Power Handling	50 mA maximum	
Lightning	DC grounded	
Data Link Electrical		
	VHF	ORBCOMM
Frequency	118 to 137 MHz	137-150.5 MHz
VSWR	2.5:1 maximum	1.8:1 maximum
Polarization	Vertical	
Radiation Pattern	Omnidirectional	
Impedance	50 OHMS	
Power Rating	50 Watts	
VHF Harmonic Rejection	80 dB typical	
Mechanical		
Weight	0.6 lbs. maximum	
Height	17.0" maximum	
Material	Molded radome	
Finish	Polyurethane enamel	
Connector	See order option	
Environmental		
Temperature	-55° C to +85° C	
Altitude	55,000'	
Air Speed	350 Knots TAS	
Federal Specifications		
RTCA Environmental	DO-160D	
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFXXSXXXXXXXXXX[XX]C	
FAA TSO	C37d, C38d, C144	
RTCA MOPS	DO-186A, DO-228	
Order Options		
Connector		
BNC	VHF port	
TNC	GPS port	
Color		
White	Standard	
Gasket		
Gasket	C248006-2 cork	

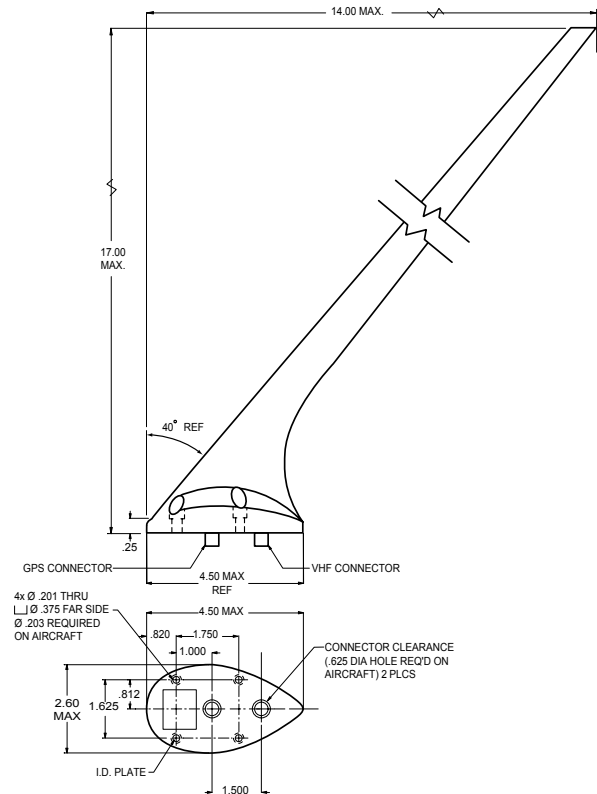


This is the first "three-in-one" antenna of its type. In a single footprint, this antenna provides GPS, VHF, and Orbcomm reception. This saves precious airframe space, and minimizes installation costs. Plus, by bringing three antennas down to one, reduced drag and increased aesthetics are obvious benefits.

Designed in conjunction with Avidyne™, this antenna also has a built-in notch filter, eliminating the need for in-line filters or excessive spacing between VHF and GPS antennas.

The CI 2480-300 is designed for 26.5 dB gain GPS systems as seen with Bendix-King™, UPS™, and Universal Navigation™.

P/N CI 2480-300



COMDAT™ VHF/GPS/Orbcomm

Frequency 1575.42 MHz 17dB Gain 118-137 MHz 137-150.5 MHz

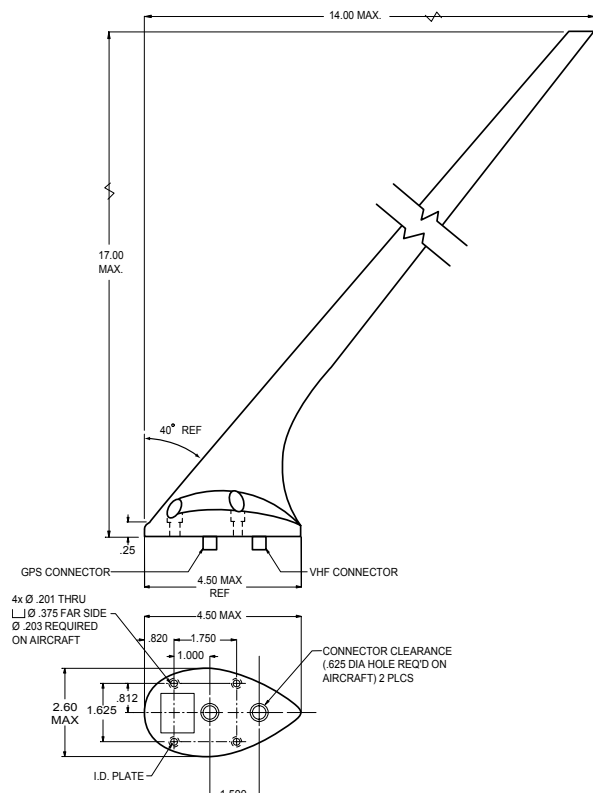


This is the first "three-in-one" antenna of its type. In a single footprint, this antenna provides GPS, VHF, and Orbcomm reception. This saves precious airframe space, and minimizes installation costs. Plus, by bringing three antennas down to one, reduced drag and increased aesthetics are obvious benefits.

Designed in conjunction with Avidyne™, this antenna also has a built-in notch filter, eliminating the need for in-line filters or excessive spacing between VHF and GPS antennas.

The CI 2480-301 is designed for 17 dB gain GPS systems as required with Garmin™ GPS systems.

P/N CI 2480-301



Model CI 2480-301
VHF/GPS/Orbcomm

GPS Electrical

Frequency	1575.42 ± 3 MHz
Polarization	RHCP
Axial Ratio (Boresight)	3 dB maximum
Power Handling	1 Watt
Radiation Coverage (Gain)	-1.0 dBic ≤ Ø < 75° -2.5 dBic ≤ Ø < 80° -4.5 dBic ≤ Ø < 85° -7.5 dBic ≤ Ø = 90° (horizon) +5.0 dBic (nominal) @ Ø = 0° (zenith)

Amplifier

Voltage	5VDC
Gain	17 dB
Noise Figure	3.8 dB maximum
Impedance	50 OHMS
VSWR	2.0:1 maximum output
Out of Band Rejection	35 dB minimum @ 1626 MHz
Power Handling	50 mA maximum
Lightning	DC grounded

Data Link Electrical

	VHF	ORBCOMM
Frequency	118 to 137 MHz	137 to 150.5 MHz
VSWR	2.5:1 maximum	1.8:1 maximum
Polarization	Vertical	
Radiation Pattern	Omnidirectional	
Impedance	50 OHMS	
Power Rating	50 Watts	
VHF Harmonic Rejection	80 dB typical	

Mechanical

Weight	0.6 lbs. maximum
Height	17.0" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order option

Environmental

Temperature	-55° C to +85° C
Altitude	55,000'
Air Speed	350 Knots TAS

Federal Specifications

RTCA Environmental	DO-160D
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFXXSXXXXXXXX[XX]C
FAA TSO	C37d, C38d, C129a
RTCA MOPS	DO-186A, DO-208

Order Options

Connector

BNC	VHF port
TNC	GPS port

Color

White	Standard
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Gasket

Gasket	C248006-2 cork
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GPS CI 401-220

Frequency GPS 1575.42 MHz +/- 3 MHz

Model CI 401-220 GPS

Passive Antenna	
Characteristics	(T _A = -55° C to +70° C)
Frequency	1575.42 ±3 MHz
Polarization	RHCP
Axial Ration	3.0 dB on bore. @ (zen.) maximum
Power Handling	1.0 Watt

Radiation Gain Pattern	
-1.0 dBic	0° ≤ θ < 75°
-2.5 dBic	75° ≤ θ < 80°
-4.5 dBic	80° ≤ θ < 80°
-7.5 dBic	θ = 90° (Horizon)
-5.0 dBic	Nominal @ θ = 0° (zen.)
Azimuth Gain Variation	≤ 3.0 dB @ ≥ 5° elevation

Preamplifier	
Characteristics	(T _A = -55° C to +70° C)
Frequency	1575.42 ±3 MHz
Output Impedance	50 OHMS (nominal)
Output VSWR	1.7:1 maximum (RL -11.73 dB)
Gain @ 1575.42 MHz	26.5 dB minimum/31.5 dB maximum
Noise Figure	3.8 dB maximum
Selectivity	-40 dB minimum Satcom (1626.5 MHz)
DC Voltage	4 to 24VDC
DC Current	25 µa minimum/40 µa maximum
Burnout Protection	30 dBm/1.0 CW unmodulated

Mechanical/Environment	
Weight	6.2 oz. maximum
Connector	TNC female
Air Speed	600 Knots @ 55,000'

Federal Specifications	
Environmental Category	[F2X]ACB[S(L)T(C,C1,R)] XRFDXSXXXX[XX]X[XXXX][1B]CX
FAA TSO	C144/DO-160D/DO-288

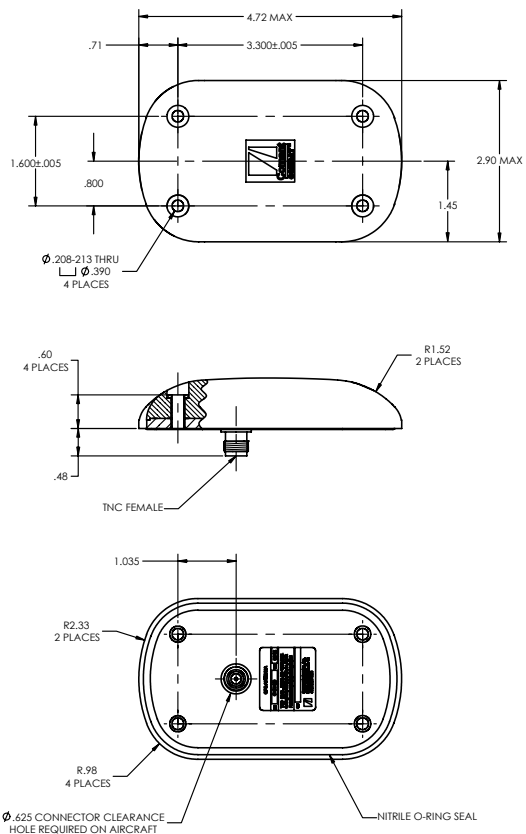


Completely redesigned 401 Series ARINC footprints GPS. This model contains an all-new, highly stable amplifier that offers great performance. Gain performance at 26.5 to 31.5 dB provides excellent Satcom rejection at 40 dB minimum. Plus, this antenna presents very low noise levels at 3.8 dB maximum.

The new design features a nickel plated aluminum base plate with an integral 'O' ring for sealing.

What's more, the built-in voltage regulator allows the antenna to operate smoothly anywhere from 4 to 24VDC, affording a wide variety of applications such as Honeywell, Bendix-King™, L3 Avionics™, Universal Avionics™ and UPS Navigation™ systems.

P/N CI 401-220



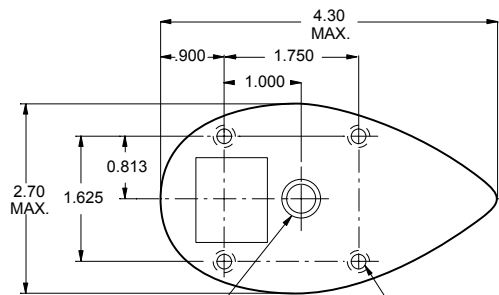
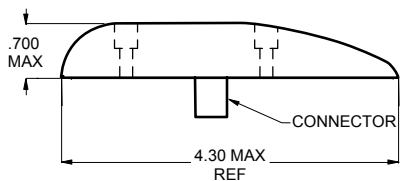
COMDAT™ GPS

Frequency 1575.42 MHz 26.5dB Gain



The CI405-200 is an exact replacement for Comant's CI 405-7 with one important exception, this GPS antenna has been upgraded and certified to the new C144 TSO requirements. The antenna uses the latest in electronic design, meeting DO-160D and DO-228 MOPS.

P/N CI 405-200



CONNECTOR CLEARANCE
(.575 DIA HOLE REQ'D ON
AIRCRAFT)

.173 DIA THRU HOLE
CBORE .332 DIA x DEEP TO
ACHIEVE .375 HT FAR SIDE
4 PLCS

Model CI 405-200

Electrical	
Frequency	1575.42 ± 3 MHz
Polarization	RHCP
Axial Ratio (Boresight)	3 dB maximum
Power Handling	1 Watt
Radiation Coverage (Gain)	-1.0 dBic ≤ θ < 75° -2.5 dBic ≤ θ < 80° -4.5 dBic ≤ θ < 85° -7.5 dBic ≤ θ = 90° (horizon) +5.0 dBic (nominal) @ θ = 0° (zenith)

Amplifier	
Voltage	5VDC
Nominal Gain	26.5 dB
Noise Figure	2.0 dB (nominal) / 3.8 dB maximum
Impedance	50 OHMS
VSWR	1.7:1 maximum output
Out of Band Rejection	35 dB minimum @ 1626 MHz
Power Handling	50 μ a maximum
Lightning	DC grounded

Mechanical	
Weight	0.3 lbs. maximum
Height	0.75" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order option
Footprint	Teardrop (compatible to standard VHF)

Environmental	
Temperature	-55° C to +85° C
Altitude	5,000'
Air Speed	600 Knots TAS

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[F2]ACB[S(L)U(F,F1)T(C,C1,R)] XRFDXSXXXX[XX]X[XXXX][1B]CX
FAA TSO	C144
RTCA MOPS	DO-228

Order Options	
Connector	
TNC	CI 405-200
Color	
White	Standard

CI 2680-100

GPS Frequency 1575.42 ± 3 MHz
 Orbcomm Frequency 137.00-150.05 MHz

Model	CI 2680-100
Preamp Characteristics GPS	
Frequency	1575.42 ±3 MHz
Output Impedance	50.0HMS (nominal)
Output VSWR	1.7:1 maximum
Gain @ 1575.42 ±3 MHz	26.5dB-31.5dB
Noise Figure	3.8dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5
DC Voltage	4-24VDC
DC Current (Min./Max.)	25mA / 40mA
Burnout Protection (CW unmod.)	30dBm/1.0 W
Polarization	RHCP
Radiation Gain Pattern	Hemispherical
RF Characteristics Orbcomm	
Frequency	137.00-150.05MHz
VSWR	2.5:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Power Rating	50 Watts
Impedance	50 OHMS
Mechanical / Environmental	
Weight	1.25 lbs. maximum
Connector	TNC, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C144
Environmental Category	[F2X]ACB[S(C,L,M)]T(C1,Y,R)] XSFXSXXXX[XX]X[XXXX]XCX



The CI 2680-100 extends the lineage that began with the CI 2480 Series ComDat®. This model features super tough construction for today's bigger and higher speed aircraft.

The antenna combines two functions into one. With two connectors on the base plate, GPS functions on TNC, and BNC is used for Orbcomm. This popular combination offers the best Orbcomm functionality for weather data in the cockpit.

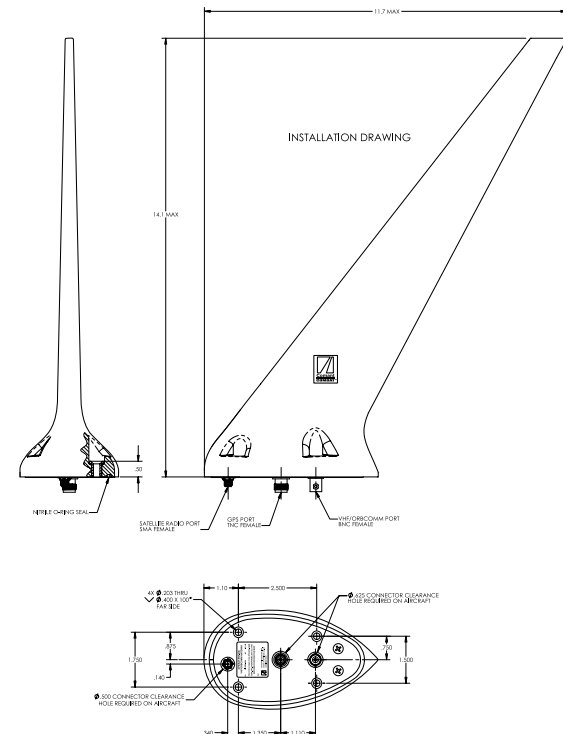
Installers will save time and money by installing fewer antennas. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

Tough, new design features heavy duty nickel plated aluminum base plate with integral Nitrile 'O' ring, making it easier for pressurized aircraft installations.

P/N CI 2680-100

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data



CI 2680-104

GPS Frequency 1575.42 ± 3 MHz
Orbcomm Frequency 137.00-150.05 MHz



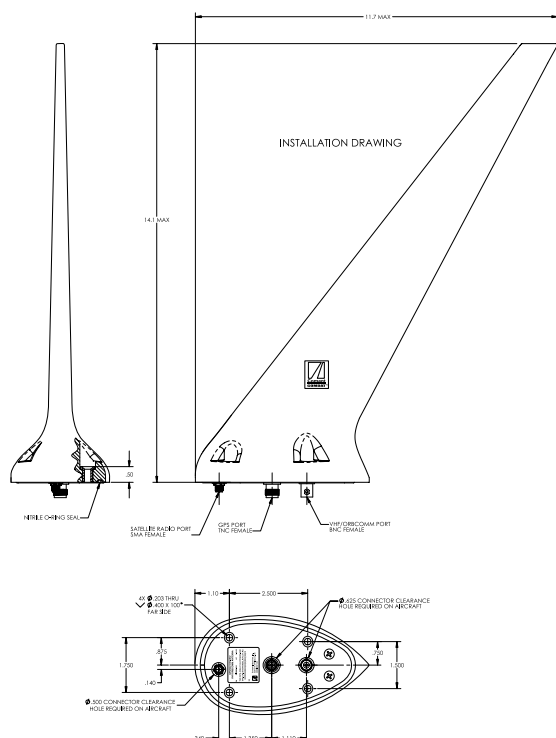
The CI 2680-104 extends the lineage that began with the CI 2480 Series ComDat®. This model features super tough construction for today's bigger and higher speed aircraft.

The antenna combines two functions into one. With two connectors on the base plate, GPS functions on TNC, and BNC is used for Orbcomm. This popular combination offers the best Orbcomm functionality for weather data in the cockpit.

Installers will save time and money by installing fewer antennas. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

Tough, new design features heavy duty nickel plated aluminum base plate with integral Nitrile 'O' ring, making it easier for pressurized aircraft installations.

P/N CI 2680-104



Model CI 2680-104

Preamp Characteristics	GPS
Frequency	1575.42 ±3 MHz
Output Impedance	50.0HMS (nominal)
Output VSWR	1.7:1 maximum
Gain @ 1575.42 ±3 MHz	37.0dB-43.0dB
Noise Figure	3.8dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5
DC Voltage	4-24VDC
DC Current (Min./Max.)	25mA / 40mA
Burnout Protection (CW unmod.)	30dBm/1.0 W
Polarization	RHCP
Radiation Gain Pattern	Hemispherical

RF Characteristics	Orbcomm
Frequency	137.00-150.05MHz
VSWR	2.5:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Power Rating	50 Watts
Impedance	50 OHMS

Mechanical / Environmental	
Weight	1.25 lbs. maximum
Connector	TNC, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C144
Environmental Category	[F2X]ACB[S(C,L,M)]T(C1,Y,R)] XSFXXXXXX[XX]X[XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

CI 2680-200

GPS Frequency
VHF Frequency

1575.42 ± 3 MHz
118-137 MHz

Model CI 2680-200

Preamp Characteristics GPS

Frequency	1575.42 ±3 MHz
Output Impedance	50.0HMS (nominal)
Output VSWR	1.7:1 maximum
Gain @ 1575.42 ±3 MHz	26.5dB-31.5dB
Noise Figure	3.8dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5
DC Voltage	4-24VDC
DC Current (Min./Max.)	25mA / 40mA
Burnout Protection (CW unmod.)	30dBm/1.0 W
Polarization	RHCP
Radiation Gain Pattern	Hemispherical

RF Characteristics VHF

Frequency	118-137 MHz
VSWR	2.5:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Power Rating	50 Watts
Impedance	50 OHMS

Mechanical / Environmental

Weight	1.25 lbs. maximum
Connector	TNC, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C144, C37d, C38d
Environmental Category	[F2X]ACB[S(C,L,M)]T(C1,Y,R)] XSFXXSXXXX[XX]X[XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

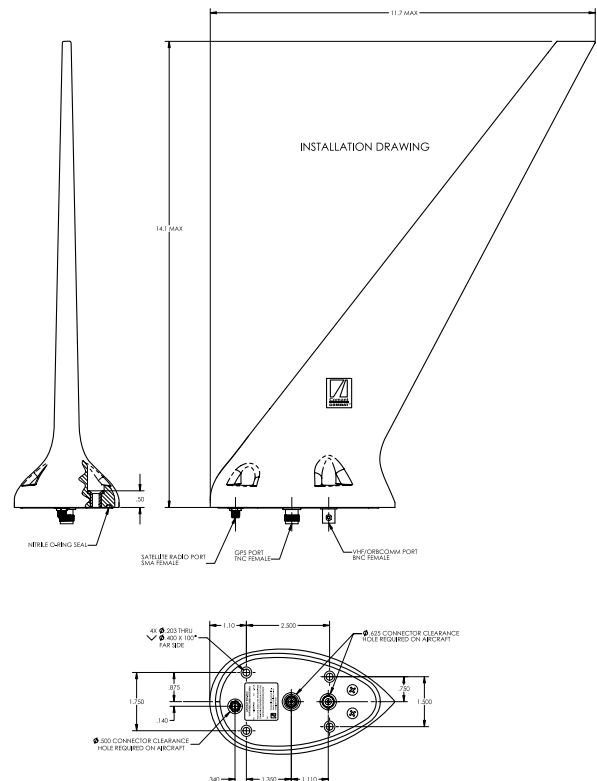


Combining GPS and VHF is where it all began for the popular ComDat® product line. Now, ComDats® feature super tough construction for today's bigger and higher speed aircraft. Plus, integral Nitrile 'O' ring and nickel plated aluminum base plates make these new models easier to install on pressurized aircraft.

The CI 2680-200 combines two functions into one. With two connectors on the base plate, GPS functions on TNC, and BNC is used for VHF Comm.

Installers will save time and money by installing fewer antennas. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

Built-in harmonic suppression filter limits VHF/GPS co-site interference.
P/N CI 2680-200



CI 2680-204

GPS Frequency 1575.42 ± 3 MHz
VHF Frequency 118-137 MHz

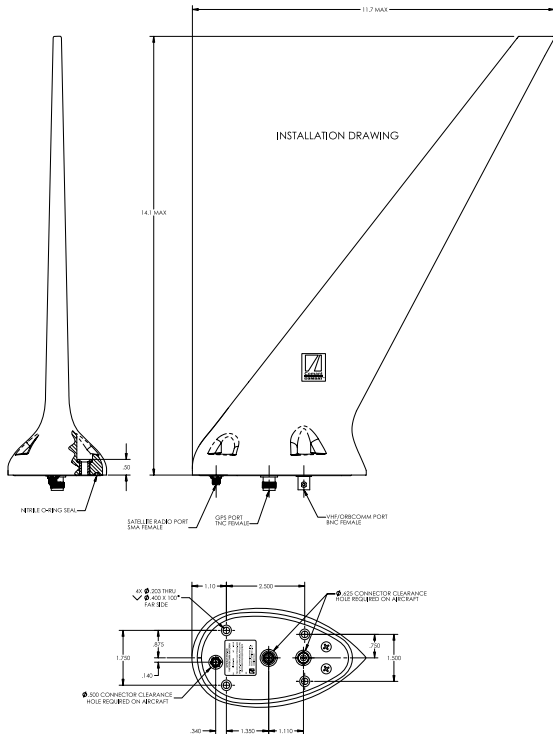


Combining GPS and VHF is where it all began for the popular ComDat® product line. Now, ComDats® feature super tough construction for today's bigger and higher speed aircraft. Plus, integral Nitrile 'O' ring and nickel plated aluminum base plates make these new models easier to install on pressurized aircraft.

The CI 2680-204 combines two functions into one. With two connectors on the base plate, GPS functions on TNC, and BNC is used for VHF Comm.

Installers will save time and money by installing fewer antennas. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

Built-in harmonic suppression filter limits VHF/GPS co-site interference.
P/N CI 2680-204



Model	CI 2680-204
Preamp Characteristics GPS	
Frequency	1575.42 ±3 MHz
Output Impedance	50.0HMS (nominal)
Output VSWR	1.7:1 maximum
Gain @ 1575.42 ±3 MHz	37.0dB-43.0dB
Noise Figure	3.8dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5
DC Voltage	4-24VDC
DC Current (Min./Max.)	25mA / 40mA
Burnout Protection (CW unmod.)	30dBm/1.0 W
Polarization	RHCP
Radiation Gain Pattern	Hemispherical

RF Characteristics VHF	
Frequency	118-137 MHz
VSWR	2.5:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Power Rating	50 Watts
Impedance	50 OHMS

Mechanical / Environmental	
Weight	1.25 lbs. maximum
Connector	TNC, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C144, C37d, C38d
Environmental Category	[F2X]ACB[S(C,L,M)]T(C1,Y,R)] XSFXXXXXX[XX]X[XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

CI 2680-205

WSI-WX Frequency
VHF Frequency

1544.5 MHz
118-137 MHz

Model	CI 2680-205
Preamp Characteristics WSI-WX	
Frequency	1544.5 MHz
Output Impedance	50.OHMS (nominal)
Output VSWR	1.67:1 maximum
Gain @ 1575.42 ±3 MHz	25.0dB-29.0dB
Noise Figure	0.9dB maximum
DC Voltage	4-5VDC
DC Current (Min./Max.)	45mA maximum
Polarization	RHCP
Radiation Gain Pattern	Hemispherical
RF Characteristics VHF	
Frequency	118-137MHz
VSWR	2.5:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Power Rating	50 Watts
Impedance	50 OHMS
Mechanical / Environmental	
Weight	1.25 lbs. maximum
Connector	TNC, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C37d, C38d
Environmental Category	[F2X]ACB[S(C,L,M)T(C1,Y,R)] XSFXXXXXX[XX][XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

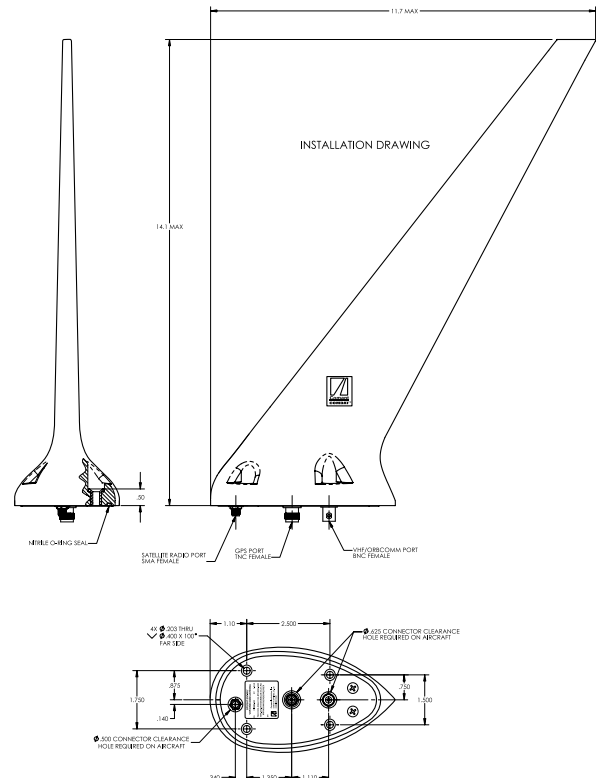


WSI and Comant have teamed to provide excellent weather data equipment. By combining standard features like GPS and VHF, WSI users will find it easy to add a WSI System because the ComDat® antenna is TSO'd, simplifying the installation process.

This model encompasses what the ComDat® concept is all about. Installers will save time and money by installing fewer antennas. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

The CI 2680-205 features super tough construction for today's bigger and higher speed aircraft. Integral Nitrile 'O' ring and a nickel plated aluminum base plate make this antenna easier to install on pressurized aircraft.

P/N CI 2680-205



CI 2680-206

SAT-ENT Frequency 2320.0-2345.0 MHz
VHF Frequency 118-137 MHz



When adding a Satellite Radio or Weather Data system, two issues arise; The need to add another antenna, and, the antenna can't hold TSO. The answer? Replace the existing VHF Comm with a combined VHF/SAT-ENT ComDat®. The SAT-ENT function allows two different applications. It can be connected to popular Satellite Radio systems for music enjoyment. Or, connect it to popular Satellite Weather Data systems for up-to-the-minute weather updates in the cockpit.

This model encompasses what the ComDat® concept is all about. Installers will save time and money. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

The CI 2680-206 features super tough construction for today's bigger and higher speed aircraft.

P/N CI 2680-206

Model CI 2680-206

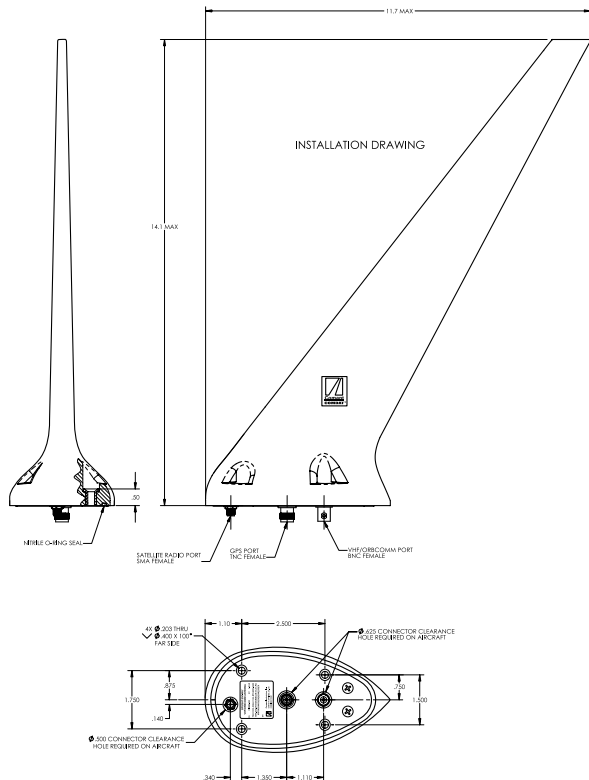
Preamp Characteristics	SAT-ENT/WX
Frequency	2320.0-2345.0 MHz
Output Impedance	50.0HMS (nominal)
Output VSWR	2.0:1 maximum
Noise Figure	2.7dB maximum
Selectivity (dB @ MHz)	-20dB Min. (FC ±230)
DC Voltage	4.75-24VDC
DC Current (Min./Max.)	45mA / 55mA
Polarization	LHCP
Radiation Gain Pattern	Hemispherical

RF Characteristics	VHF
Frequency	118-137 MHz
VSWR	2.5:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Power Rating	50 Watts
Impedance	50 OHMS

Mechanical / Environmental	
Weight	1.25 lbs. maximum
Connector	SMA, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C37d, C38d
Environmental Category	[F2X]ACB[S(C,L,M)]T(C1,Y,R)] XSFXXXXX[XX]X[XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data



CI 2680-300

GPS Frequency 1575.42 ± 3 MHz
 VHF Frequency 118-137 MHz
 Orbcomm Frequency 137.00-150.05 MHz

Model CI 2680-300

Preamp Characteristics GPS

Frequency	1575.42 ±3 MHz
Output Impedance	50.0HMS (nominal)
Output VSWR	1.7:1 maximum
Gain @ 1575.42 ±3 MHz	26.5dB-31.5dB
Noise Figure	3.8dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5
DC Voltage	4-24VDC
DC Current (Min./Max.)	25mA/40mA
Burnout Protection (CW unmod.)	30dBm/1.0 W
Polarization	RHCP
Radiation Gain Pattern	Hemispherical

RF Characteristics VHF Orbcomm

	VHF	Orbcomm
Frequency	118-137 MHz	137.00-150.05 MHz
VSWR	2.5:1	2.5:1
Polarization	Vertical	Vertical
Radiation Pattern	Omnidirectional	Omnidirectional
Power Rating	50 Watts	50 Watts
Impedance	50 OHMS	50 OHMS

Mechanical / Environmental

Weight	1.25 lbs. maximum
Connector	TNC, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C144, C37d, C38d
Environmental Category	[F2X]ACB[S(C,L,M)T(C1,Y,R)] XSFXSXXXX[XX]X[XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

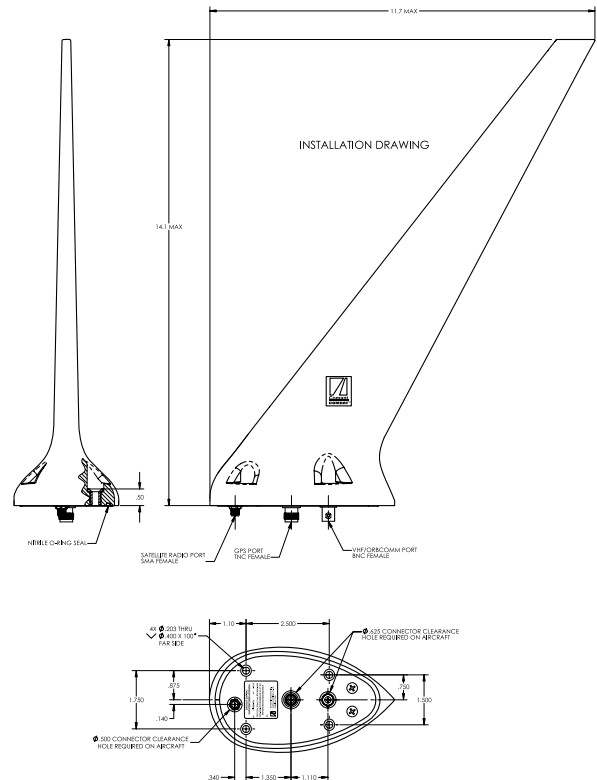


The CI 2680-300 extends the lineage that began with the CI 2480 Series ComDat®. This model features super tough construction for today's bigger and higher speed aircraft.

The antenna combines three separate functions into one. With two connectors on the base plate, GPS functions on TNC, and BNC is used for combined VHF/Orbcomm. VHF/Orbcomm requires the Avidyne DC50 Coupler®, allowing the VHF side to operate as Comm 2 or as Orbcomm TX/RX.

Installers will save time and money, placing one antenna instead of three. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

Built-in harmonic suppression filter limits VHF/GPS co-site interference.
P/N CI 2680-300



CI 2680-304

GPS Frequency 1575.42 ± 3 MHz
VHF Frequency 118-137 MHz
Orbcomm Frequency 137.00-150.05 MHz

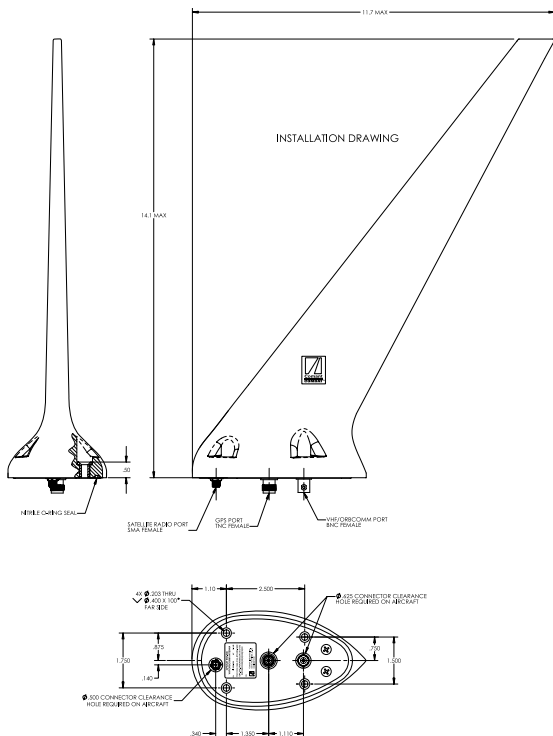


The CI 2680-304 extends the lineage that began with the CI 2480 Series ComDat®. This model features super tough construction for today's bigger and higher speed aircraft.

The antenna combines three separate functions into one. With two connectors on the base plate, GPS functions on TNC, and BNC is used for combined VHF/Orbcomm. VHF/Orbcomm requires the Avidyne DC50 Coupler®, allowing the VHF side to operate as Comm 2 or as Orbcomm TX/RX.

Installers will save time and money by installing fewer antennas. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

Built-in harmonic suppression filter limits VHF/GPS co-site interference.
P/N CI 2680-304



Model CI 2680-304

Preamp Characteristics GPS

Frequency	1575.42 ± 3 MHz
Output Impedance	50.0HMS (nominal)
Output VSWR	1.7:1 maximum
Gain @ 1575.42 ± 3 MHz	37.0dB-43.0dB
Noise Figure	3.8dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5
DC Voltage	4-24VDC
DC Current (Min./Max.)	25mA / 40mA
Burnout Protection (CW unmod.)	30dBm/1.0 W
Polarization	RHCP
Radiation Gain Pattern	Hemispherical

RF Characteristics VHF Orbcomm

Frequency	118-137 MHz	137.00-150.05 MHz
VSWR	2.5:1	2.5:1
Polarization	Vertical	Vertical
Radiation Pattern	Omnidirectional	Omnidirectional
Power Rating	50 Watts	50 Watts
Impedance	50 OHMS	50 OHMS

Mechanical / Environmental

Weight	1.25 lbs. maximum
Connector	TNC, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C144, C37d, C38d
Environmental Category	[F2X]ACB[S(C,L,M)T(C1,Y,R)] XSFXXSXXXX[XX]X[XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

CI 2680-400

GPS Frequency 1575.42 ± 3 MHz
 SAT-ENT Frequency 2320.0-2345.0 MHz
 VHF Frequency 118-137 MHz

Model	CI 2680-400	
Preamp Characteristics	GPS	SAT-ENT/WX
Frequency	1575.42 ±3 MHz	2320.0- 2345.0 MHz
Output Impedance	50.OHMS (nominal)	50 OHMS (nominal)
Output VSWR	1.7:1 maximum	2.0:1 maximum
Gain @ 1575.42 ±3 MHz	26.5dB-31.5dB	N/A
Noise Figure	3.8dB maximum	2.7dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5	-20dB Min. (FC±230)
DC Voltage	4-24VDC	4.75-24VDC
DC Current (Min./Max.)	25mA / 40mA	45mA / 55mA
Burnout Protection (CW unmod.)	30dBm/1.0 W	N/A
Polarization	RHCP	LHCP
Radiation Gain Pattern	Hemispherical	Hemispherical
RF Characteristics	VHF	
Frequency	118-137 MHz	
VSWR	2.5:1	
Polarization	Vertical	
Radiation Pattern	Omnidirectional	
Power Rating	50 Watts	
Impedance	50 OHMS	
Mechanical / Environmental		
Weight	1.25 lbs. maximum	
Connector	TNC, SMA, BNC	
Air Speed	325 KIAS maximum @ Sea Level	
Service Ceiling	35,000' maximum	
TSO	C144, C37d, C38d	
Environmental Category	[F2X]ACB[S(C,L,M)T(C1,Y,R)] XSFXSXXXX[XX]X[XXXX]XCX	

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

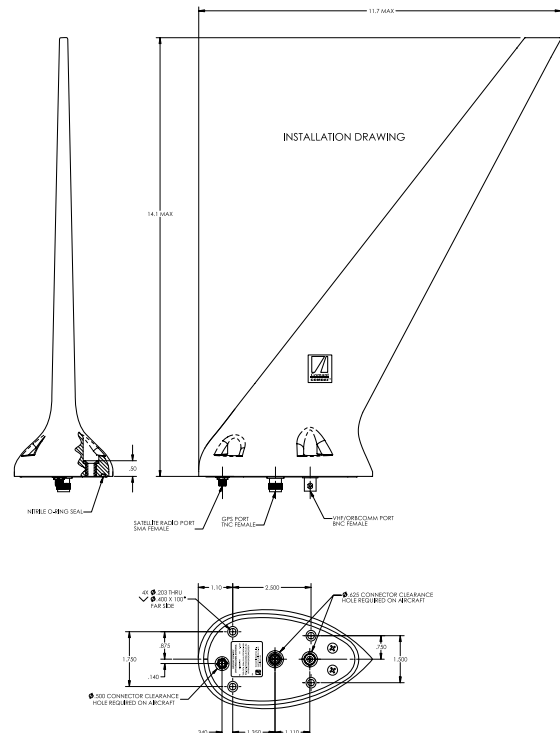


The CI 2680-400 combines three separate antenna functions into one. Three different connectors are on the base plate; TNC for GPS, SMA for popular satellite radio and/or weather data systems, and BNC for VHF. The SAT-ENT function allows two different applications. It can be connected to popular Satellite Radio systems for music enjoyment. Or, connect it to popular Satellite Weather Data systems for up-to-the-minute weather updates in the cockpit.

This model encompasses what the ComDat® concept is all about. Installers will save time and money, placing one antenna instead of three. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

The CI 2680-404 features super tough construction for today's bigger and higher speed aircraft. Built-in harmonic suppression filter limits VHF/GPS co-site interference.

P/N CI 2680-400



CI 2680-404

GPS Frequency 1575.42 ± 3 MHz
 SAT-ENT Frequency 2320.0-2345.0 MHz
 VHF Frequency 118-137 MHz

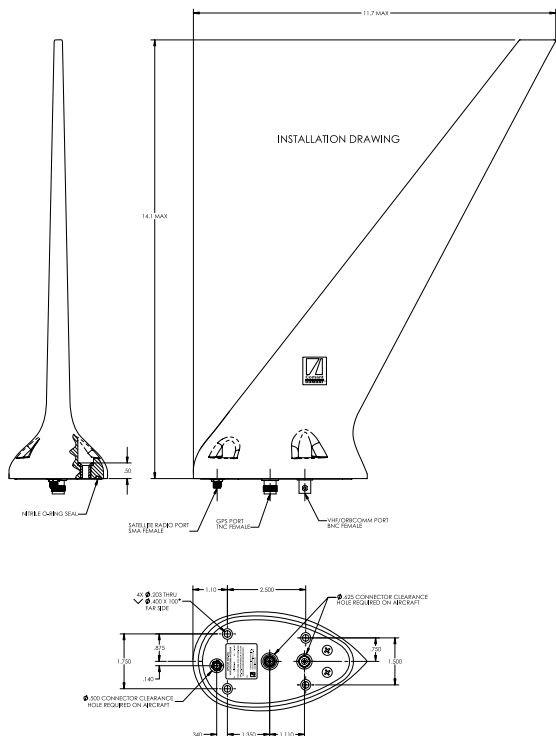


The CI 2680-404 combines three separate antenna functions into one. Three different connectors are on the base plate; TNC for GPS, SMA for popular satellite radio and/or weather data systems, and BNC for VHF. The SAT-ENT function allows two different applications. It can be connected to popular Satellite Radio systems for music enjoyment. Or, connect it to popular Satellite Weather Data systems for up-to-the-minute weather updates.

Installers will save time and money by installing fewer antennas. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

The CI 2680-404 features super tough construction for today's bigger and higher speed aircraft. Built-in harmonic suppression filter limits VHF/GPS co-site interference.

P/N CI 2680-404



Model CI 2680-404

Preamp Characteristics	GPS	SAT-ENT/WX
Frequency	1575.42 ±3 MHz	2320.0-2345.0 MHz
Output Impedance	50.OHMS (nominal)	50 OHMS (nominal)
Output VSWR	1.7:1 maximum	2.0:1 maximum
Gain @ 1575.42 ±3 MHz	37.0dB-43.0dB	N/A
Noise Figure	3.8dB maximum	2.7dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5	-20dB Min. (FC±230)
DC Voltage	4-24VDC	4.75-24VDC
DC Current (Min./Max.)	25mA / 40mA	45mA / 55mA
Burnout Protection (CW unmod.)	30dBm/1.0 W	N/A
Polarization	RHCP	LHCP
Radiation Gain Pattern	Hemispherical	Hemispherical

RF Characteristics	VHF
Frequency	118-137 MHz
VSWR	2.5:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Power Rating	50 Watts
Impedance	50 OHMS

Mechanical / Environmental	
Weight	1.25 lbs. maximum
Connector	TNC, SMA, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C144, C37d, C38d
Environmental Category	[F2X]ACB[S(C,L,M)]T(C1,Y,R) XSFXXXXXX[XX]X[XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

CI 2680-405

GPS Frequency 1575.42 ±3 MHz
 WSI-WX Frequency 1544.5 MHz
 VHF Frequency 118-137 MHz

Model	CI 2680-405	
Preamp Characteristics	GPS	WSI-WX
Frequency	1575.42 ±3 MHz	2320.0-2345.0 MHz
Output Impedance	50 OHMS (nominal)	50 OHMS (nominal)
Output VSWR	1.7:1 maximum	1.67:1 maximum
Gain @ 1575.42 ±3 MHz	26.5dB-31.5dB	N/A
Gain @ 154.5 ±3 MHz	N/A	25.0dB-29.0dB
Noise Figure	3.8dB maximum	0.9dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5	-20dB Min. (FC±230)
DC Voltage	4-24VDC	4-5VDC
DC Current (Min./Max.)	25mA / 40mA	49mA maximum
Burnout Protection (CW unmod.)	30dBm/1.0 W	N/A
Polarization	RHCP	RHCP
Radiation Gain Pattern	Hemispherical	Hemispherical
RF Characteristics	VHF	
Frequency	118-137 MHz	
VSWR	2.5:1	
Polarization	Vertical	
Radiation Pattern	Omnidirectional	
Power Rating	50 Watts	
Impedance	50 OHMS	
Mechanical / Environmental		
Weight	1.25 lbs. maximum	
Connector	TNC, SMA, BNC	
Air Speed	325 KIAS maximum @ Sea Level	
Service Ceiling	35,000' maximum	
TSO	C144, C37d, C38d	
Environmental Category	[F2X]ACB[S(C,L,M)T(C1,Y,R)] XSFXSXXXX[XX]X[XXXX]XCX	

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

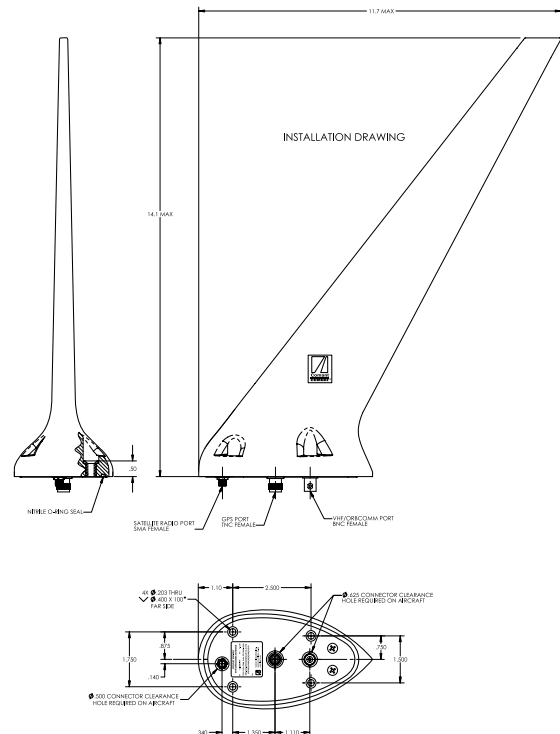


WSI and Comant have teamed to provide excellent weather data equipment. By combining standard features like GPS and VHF, WSI users will find it easy to add a WSI System because the ComDat® antenna is TSO'd, simplifying the installation process. Features 26.5dB gain GPS.

This model encompasses what the ComDat® concept is all about. Installers will save time and money by installing fewer antennas. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

The CI 2680-405 features super tough construction for today's bigger and higher speed aircraft. Built-in harmonic suppression filter limits VHF/GPS co-site interference. Integral Nitrile 'O' ring and a nickel plated aluminum base plate make this antenna easier to install on pressurized aircraft.

P/N CI 2680-405



CI 2680-406

GPS Frequency 1575.42 ± 3 MHz
 WSI-WX Frequency 1544.5 MHz
 VHF Frequency 118-137 MHz

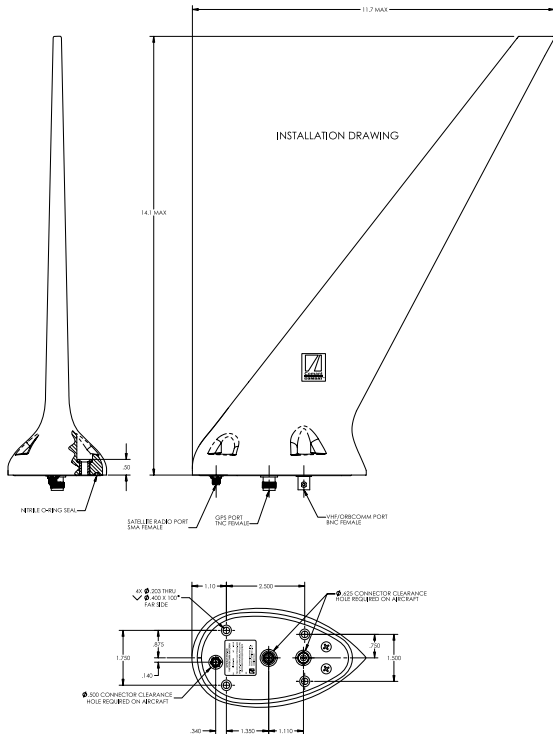


WSI and Comant have teamed to provide excellent weather data equipment. By combining standard features like GPS and VHF, WSI users will find it easy to add a WSI System because the ComDat® antenna is TSO'd, simplifying the installation process.

This model encompasses what the ComDat® concept is all about. Installers will save time and money by installing fewer antennas. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

The CI 2680-406 features super tough construction for today's bigger and higher speed aircraft. Built-in harmonic suppression filter limits VHF/GPS co-site interference. Integral Nitrile 'O' ring and a nickel plated aluminum base plate make this antenna easier to install on pressurized aircraft.

P/N CI 2680-406



Model CI 2680-406

Preamp Characteristics	GPS	WSI-WX
Frequency	1575.42 ±3 MHz	1544.5 MHz
Output Impedance	50.OHMS (nominal)	50 OHMS (nominal)
Output VSWR	1.7:1 maximum	1.67:1 maximum
Gain @ 1575.42 ±3 MHz	37.0dB-43.0dB	N/A
Gain @ 154.5 ±3 MHz	N/A	25.0dB-29.0dB
Noise Figure	3.8dB maximum	0.9dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5	-20dB Min. (FC±230)
DC Voltage	4-24VDC	4-5VDC
DC Current (Min./Max.)	25mA/40mA	49mA maximum
Burnout Protection	30dBm/1.0 W	N/A
(CW unmod.)		
Polarization	RHCP	RHCP
Radiation Gain Pattern	Hemispherical	Hemispherical

RF Characteristics	VHF
Frequency	118-137 MHz
VSWR	2.5:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Power Rating	50 Watts
Impedance	50 OHMS

Mechanical / Environmental	
Weight	1.25 lbs. maximum
Connector	TNC, SMA, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C144, C37d, C38d
Environmental Category	[F2X]ACB[S(C,L,M)]T(C1,Y,R)] XSFXXXXXX[XX]X[XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

CI 2680-500

GPS Frequency 1575.42 ± 3 MHz
 SAT-ENT Frequency 2320.0-2345.0 MHz
 VHF Frequency 118-137 MHz
 Orbcomm Frequency 137.00-150.05 MHz



Model	CI 2680-500	
Preamp Characteristics	GPS	SAT-ENT/WX
Frequency	1575.42 ±3 MHz	2320.0-2345.0 MHz
Output Impedance	50.OHMS (nominal)	50 OHMS (nominal)
Output VSWR	1.7:1 maximum	2.0:1 maximum
Gain @ 1575.42 ±3 MHz	26.5dB-31.5dB	N/A
Noise Figure	3.8dB maximum	2.7dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5	-20dB Min. (FC±230)
DC Voltage	4-24VDC	4.75-24VDC
DC Current (Min./Max.)	25mA / 40mA	45mA / 55mA
Burnout Protection (CW unmod.)	30dBm/1.0 W	N/A
Polarization	RHCP	LHCP
Radiation Gain Pattern	Hemispherical	Hemispherical
RF Characteristics	VHF	Orbcomm
Frequency	118-137 MHz	137.00- 150.05 MHz
VSWR	2.5:1	2.5:1
Polarization	Vertical	Vertical
Radiation Pattern	Omnidirectional	Omnidirectional
Power Rating	50 Watts	50 Watts
Impedance	50 OHMS	50 OHMS
Mechanical / Environmental		
Weight	1.25 lbs. maximum	
Connector	TNC, SMA, BNC	
Air Speed	325 KIAS maximum @ Sea Level	
Service Ceiling	35,000' maximum	
TSO	C144, C37d, C38d	
Environmental Category	[F2X]ACB[S(C,L,M)T(C1,Y,R)] XSFXSXXXX[XX]X[XXXX]XCX	
Passive Antenna Characteristics		

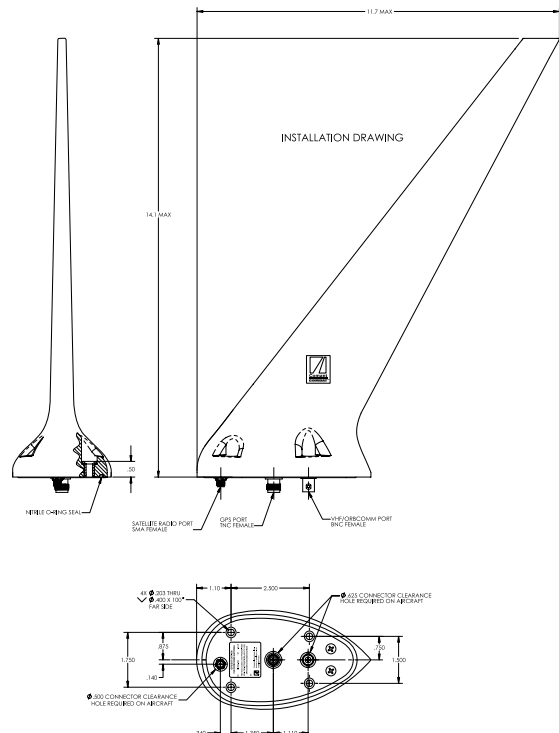
Refer to Installation Drawing for Passive Antenna Data

First of its kind, the CI 2680-500 combines four separate antenna functions into one. Three different connectors are on the base plate; TNC for GPS, SMA for popular satellite radio and/or weather data systems, and BNC for combined VHF/Orbcomm. The BNC VHF/Orbcomm requires the Avidyne DC50 Coupler®, allowing the VHF side to operate as Comm 2 or as Orbcomm TX/RX.

This model encompasses what the ComDat® concept is all about. Installers will save time and money, placing one antenna instead of four. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

The CI 2680-500 features super tough construction for today's bigger and higher speed aircraft. Built-in harmonic suppression filter limits VHF/GPS co-site interference.

P/N CI 2680-500



CI 2680-504

GPS Frequency 1575.42 ± 3 MHz
 SAT-ENT Frequency 2320.0-2345.0 MHz
 VHF Frequency 118-137 MHz
 Orbcomm Frequency 137.00-150.05 MHz

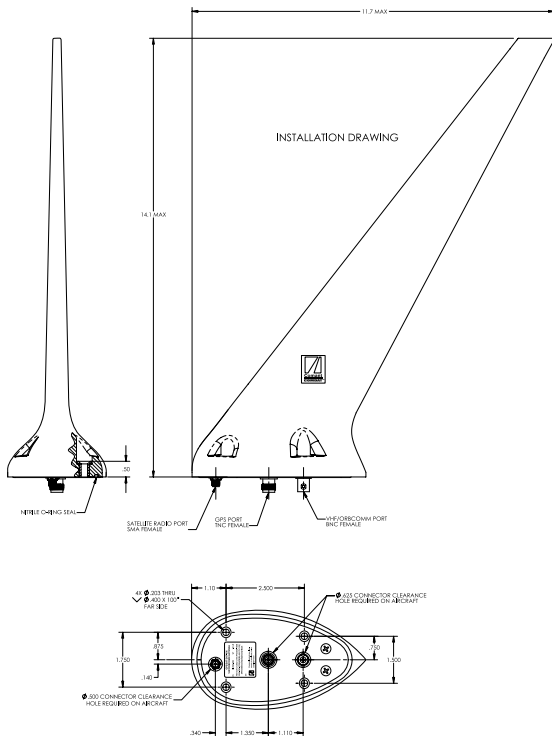


First of its kind, the CI 2680-504 combines four separate antenna functions into one. Three different connectors are on the base plate; TNC for GPS, SMA for popular satellite radio and/or weather data systems, and BNC for combined VHF/Orbcomm. The BNC VHF/Orbcomm requires the Avidyne DC50 Coupler®, allowing the VHF side to operate as Comm 2 or as Orbcomm TX/RX.

This model encompasses what the ComDat® concept is all about. Installers will save time and money, placing one antenna instead of four. Pilots will appreciate the reduction in the number of antennas on their aircraft, and reduced drag, resulting in fuel economy and even higher speeds.

The CI 2680-504 features super tough construction for today's bigger and higher speed aircraft. Built-in harmonic suppression filter limits VHF/GPS co-site interference.

P/N CI 2680-504



Model CI 2680-504

Preamp Characteristics	GPS	SAT-ENT/WX
Frequency	1575.42 ±3 MHz	2320.0-2345.0 MHz
Output Impedance	50.OHMS (nominal)	50 OHMS (nominal)
Output VSWR	1.7:1 maximum	2.0:1 maximum
Gain @ 1575.42 ±3 MHz	37.0dB-43.0dB	N/A
Noise Figure	3.8dB maximum	2.7dB maximum
Selectivity (dB @ MHz)	-35dB Min. @ 1626.5	-20dB Min. (FC±230)
DC Voltage	4-24VDC	4.75-24VDC
DC Current (Min./Max.)	25mA / 40mA	45mA / 55mA
Burnout Protection (CW unmod.)	30dBm/1.0 W	N/A
Polarization	RHCP	LHCP
Radiation Gain Pattern	Hemispherical	Hemispherical

RF Characteristics	VHF	Orbcomm
Frequency	118-137 MHz	137.00- 150.05 MHz
VSWR	2.5:1	2.5:1
Polarization	Vertical	Vertical
Radiation Pattern	Omnidirectional	Omnidirectional
Power Rating	50 Watts	50 Watts
Impedance	50 OHMS	50 OHMS

Mechanical / Environmental	
Weight	1.25 lbs. maximum
Connector	TNC, SMA, BNC
Air Speed	325 KIAS maximum @ Sea Level
Service Ceiling	35,000' maximum
TSO	C144, C37d, C38d
Environmental Category	[F2X]ACB[S(C,L,M)T(C1,Y,R)] XSFXXXXXX[XX]X[XXXX]XCX

Passive Antenna Characteristics

Refer to Installation Drawing for Passive Antenna Data

VHF Communications

Frequency 118-137 MHz

Model CI 109 VHF Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts

Mechanical	
Weight	0.6 lbs. maximum
Height	18 9/16" maximum
Material	Cast housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector	
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BNC	Standard
-----	----------

Color	
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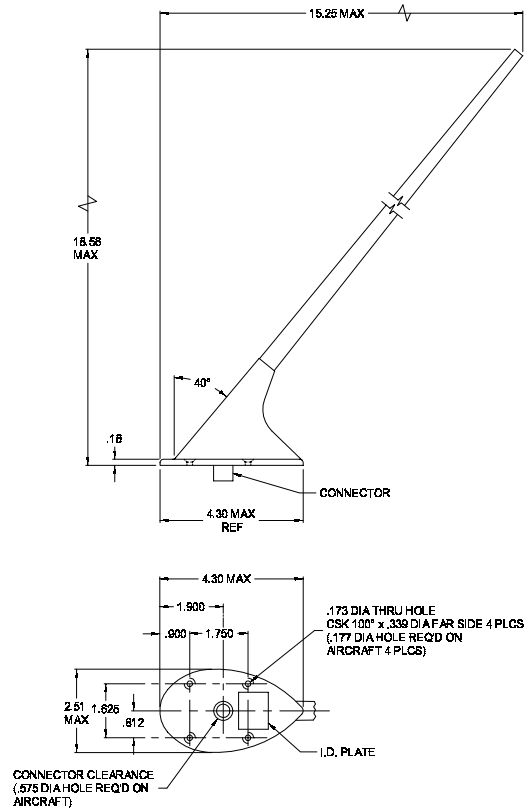
White	Standard
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Gasket	
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Gasket	B12607-3 cork neoprene
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Exhibits excellent electrical characteristics and incorporates an aerodynamically shaped mounting base and radiator housing that matches the styling of the communication antennas used on the 1968-72 single engine Cessnas. The 109 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.
P/N CI 109



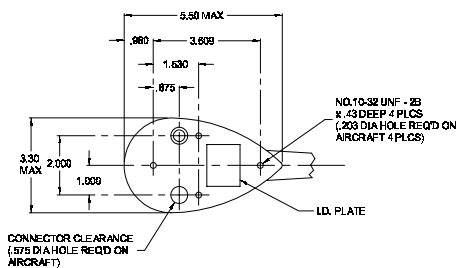
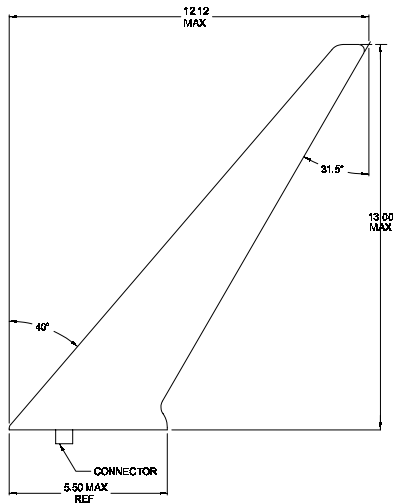
VHF Communications

Frequency 118-137 MHz



Designed for large single or twin-engine aircraft. The antenna assembly enclosed in an aerodynamically shaped, injection molded polyester glass shell with internal components foamed in place for mechanical integrity. Reduced height convenient for mounting to the underside of an aircraft. The 119 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 119



Model CI 119 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts

Mechanical	
Weight	1.2 lbs. maximum
Height	13.00" maximum
Material	Valox 420
Finish	Polyurethane enamel
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	35,000'
Air Speed	350 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C12704 cork neoprene

VHF Communications

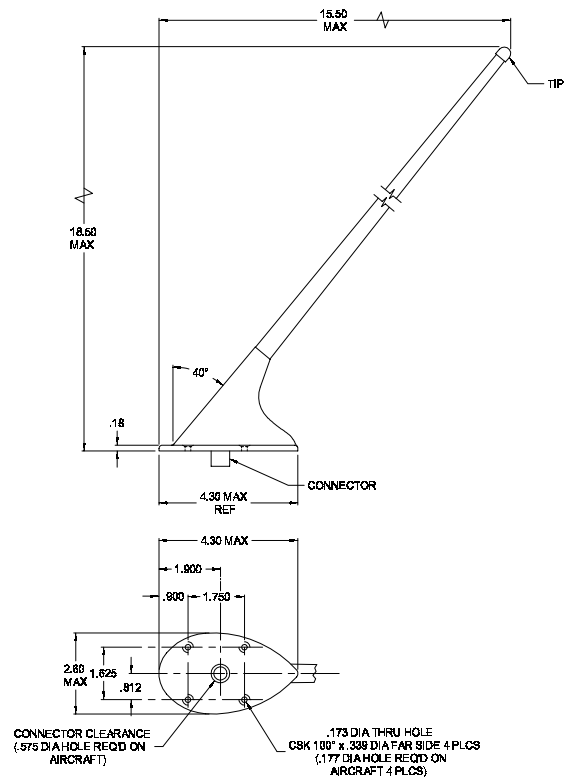
Frequency 118-137 MHz

Model		CI 121 VHF Antenna
Electrical		
Frequency		118 to 137 MHz
VSWR		2.5:1 maximum
Polarization		Vertical
Radiation Pattern		Omnidirectional
Impedance		50 OHMS
Power		50 Watts
Mechanical		
Weight		0.5 lbs. maximum
Height		18.50" maximum
Material		Cast housing/fiberglass whip
Finish		Polyurethane enamel
Connector		BNC (female)
Environmental		
Temperature		-55° C to +85° C
Altitude		50,000'
Air Speed		250 Knots TAS
Federal Specifications		
RTCA Environmental		DO-160D
Environmental Category		[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO		C37d, C38d
RTCA MOPS		DO-186A
Order Options		
Connector		
BNC		Standard
Color		
White		Standard
Gasket		
Gasket		C12607-3 cork neoprene



Similar to the CI 109, the CI 121 is smaller in diameter and lighter at only 0.5 pounds. Features a tapered glass laminate housing and die-cast aluminum base. Offers standard mounting and appearance to many Cessna communication antennas. The CI 121 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 121



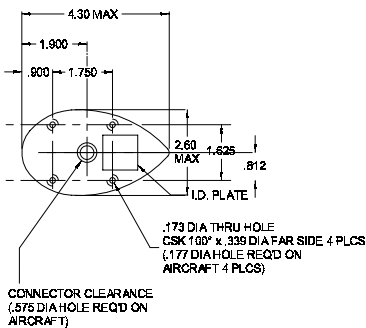
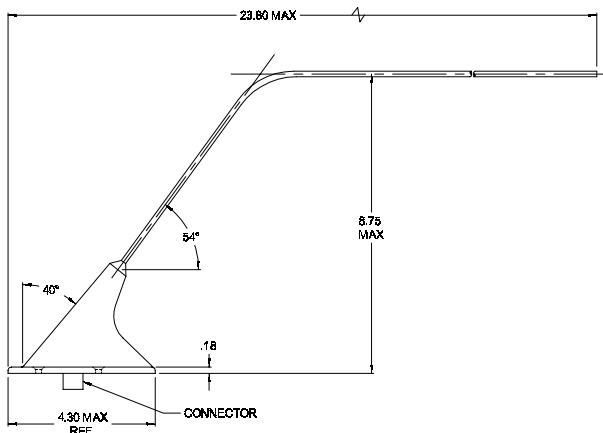
VHF Communications

Frequency 118-137 MHz



Designed specifically for mounting to the underside of an aircraft providing excellent radiation coverage for air-to-ground communications. Bent configuration makes it ideally suited for helicopters and low wing aircraft. The CI 122 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 122



Model CI 122 VHF Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	3.0:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts
Mechanical	
Weight	0.5 lbs. maximum
Height	8.75" maximum
Material	Cast housing/stainless whip
Finish	Polyurethane enamel
Connector	BNC
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	350 Knots TAS
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C12607-3 cork neoprene

VHF Communications

Frequency 118-137 MHz

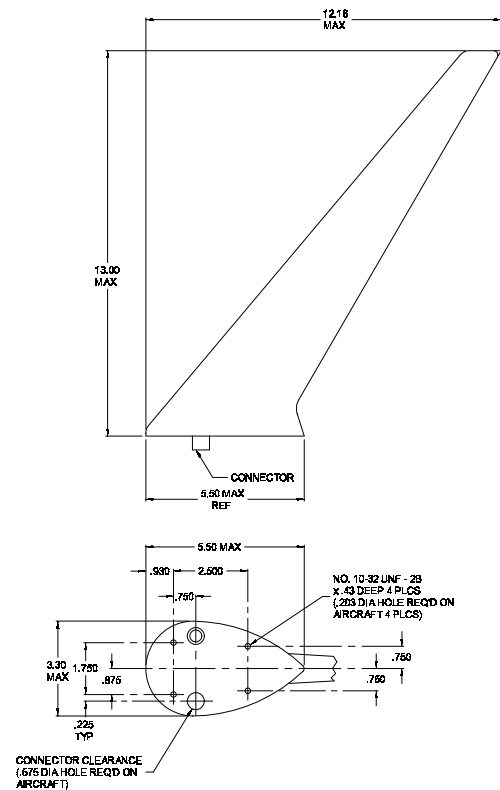
Model CI 138 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts
Mechanical	
Weight	1.0 lbs. maximum
Height	13.00" maximum
Material	Valox 420
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	350 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C13804 cork neoprene—standard



Identical to the CI 119 with the exception of the mounting hole pattern and RF connector location which are compatible with Beechcraft mounting. RF connector is offset from the center line of the antenna. The CI 138 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 138



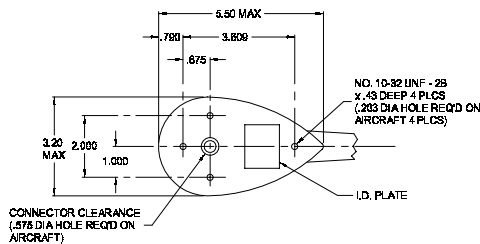
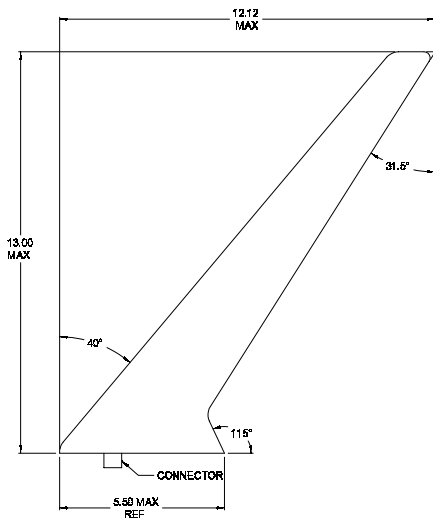
VHF Communications

Frequency 118-137 MHz



Piper compatible mounting version of the CI 119 with respect to the mounting hole pattern and RF connector location. The CI 139 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 139



Model CI 139 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts

Mechanical	
Weight	1.25 lbs. maximum
Height	13.00" maximum
Material	Valox 420
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	350 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C13904 cork neoprene—standard

VHF Communications

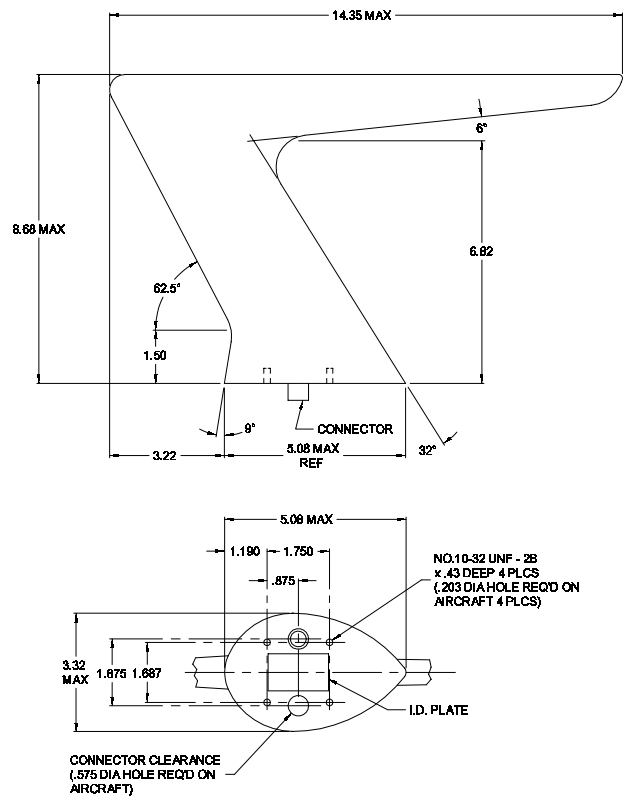
Frequency 118-136 MHz

Model CI 156 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts
Mechanical	
Weight	1.25 lbs. maximum
Height	8.68" maximum
Material	High density polyurethane
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Air Speed	350 Knots TAS
Order Options	
Connector	
BNC	Standard
Color	
White	Standard



Matches the styling and mounting configuration used by Mooney aircraft up to 1977. Antenna assembly is cast in an aerodynamically shaped polyurethane shell featuring a very low profile. Reduced height makes it ideal for mounting to the underside of an aircraft.
P/N CI 156



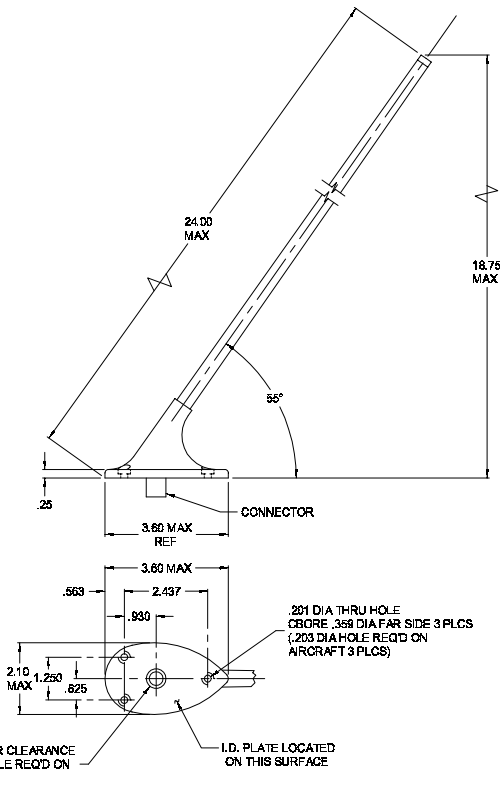
VHF Communications

Frequency 118-137 MHz



High strength antenna designed as an improved direct replacement for the standard Cessna 3-hole mounting configuration. The CI 175 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 175



Model CI 175 VHF Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts

Mechanical	
Weight	0.5 lbs. maximum
Height	18.75" maximum
Material	Cast housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector	
BNC	Standard
Color	
White	Standard

VHF Communications

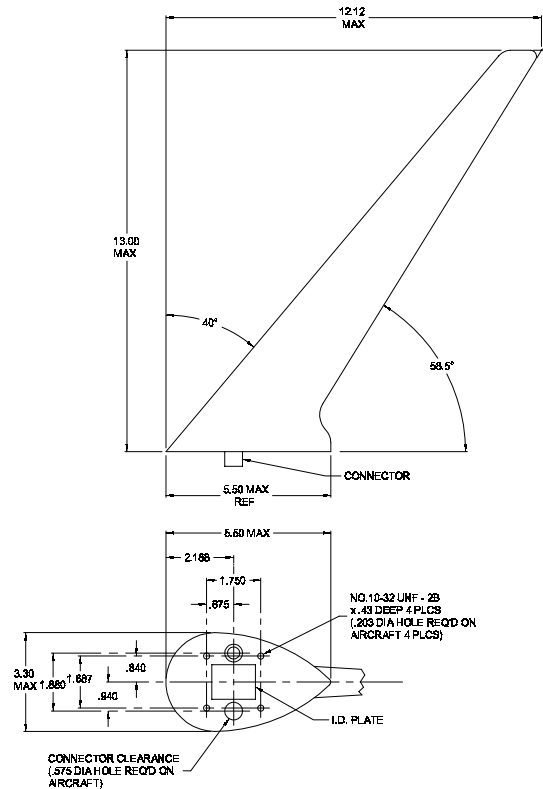
Frequency 118-137 MHz

Model CI 196 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts
Mechanical	
Weight	1.25 lbs. maximum
Height	13.00" maximum
Material	Valox 420
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	350 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	B19604



Identical to the CI 119. Matches the styling and mounting configuration of the late model Mooney 201/231/252 aircraft series starting in 1978. The CI 196 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.
P/N CI 196



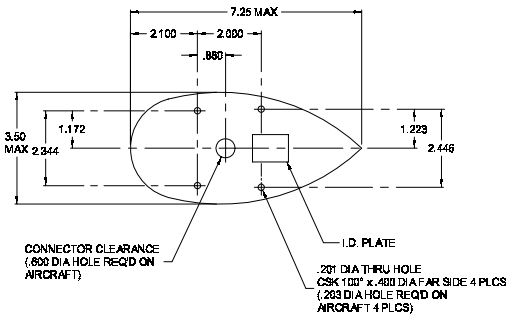
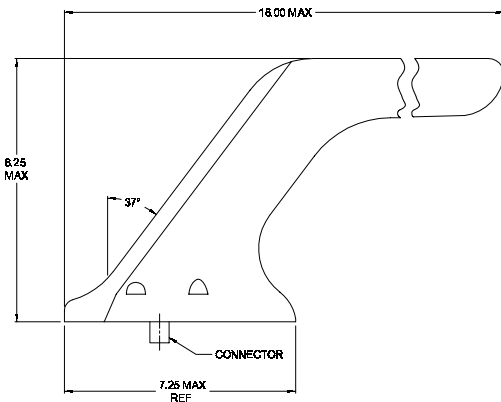
VHF Communications

Frequency 118-137 MHz



Optimum antenna for high-performance jet aircraft. Only 8.25" high, yet provides good performance without the added drag of a taller blade-type communication antenna. Skydrol and rain erosion resistant. The optional CI 211-L offers leading edge protection as shown in outline drawing. The CI 211 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 211



Model CI 211 VHF Blade Antenna

Electrical

Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	30 Watts C.W.

Mechanical

Weight	1.6 lbs. maximum
Height	8.25" maximum
Material	High density polyurethane
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental

Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	573 Knots TAS or 0.88 Mach @ 45,000'

Federal Specifications

RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector

BNC	Standard
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Color

White	Standard
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Gasket

Gasket	C21104 cork neoprene—standard
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Leading Edge Protection

Leading Edge Protection	CI 211-L
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VHF Extended Band

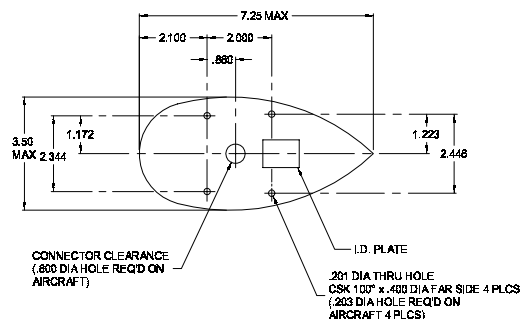
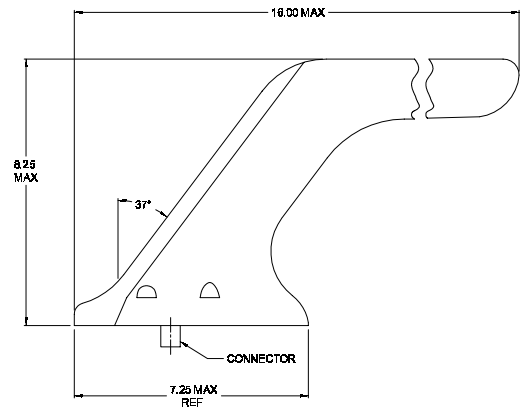
Frequency 118-153 MHz

Model	CI 211-1 VHF Blade Antenna
Electrical	
Frequency	118 to 153 MHz
VSWR	2.75:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	30 Watts C.W.
Mechanical	
Weight	1.6 lbs. maximum
Height	8.25" maximum
Material	High density polyurethane
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	573 Knots TAS or 0.88 Mach @ 45,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C21104 cork neoprene
Leading Edge Protection	
Leading Edge Protection	CI 211-1-L



Intended for installation on long-range executive jet and turbo-prop aircraft capable of operating in Europe, Asia and South America where VHF communication is available over a much wider band. Only 8.5" high, yet provides good performance without the added drag of taller blade communication antennas. Skydrol and rain erosion resistant, the optional CI 211-1-L offers leading edge protection as shown in outline drawing. The CI 211-1 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements.

P/N CI 211-1



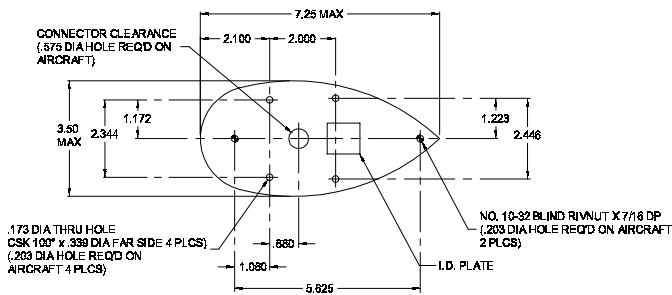
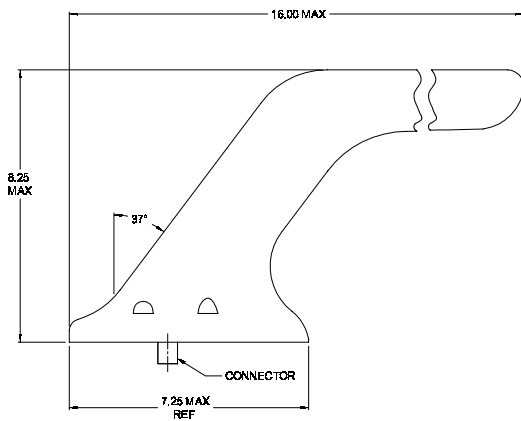
VHF Extended Band

Frequency 118-153 MHz



Intended for installation on long-range executive jet and turbo-prop aircraft capable of operating in Europe, Asia and South America where VHF communication is available over a much wider band. Only 8.25" high, yet provides good performance without the added drag of taller blade communication antennas. The CI 211-16 is identical to the CI 211-1 except it also includes one internal mounting hole forward and one internal mounting hole aft on the antenna center line as shown in outline drawing. The CI 211-16 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements.

P/N CI 211-16



Model CI 211-16 VHF Blade Antenna

Electrical	
Frequency	118 to 153 MHz
VSWR	2.75:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	30 Watts C.W.

Mechanical	
Weight	1.6 lbs. maximum
Height	8.25" maximum
Material	High density polyurethane
Finish	Polyurethane enamel
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	573 Knots TAS or 0.88 Mach @ 45,000'

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C21104 cork neoprene

VHF Communications

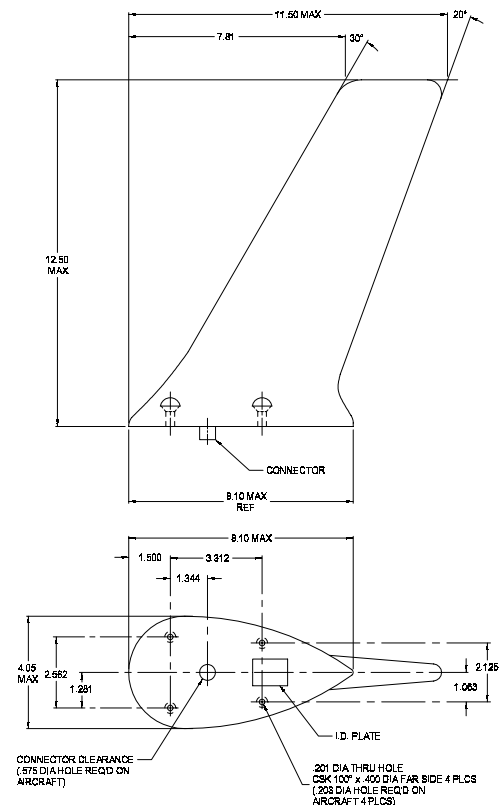
Frequency 118-137 MHz

Model CI 223 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.0:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts
Mechanical	
Weight	1.5 lbs. maximum
Height	12.5" maximum
Material	High density polyurethane
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	600 Knots @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C22310



Blade-type antenna with four mounting holes for external mounting on high-performance twins and jets. Very low-drag profile and clean aerodynamical shape. Suitable for mounting on top or bottom of the aircraft fuselage. The CI 223 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.
P/N CI 223



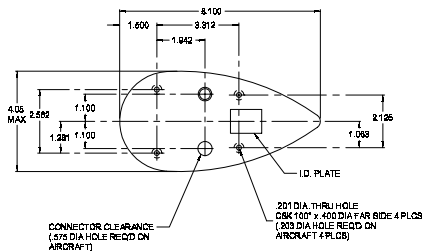
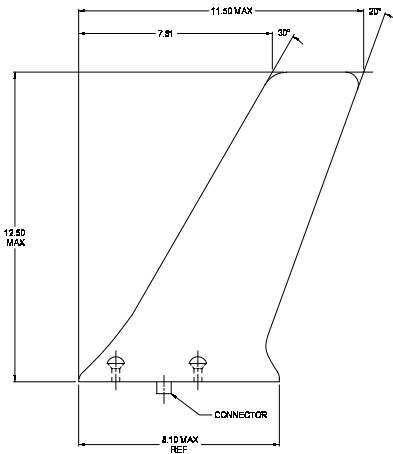
VHF Communications

Frequency 118-137 MHz



Blade-type antenna with four mounting holes for external mounting on high-performance twins and jets. Very low-drag profile and clean aerodynamical shape. Suitable for mounting on top or bottom of the aircraft fuselage. The CI 223-1 is identical to the CI 223 but with offset connector. The CI 223-1 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 223-1



Model CI 223-1 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.0:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts

Mechanical	
Weight	1.5 lbs. maximum
Height	12.5" maximum
Material	High density polyurethane
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	600 Knots @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C22310

VHF Communications

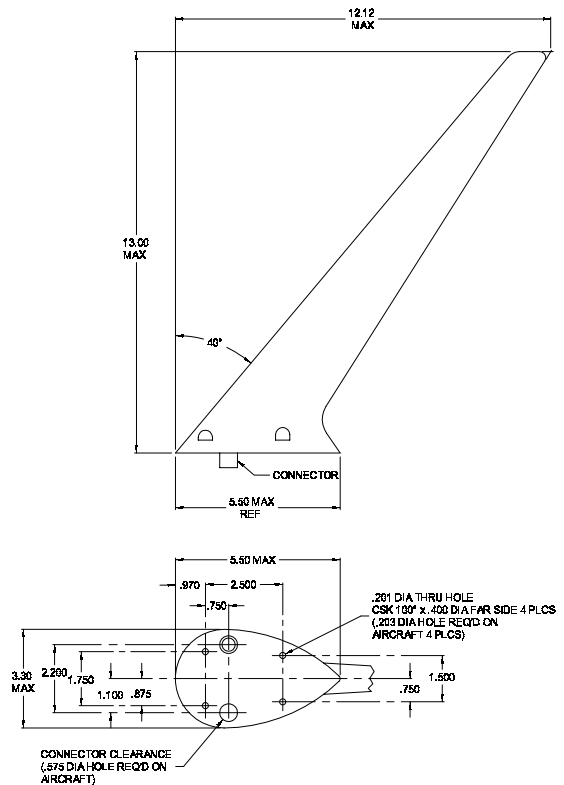
Frequency 118-137 MHz

Model CI 238 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts
Mechanical	
Weight	1.25 lbs. maximum
Height	13.00" maximum
Material	Fiberglass
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	350 Knots TAS @ 35,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	CI13804 cork neoprene—standard



Specifically designed for medium speed single and twin-engine aircraft. Features a low drag aerodynamic blade design with an overall height of 13". The CI 238 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.
P/N CI 238



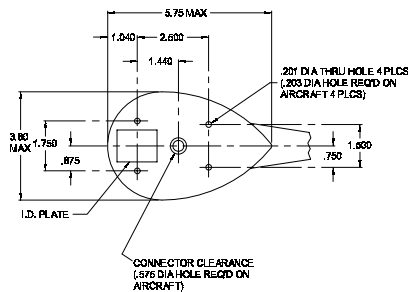
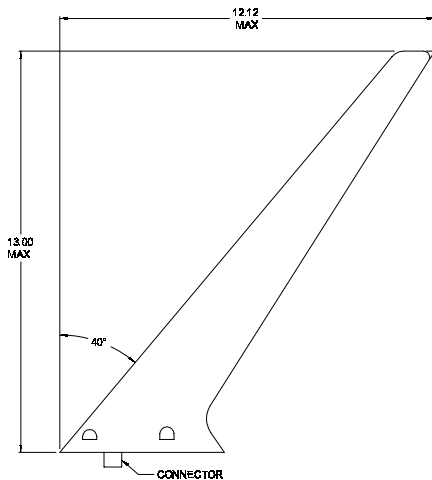
VHF Communications

Frequency 118-137 MHz



Specifically designed for medium speed single and twin-engine aircraft. Features a low drag aerodynamic blade design with an overall height of 13 inches. The CI 238-1 is identical to the CI 238 with the exception of the mounting configuration. The CI 238-1 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 238-1



Model CI 238-1 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts
Mechanical	
Weight	1.25 lbs. maximum
Height	13.00" maximum
Material	Fiberglass
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	350 Knots TAS @ 35,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	CI13804 cork neoprene

VHF Communications

Frequency 118-137 MHz

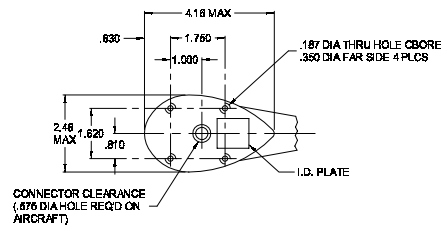
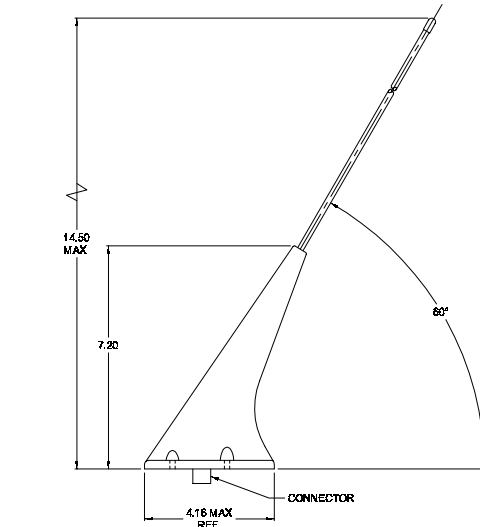
Model CI 270 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts
Mechanical	
Weight	0.53 lbs. maximum
Height	14.50" maximum
Material	Polyester housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS @ 35,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[T(C,C1)U(F,F1)R(Y)] XRFDXSXXXXX[XX]X[XXXX]XCX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard



The CI 270 VHF communications antenna is designed for top or bottom installation on high performance single, twin and turbo engine aircraft. Tested to the RTCA's newest and toughest DO-160D standards, the CI 270 is qualified to the C37d, C38d TSO. This antenna is a robust design ideal for both fixed and rotary wing applications. The CI 270 matches popular footprints and designs.

P/N CI 270

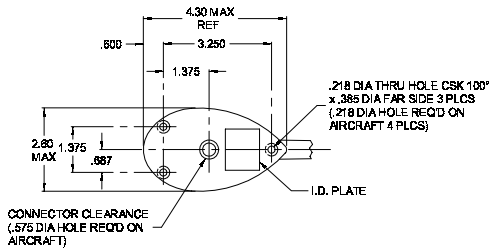
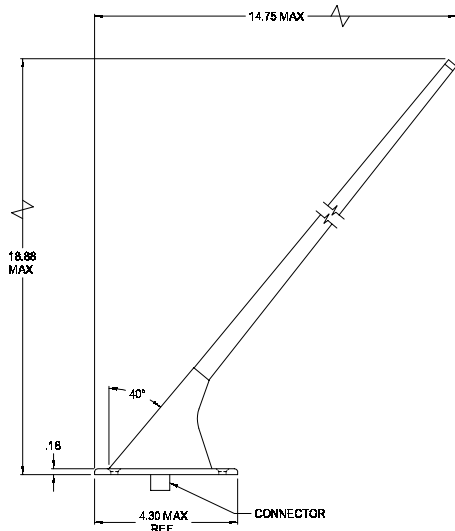


VHF Communications

Frequency 118-137 MHz



Weighs only 0.5 pounds. Features high strength fiberglass "stick" radiator and die-cast, 3-hole mounted aluminum base. Virtually identical in appearance to many Cessna communication antennas and most LORAN antennas. The CI 291 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS. **P/N CI 291**



Model CI 291 VHF Blade Antenna

Electrical

Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts

Mechanical

Weight	0.5 lbs. maximum
Height	18.88" maximum
Material	Cast housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental

Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS

Federal Specifications

RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector

BNC	Standard
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Color

White	Standard
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Gasket

Gasket	C29205 cork neoprene
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VHF Communications

Frequency 118-137 MHz

Model CI 292-1 VHF Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts

Mechanical	
Weight	0.5 lbs. maximum
Height	20.0" maximum
Material	Cast housing/stainless whip
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

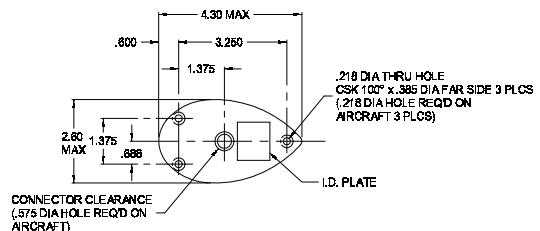
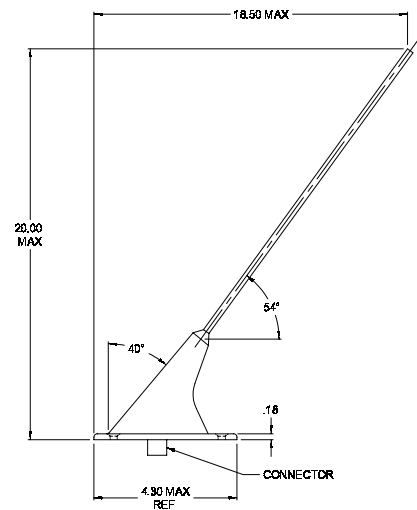
Connector	
BNC	Standard

Color	
White	Standard

Gasket	
Gasket	C29205 cork neoprene



Designed specifically for top mounting on an aircraft. Provides excellent omnidirectional pattern coverage for all VHF aircraft communications. It is equivalent to the CI 291 but features a straight tapered stainless steel radiator. The CI 292-1 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.
P/N CI 292-1



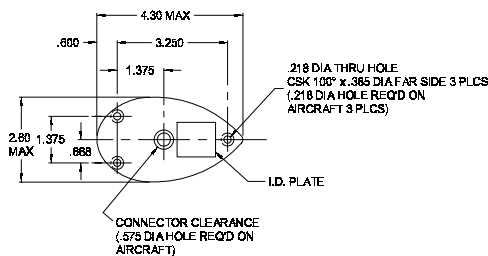
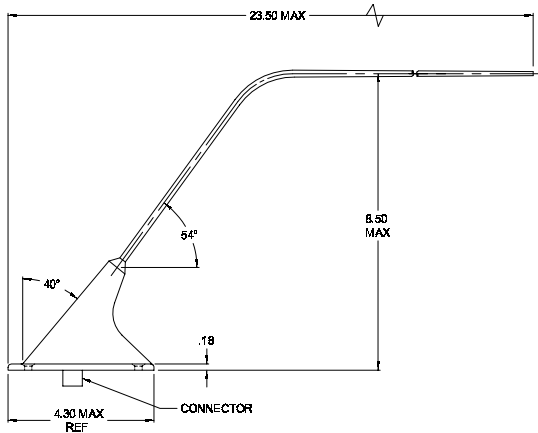
VHF Communications

Frequency 118-137 MHz



Identical to the CI 292-1 except that it provides a stainless steel bent-whip radiator which makes it ideal for helicopters and bottom mounting underneath fixed wing aircraft. The CI 292-2 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS.

P/N CI 292-2



Model CI 292-2 VHF Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	3.0:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts

Mechanical	
Weight	0.5 lbs. maximum
Height	8.50" maximum
Material	Cast housing/stainless whip
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C29205 cork neoprene

VHF Communications

Frequency 118-137 MHz

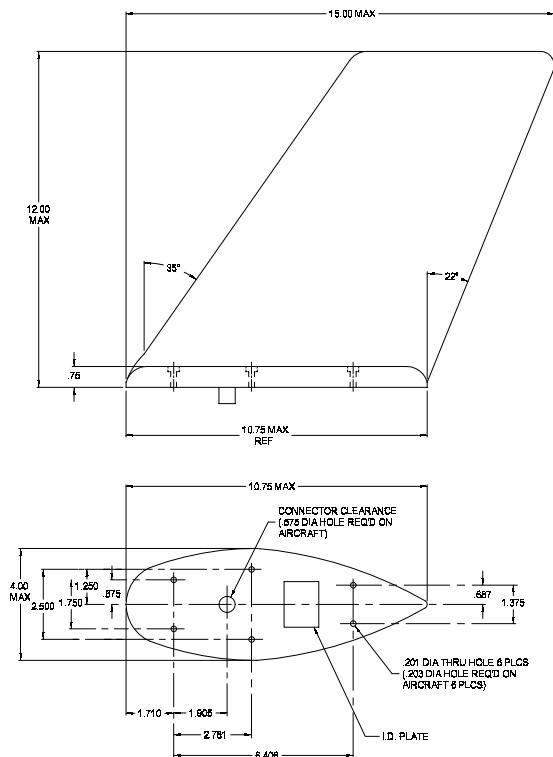
Model CI 108 VHF Blade Antenna

Electrical	
Frequency	118 to 137 MHz
VSWR	2.5:1
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts
Mechanical	
Weight	2.5 lbs. maximum
Height	12.0" maximum
Material	High density polyurethane
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	600 Knots TAS @ 35,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C10810 cork neoprene—standard



Designed for high-performance aircraft applications. Suitable for either top or bottom mounting. Solid Polyurethane construction for strength, reliability and durability. White Polyurethane finish is Skydrol and rain erosion resistant. The 108 Series has been re-tested and upgraded to the RTCA DO-160D environmental requirements and offers the 118 to 137 MHz frequency associated with DO-186A MOPS. Optional leading edge protection available with the CI 108-L.

P/N CI 108



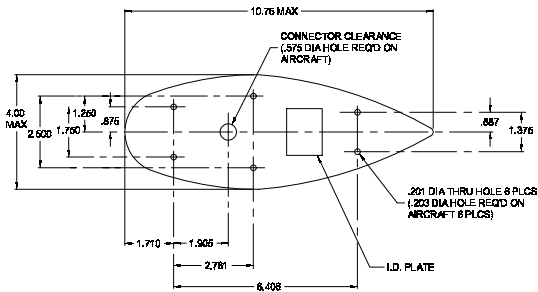
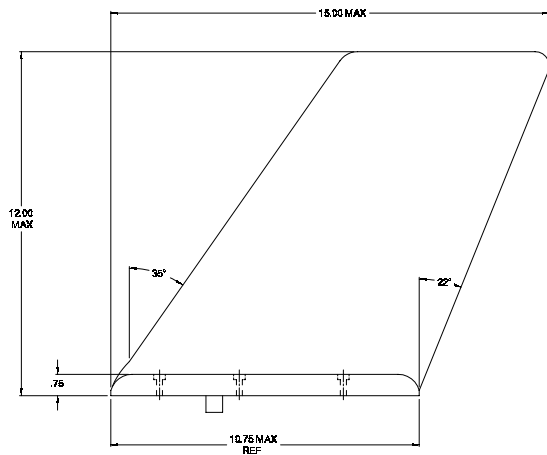
VHF Extended Band

Frequency 118-153 MHz



Designed for world-wide service where VHF communication is available over a wider band. Suitable for either top or bottom mounting. Solid Polyurethane construction for strength, reliability and durability. White Polyurethane finish is Skydrol and rain erosion resistant. The 108 Series has been re-tested and upgraded to the RTCA DO-160D environmental requirements. Optional leading edge protection available with the CI 108-1-L.

P/N CI 108-1



Model CI 108-1 VHF Blade Antenna

Electrical	
Frequency	118 to 153 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts

Mechanical	
Weight	2.5 lbs. maximum
Height	12.0" maximum
Material	High density polyurethane
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	600 Knots TAS @ 35,000'

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C10810 cork neoprene—standard

FM/2 Meter

Frequency 148-174 MHz

Model CI 145 FM/2 Meter
Communications

Electrical

Frequency	148 to 174 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts.

Mechanical

Weight	1.25 lbs. maximum
Height	12.90" maximum
Material	Valox
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental

Temperature	-55° C to +85° C
Altitude	35,000'
Air Speed	350 Knots TAS @ 25,000'

Federal Specifications

RTCA	DO 160
FAA TSO	C37b, Class 1, C38b
Environmental Category	C2BLXXXXXXXXXX

Order Options

Connector

BNC	Standard
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Color

White	Standard
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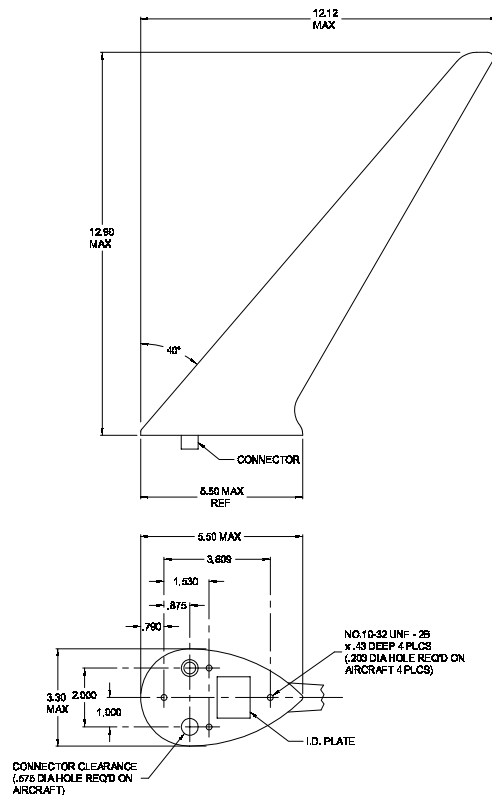
Gasket

Gasket	C12704
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Designed for single or twin-engine aircraft. Similar to the CI 119 but covers the 148-174MHz FM/2 meter communication band.

P/N CI 145



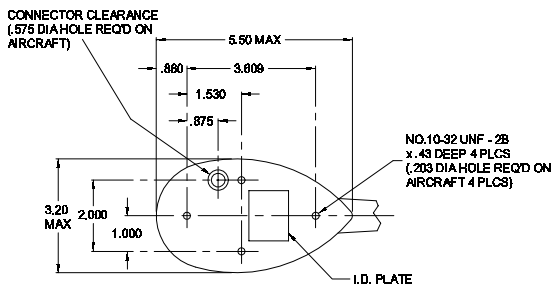
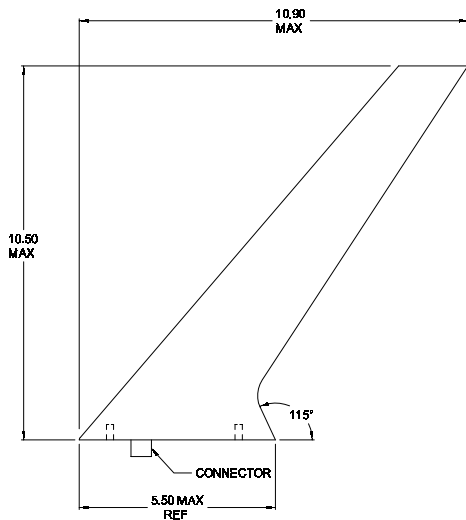
FM/2 Meter

Frequency 148-174 MHz



Similar to the CI 145, but is only 10.50" tall. This makes the CI 145-1 ideal for mounting on the underside of the fuselage.

P/N CI 145-1



Model CI 145-1 FM/2 Meter Communications

Electrical

Frequency	148 to 174 MHz
VSWR	2.7:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts

Mechanical

Weight	1.25 lbs. maximum
Height	10.50" maximum
Material	Valox
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental

Temperature	-55° C to +85° C
Altitude	35,000'
Air Speed	350 Knots TAS @ 25,000'

Federal Specifications

RTCA	DO 160
FAA TSO	C37b, Class 1, C38b
Environmental Category	C2BLXXXXXXXXXX

Order Options

Connector

BNC	Standard
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Color

White	Standard
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FM/2 Meter

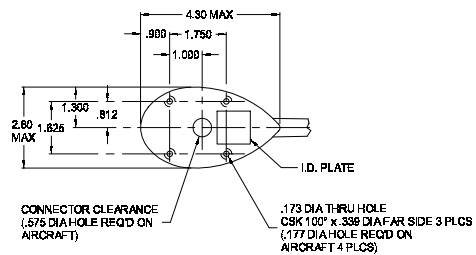
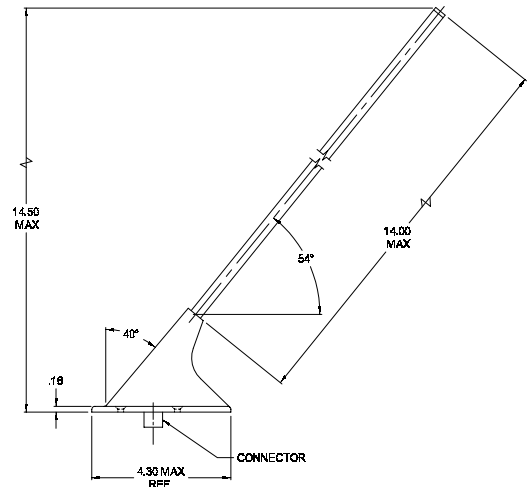
Frequency 148-174 MHz

Model CI 177 FM/2 Meter Whip Antenna

Electrical	
Frequency	148 to 174 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts.
Mechanical	
Weight	0.5 lbs. maximum
Height	14.50" maximum
Material	Die cast housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +55° C
Altitude	30,000'
Air Speed	450 Knots @ 25,000'
Federal Specifications	
RTCA	DO 138
FAA TSO	C37b, Class 1, C38b
Environmental Category	BAJXXXXXXXXXX
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	B12607



Designed for use over the public service FM frequency band. Features the popular standard 4 hole mounting with the radiating element enclosed in a high strength tapered glass laminate housing. **P/N CI 177**



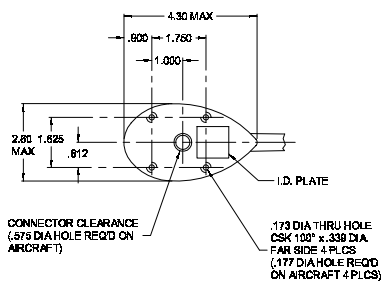
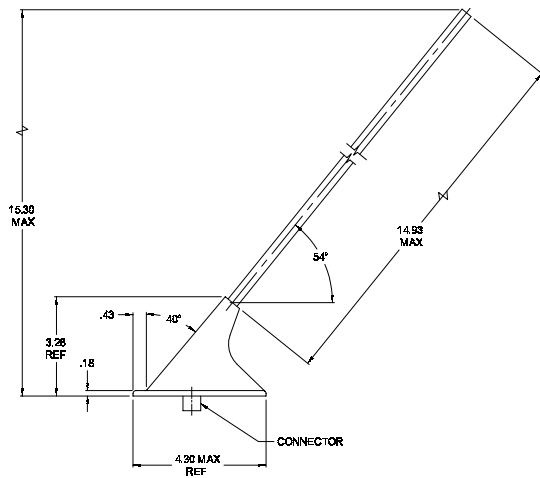
FM/2 Meter Extended Band

Frequency 138-174 MHz



Wider band version of the CI 177 over a frequency band of 138 to 174 MHz. Improved bandwidth provides greater flexibility by optimizing features of some of the newer FM transceivers. Features a molded base with popular 4-hole mounting. Radiating element is enclosed in a high strength, tapered glass laminate housing.

P/N CI 177-1



Model CI 177-1 FM/2 Meter Extended Band

Electrical

Frequency	138 to 174 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts.

Mechanical

Weight	0.5 lbs. maximum
Height	15.30" maximum
Material	Die cast housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental

Temperature	-55° C to +55° C
Altitude	30,000'
Air Speed	450 Knots @ 25,000'

Federal Specifications

RTCA	DO 138
FAA TSO	C37b, Class 1, C38b
Environmental Category	BAJXXXXXXXXXX

Order Options

Connector

BNC	Standard
-----	----------

Color

White	Standard
-------	----------

Gasket

Gasket	B12607-3
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FM/2 Meter

Frequency 148-174 MHz

Model CI 177-3 FM/2 Meter Antenna

Electrical

Frequency	148 to 174 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts

Mechanical

Weight	0.5 lbs. maximum
Height	14.50" maximum
Material	Die cast housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental

Temperature	-55° C to +55° C
Altitude	30,000'
Air Speed	450 Knots @ 25,000'

Federal Specifications

RTCA	DO 138
FAA TSO	C37b, Class 1, C38b
Environmental Category	BAJXXXXXXXXXX

Order Options

Connector

BNC	Standard
-----	----------

Color

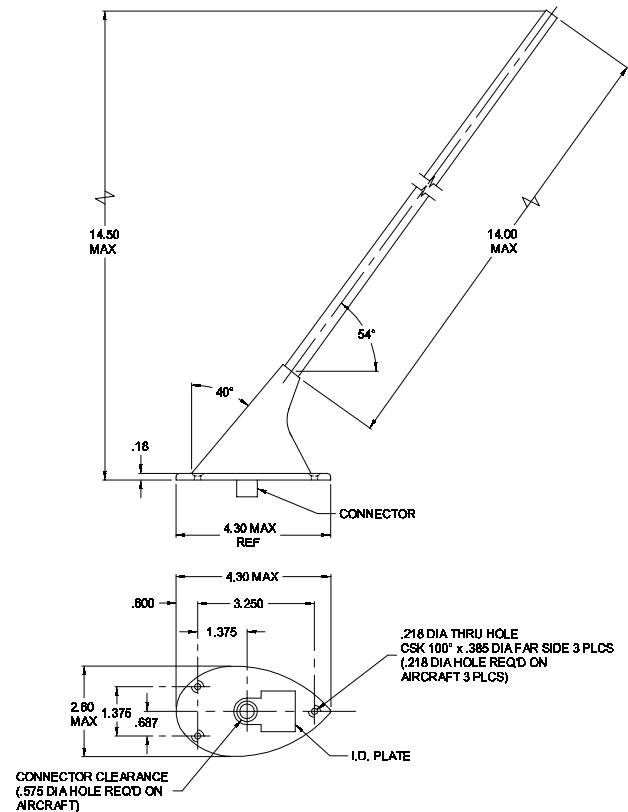
White	Standard
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Gasket

Gasket	C29205
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Designed for use over the public service FM frequency band. Features the popular standard 3-hole mounting with the radiating element enclosed in a high strength tapered glass laminate housing. **P/N CI 177-3**



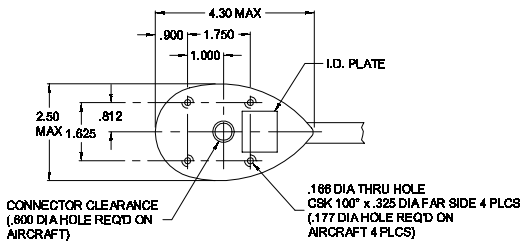
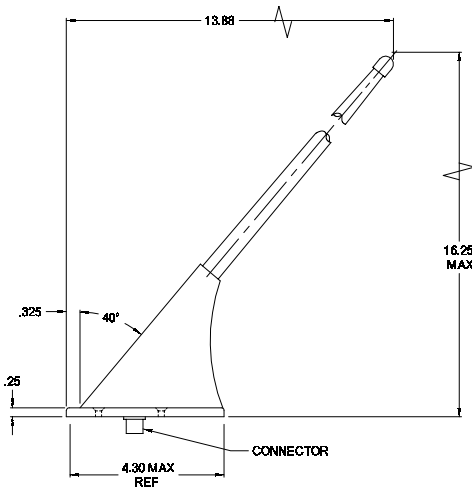
Data Link

Frequency 137-150 MHz



The CI 177-4 is specifically designed for use with Weather/Data or WX systems, bringing e-mail and weather data to the cockpit. The CI 177-4 links to the ORBCOMM™ LEO satellite constellation to bring real time weather and e-mail within easy reach of any pilot. This was built for pure electrical performance. Its 1.5:1 VSWR provides the best reception of any airborne antenna of its kind.

P/N CI 177-4



Model CI 177-4 Data Link/WX

Electrical	
Frequency	137 to 150 MHz
VSWR	1.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedence RF	50 OHMS
Power RF	50 Watts

Mechanical	
Weight	0.4 lbs. maximum
Height	16.25" maximum
Material	Valox housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	55,000'
Air Speed	250 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2]-ACB[(C,C1,R)(F,F1,U)] XRFDXSX[X]XXX[XXX]X[XXXX]XCA
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector	
BNC	Standard

Color	
White	Standard

FM/2 Meter Extended Band

Frequency 138-174 MHz

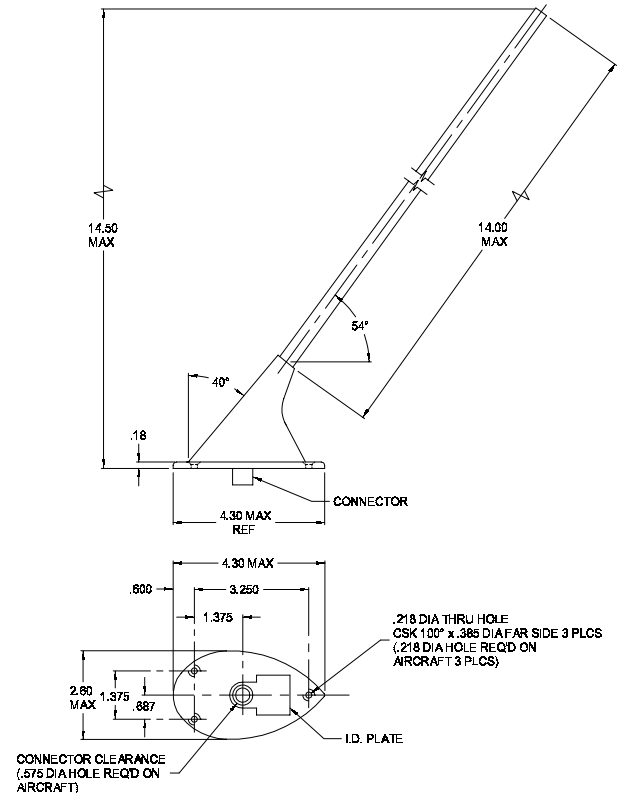
Model CI 177-13 FM/2 Meter Extended Band

Electrical	
Frequency	148 to 174 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts
Mechanical	
Weight	0.5 lbs. maximum
Height	14.50" maximum
Material	Die cast housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +55° C
Altitude	30,000'
Air Speed	450 Knots @ 25,000'
Federal Specifications	
RTCA	DO 138
FAA TSO	C37b, Class 1, C38b
Environmental Category	BAJXXXXXXXXXX
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C29205



Wider band version of the CI 177 with 2.5:1 VSWR or better over a frequency band of 138 to 174 MHz. Improved bandwidth provides greater flexibility by optimizing features of some of the newer FM transceivers. Features a molded base with popular 3-hole mounting. Radiating element is enclosed in a high strength, tapered glass laminate housing.

P/N CI 177-13



AM/FM Receive

Frequency 88-108 MHz 550-1600 KHz

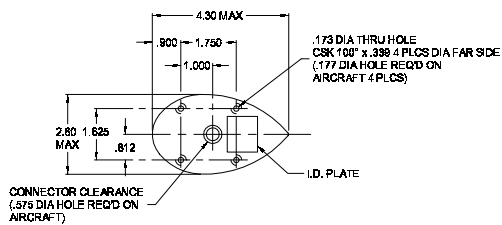
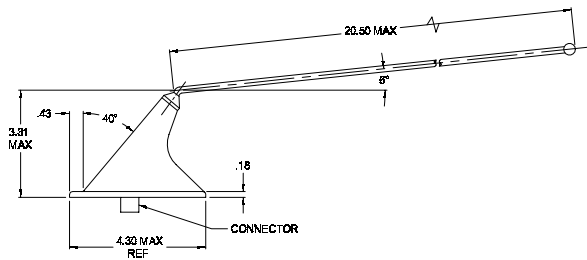


AM/FM receive antenna offers a unique low profile design using standard 4-hole mounting used on many VHF type antennas. Bent whip configuration is ideally suited for underbelly and helicopter installations.

P/N CI 222

Model CI 222 AM/FM Antenna

Electrical	
Frequency	88 to 108 MHz & 550 to 1600 KHz
VSWR	3.5:1 maximum @ mid-band
Polarization	Slant/linear
Radiation Pattern	Omnidirectional—receive only
Impedance	50 OHMS
Power	50 Watts
Mechanical	
Weight	0.5 lbs. maximum
Height	5.5" maximum
Material	Cast zinc housing/stainless whip
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Air Speed	450 Knots TAS @ 25,000'
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	B12607-3



FM Receive

Frequency 88-108 MHz

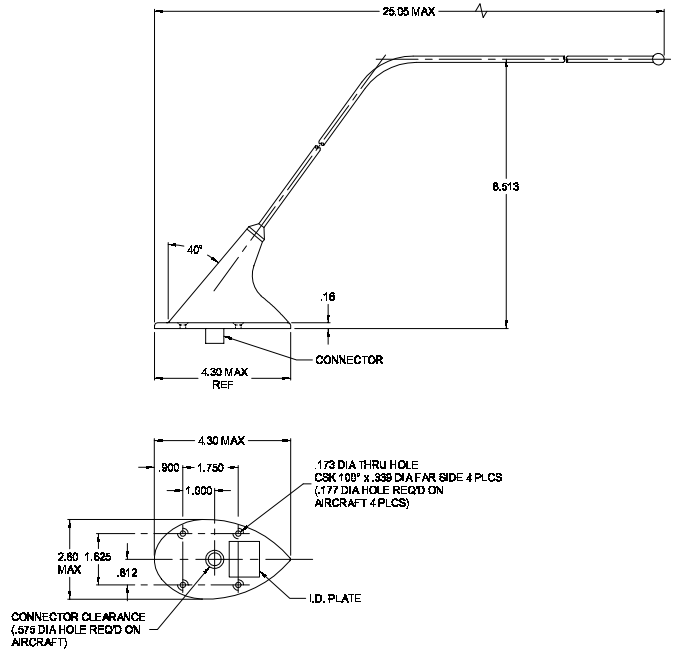
Model CI 222-1 FM Antenna

Electrical	
Frequency	88 to 108 MHz
VSWR	3.0:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts
Mechanical	
Weight	0.5 lbs. maximum
Height	8.5" maximum
Material	Cast zinc housing/stainless whip
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Air Speed	450 Knots TAS @ 25,000'
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	B12607-3



Efficient FM radio bent whip antenna is higher performance and moderately higher profile version of the CI 222. Features 4-hole mounting, suitable for either top or bottom airframe installations or fixed wing/rotorcraft. DC grounded.

P/N CI 222-1



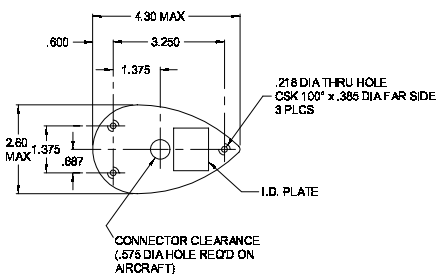
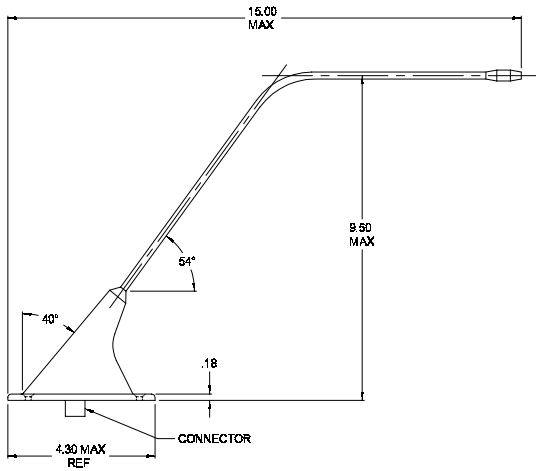
FM/2 Meter Extended Band

Frequency 138-174 MHz



Designed to provide 2.5:1 VSWR or better over a bandwidth of 138 to 174 MHz. Features a high-strength die-cast 3-hole aluminum base. Radiating element is a bent-whip tapered stainless steel rod suitable for bottom mounting. The CI 292-3 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements.

P/N CI 292-3



Model CI 292-3 FM Extended Band Bent Whip

Electrical

Frequency	138 to 174 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	50 Watts

Mechanical

Weight	0.5 lbs. maximum
Height	9.50" maximum
Material	Die cast housing/stainless whip
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental

Temperature	-55° C to +70° C
Altitude	50,000'
Air Speed	250 Knots TAS @ 25,000'

Federal Specifications

RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector

BNC	Standard
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Color

White	Standard
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Gasket

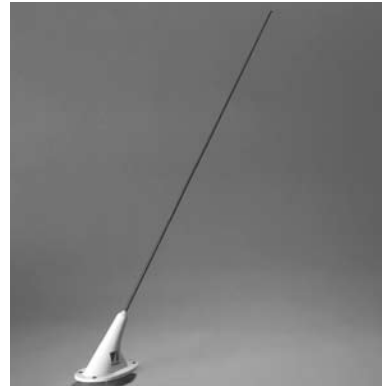
Gasket	B29205
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FM/2 Meter Extended Band

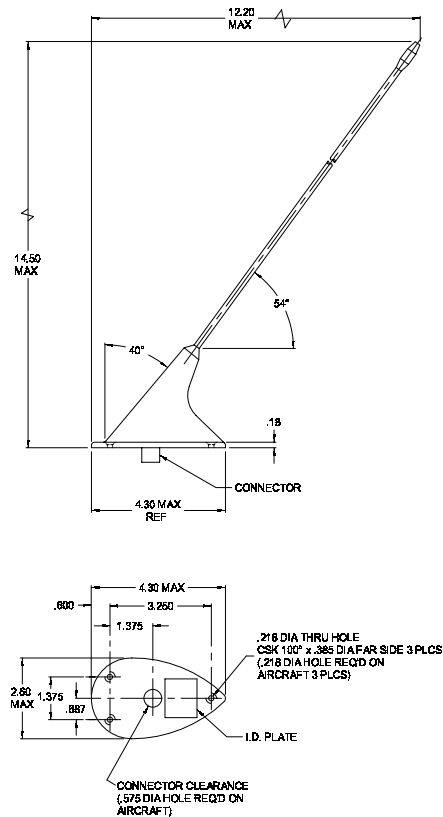
Frequency 136-174 & 138-174 MHz

Model CI 292-4 FM Extended Band Whip Antenna

Electrical	
Frequency	138 to 174 MHz & 136 to 174 MHz
VSWR	2.5:1 @ 138 to 174 MHz 3.0:1 @ 136 to 174 MHz
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS (nominal)
Power	50 Watts
Mechanical	
Weight	0.5 lbs. maximum
Height	14.50" maximum
Material	Die cast housing/stainless whip
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +70° C
Altitude	50,000'
Air Speed	250 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[D2X]ACB[R(C,C1)U(F,F1)] XWFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	B29205



Wider band covers popular VHF and FM frequencies. Designed to provide 2.5:1 VSWR or better over a bandwidth of 138-174 MHz. Features a high-strength die-cast 3-hole aluminum base. Radiating element is a straight tapered stainless steel rod suitable for bottom mounting. Overall height only 14.5 inches with BNC connector as standard. The CI 292-4 has been re-tested and upgraded to the new RTCA DO-160D environmental requirements
P/N CI 292-4



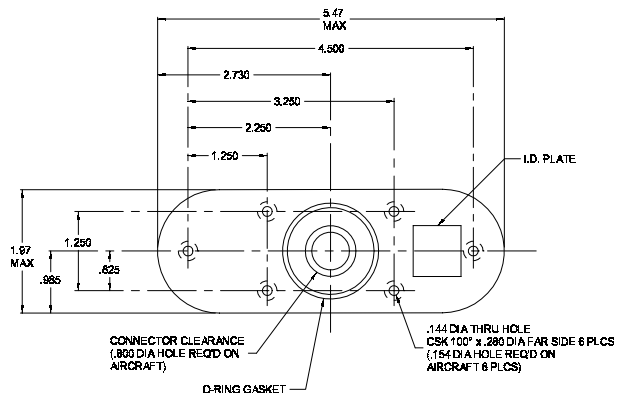
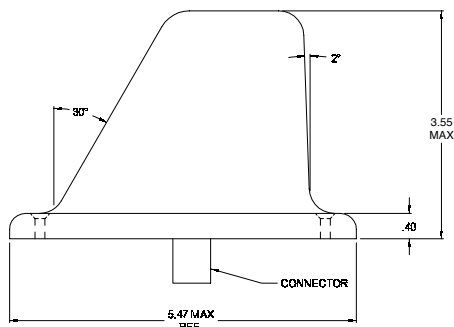
UHF Radiotelephone

Frequency 806-960 MHz & 960-1220 MHz



Wide band vertically polarized/omnidirectional antenna designed for high performance aircraft over the UHF/L band of frequencies from 806 to 960 MHz. Low profile blade-type construction features 6-hole mounting, low drag, low weight, wide band/high efficiency electrical performance, DC grounding for lightning protection and Skydrol/rain erosion resistance.

P/N CI 105-20 Series



Model CI 105-20 Series Radiotelephone

Electrical	
Frequency	806 to 960 MHz & 960 to 1220 MHz
VSWR	1.5:1 894 to 896 MHz transmit 1.5:1 849 to 851 MHz receive
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda / 4$ stub
Impedance RF	50 OHMS
Resistance DC	Short circuit
Power RF	100 Watts maximum average

Mechanical	
Weight	0.40 lbs. maximum
Height	3.55" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order options

Environmental	
Temperature	-55° C to +85° C
Altitude	70,000'
Air Speed	600 Knots TAS @ 25,000'

Federal Specifications	
RTCA	DO 160C
Environmental Category	[E1]-AX(CLY)XXXXXXXXXXXX[XXX][X]X
FAA TSO	C66b, C74b
RTCA MOPS	DO-144, DO-189

Order Options	
Connector	
BNC	CI 105-20
TNC	CI 105-22
C	CI 105-23
HN	CI 105-24
N	CI 105-25

Color	
White	Standard
Orange	Minimum order required

Gasket	
Gasket	70445 'O' Ring

UHF Radiotelephone

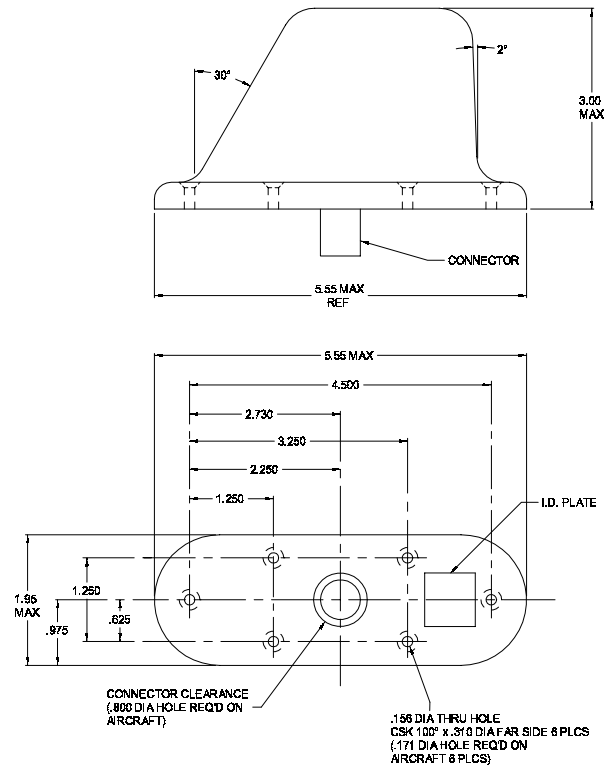
Frequency 806-960 MHz & 960-1220 MHz

Model		CI 105-30 Series Radiotelephone
Electrical		
Frequency	806 to 960 MHz; 960 to 1220 MHz	
VSWR	1.5:1 806 to 960 MHz 2.5:1 960 to 1220 MHz	
Polarization	Vertical	
Radiation Pattern	Equivalent of $\lambda/4$ stub	
Impedance RF	50 OHMS	
Resistance DC	Short circuit	
Power RF	100 Watts maximum average	
Mechanical		
Weight	0.33 lbs.	
Height	3.00"	
Material	Molded radome	
Finish	Polyurethane enamel	
Connector	See order options	
Environmental		
Temperature	-55° C to +85° C	
Altitude	70,000'	
Air Speed	600 Knots @ 25,000'	
Federal Specifications		
RTCA	DO 160C	
Environmental Category	[E1]-AX(CLY)XXXXXXXXXX[XXXX][X]X	
FAA TSO	C66b, C74b	
RTCA MOPS	DO-144, DO-189	
Order Options		
Connector		
BNC	CI 105-30	
TNC	CI 105-32	
C	CI 105-33	
HN	CI 105-34	
N	CI 105-35	
Color		
White	Standard	
Orange	Minimum order required	
Gasket		
Gasket	70445 'O' Ring	



Similar to the CI 105-20 series but offers slightly lower profile. Wide band vertically polarized/omnidirectional antenna designed for high performance aircraft over the UHF/L band of frequencies. Features 6-hole mounting, low drag, low weight, wide band/high efficiency electrical performance, DC grounding for lightning protection and Skydrol/rain erosion resistance.

P/N CI 105-30 Series



UHF Radiotelephone

Frequency 450-470 MHz Series

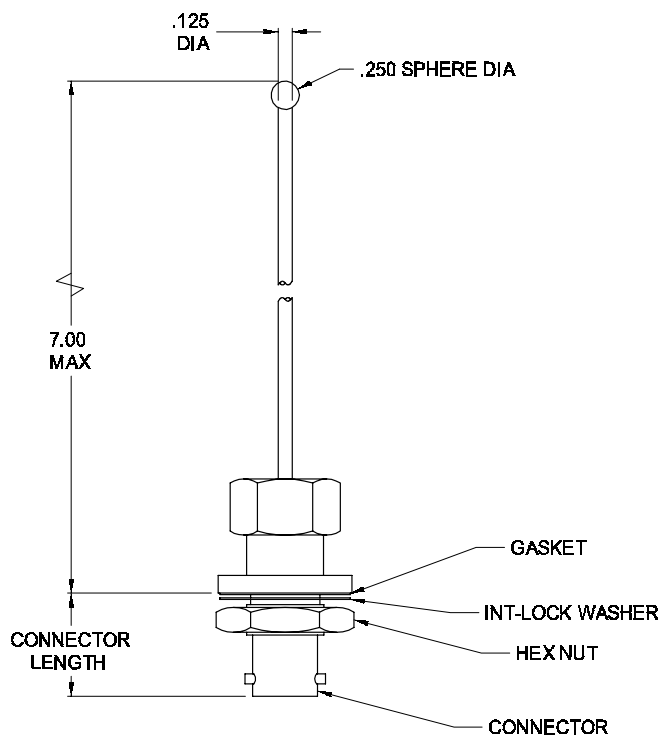


Stub antenna designed to withstand the environment associated with the underside of an aircraft. Antenna radiator is mechanically captivated and sealed against leakage. All exposed metal surfaces are nickel-plated for corrosion resistance and long service. See Order Options for connector choices.

P/N CI 106

Model **CI 106 UHF Radiotelephone**

Electrical	
Frequency	450 to 470 MHz
VSWR	1.5:1 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance RF	50 OHMS
Power RF	50 Watts average
Mechanical	
Weight	0.18 lbs. maximum
Height	7.0" maximum
Material	Nickel plated brass
Finish	Tin nickel alloy
Connector	BNC (female)
Environmental	
Air Speed	250 Knots TAS
Order Options	
Connector	
BNC	CI 106
TNC	CI 106-2
C	CI 106-3
N	CI 106-5



UHF Radiotelephone

Frequency 450-470 MHz

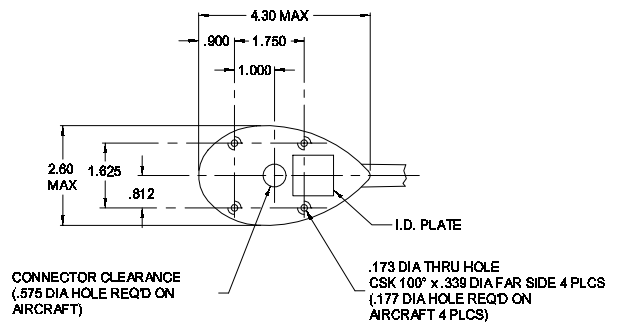
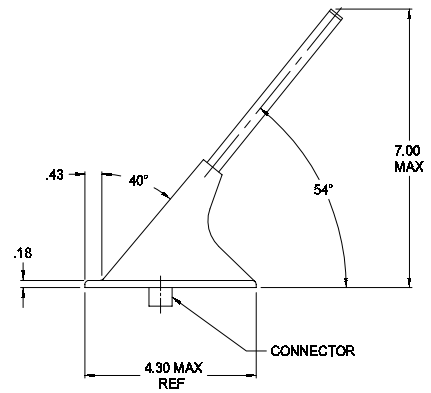
Model CI 177-20 UHF Antenna

Electrical	
Frequency	450 to 470 MHz
VSWR	2.0:1 MHz
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power RF	30 Watts
Mechanical	
Weight	0.5 lbs. maximum
Height	7.00" maximum
Material	Die cast housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +55° C
Altitude	30,000'
Air Speed	450 Knots TAS @ 25,000'
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	B12607



A rugged monopole antenna particularly well-suited to the harsh environments experienced on the underside of an aircraft. Features standard 4-hole mounting, die-cast metal base and radiator encased in glass laminate housing.

P/N CI 177-20



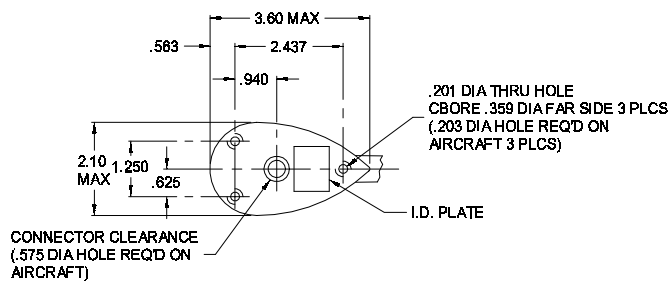
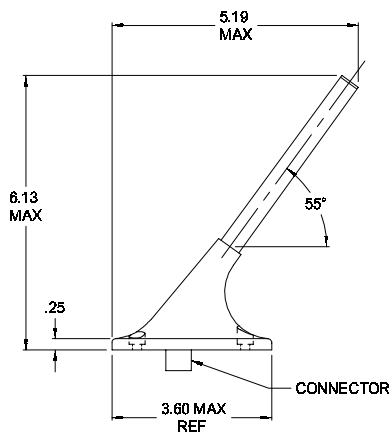
UHF Radiotelephone

Frequency 450-470 MHz



Rugged monopole antenna particularly well-suited to the harsh environments experienced on the underside of an aircraft. Features a very compact 3-hole mounted die-cast aluminum base with the radiator encased in a glass laminate housing.

P/N CI 200



Model CI 200 UHF Antenna

Electrical	
Frequency	450 to 470 MHz
VSWR	1.5:1 MHz
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power RF	30 Watts
Mechanical	
Weight	0.5 lbs. maximum
Height	6 1/8" maximum
Material	Aluminum alloy housing/fiberglass whip
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Air Speed	450 Knots TAS @ 25,000'
Order Options	
Connector	
BNC	Standard
Color	
White	Standard

UHF Radiotelephone

Frequency 400-430 MHz

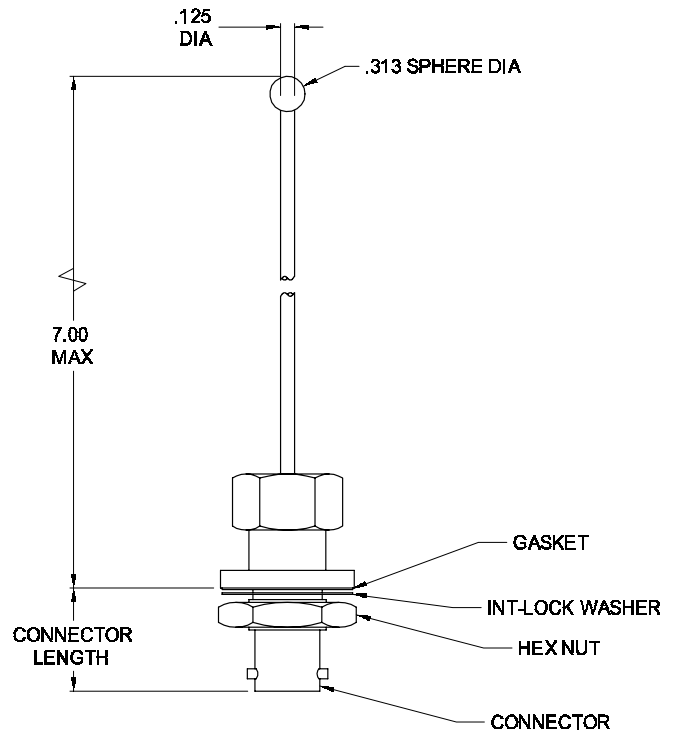
Model CI 271 Series UHF Antenna

Electrical	
Frequency	400 to 430 MHz
VSWR	1.8:1 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance	50 OHMS
Power RF	50 Watts average
Mechanical	
Weight	0.18 lbs. maximum
Height	7.00" maximum
Material	Nickel plated brass
Finish	Tin nickel alloy
Connector	BNC (female)
Environmental	
Air Speed	450 Knots TAS @ 25,000'
Order Options	
Connector	P/N
BNC	CI 271
TNC	CI 271-2
C	CI 271-3
N	CI 271-5



Stub antenna designed to withstand the harsh environments associated with the underside of an aircraft. Antenna radiator is mechanically captivated and is sealed against leakage. All exposed metal surfaces are nickel-plated for corrosion resistance and long service. CI 271 mounts through single 0.600". BNC connector is standard. See Order Options for connector choices.

P/N CI 271 Series



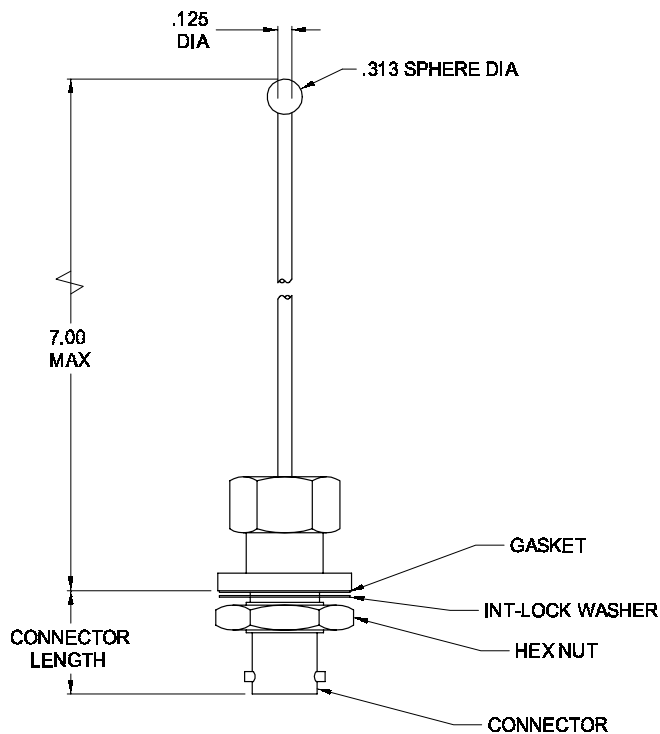
UHF Radiotelephone

Frequency 403-512 MHz



Identical to CI 271 except its electrical performance is specified over the frequency range of 403 to 512 MHz in various band segments with VSWR limits shown. Stub antenna designed to withstand the harsh environments associated with the underside of an aircraft. Antenna radiator is mechanically captivated and is sealed against leakage. All exposed metal surfaces are nickel-plated for corrosion resistance and long service. CI 273 mounts through single 0.600". BNC connector is standard. Other connectors available. See Order Options chart.

P/N CI 273 Series



Model CI 273 Series UHF Antenna

Electrical	
Frequency	430 to 512 MHz
VSWR	3.0:1 @ 403 to 512 MHz 3.0:1 @ 403 to 430 MHz 2.0:1 @ 403 to 470 MHz 3.0:1 @ 470 to 512 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance	50 OHMS
Power RF	50 Watts average

Mechanical	
Weight	0.18 lbs. maximum
Height	7.0" maximum
Material	Nickel plated brass
Finish	Tin nickel alloy
Connector	BNC (female)

Environmental	
Air Speed	250 Knots TAS @ 25,000'

Order Options

Connector	P/N
BNC	CI 273
TNC	CI 273-2
C	CI 273-3
N	CI 273-5

UHF Radiotelephone

Frequency 406-512 MHz

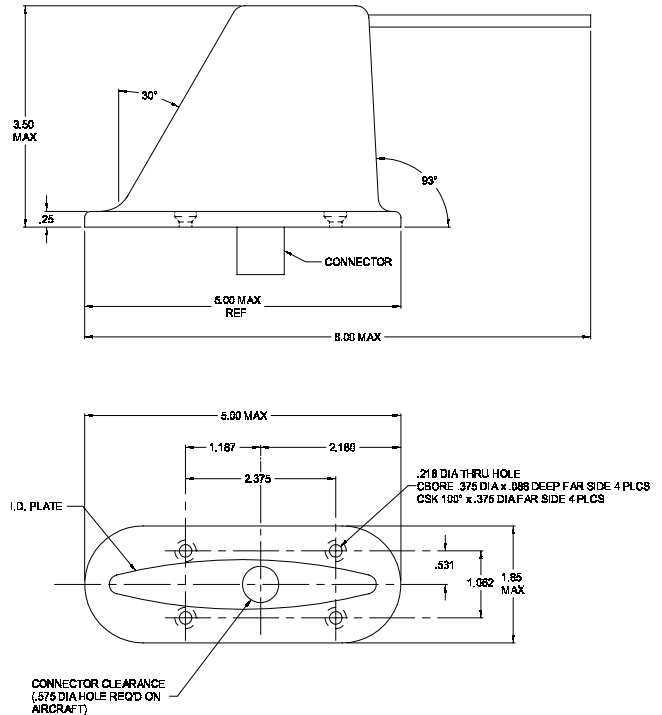
Model CI 275 Series UHF Antenna

Electrical	
Frequency	406 to 512 MHz
VSWR	2.0:1 maximum
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance	50 OHMS
Power RF	50 Watts average
Mechanical	
Weight	0.5 lbs. maximum
Height	3.5" maximum
Material	Lexan housing
Finish	Polyurethane enamel
Connector	BNC (female)
Environmental	
Temperature	-55° C to +70° C
Altitude	50,000'
Air Speed	600 Knots TAS @ 25,000'
Order Options	
Connector	P/N
BNC	CI 275
TNC	CI 275-2
C	CI 275-3
N	CI 275-5
Connector	
White	Standard



Wide band UHF antenna designed for high-performance aircraft over the full frequency range of 406-512 MHz. Low profile, blade-type antenna is encased in a low drag, low weight molded body to ensure high reliability. The CI 275 comes standard with BNC connector. Other connectors available. See order options chart.

P/N CI 275 Series



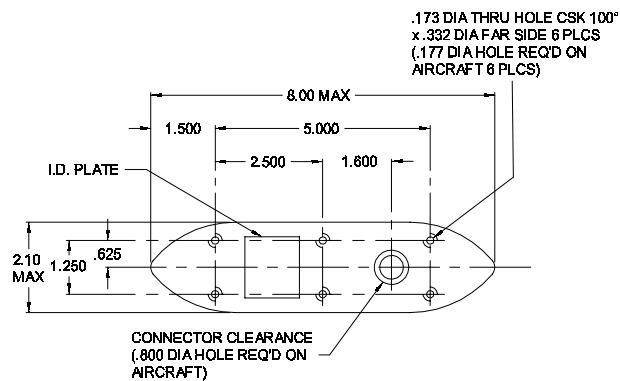
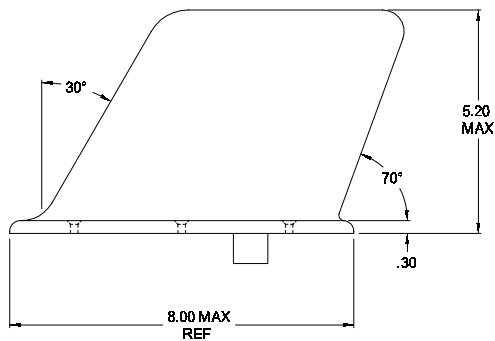
UHF Radiotelephone

Frequency 400-960 MHz



UHF blade antenna design for high performance aircraft over the full frequency range of 400-960 MHz. Low profile, low drag, light weight antenna is packaged in a molded body and metal mounting base to ensure stable performance in tough environmental conditions. Features vertically polarized/omnidirectional pattern, extremely wide band/high efficient electrical performance. DC grounding for lightning protection, 6-hole mounting.

P/N CI 285



Model CI 285 Series UHF Wide Band Antenna

Electrical

Frequency	400 to 960 MHz
VSWR	2.0:1 maximum
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda / 4$ stub
Impedance	50 OHMS
Power RF	50 Watts average

Mechanical

Weight	0.75 lbs. maximum
Height	5.20" maximum
Material	Lexan
Finish	Polyurethane enamel
Connector	N (female)

Environmental

Temperature	-55° C to +70° C
Altitude	50,000'
Air Speed	600 Knots TAS @ 25,000'

Order Options

Connector

N	CI 285 standard
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Connector

White	Standard
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UHF Radiotelephone

Frequency 800-870 MHz

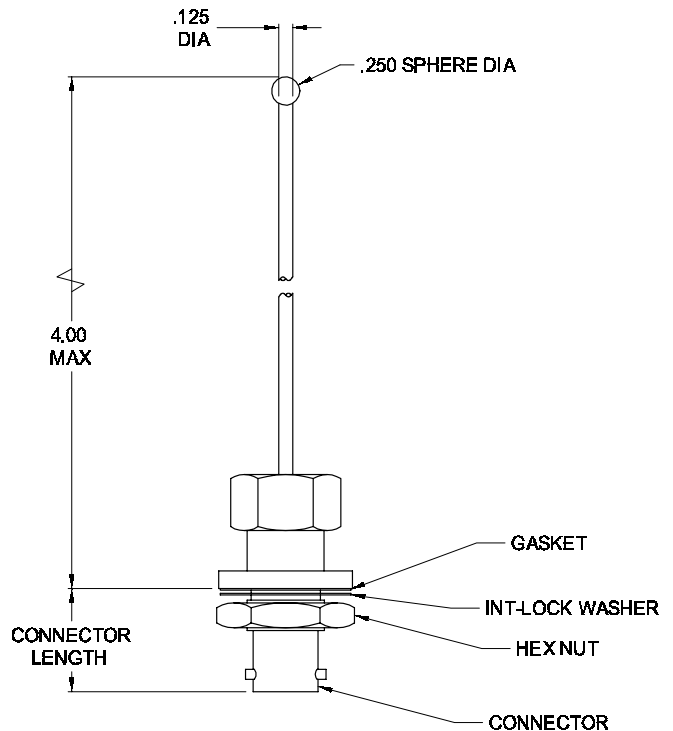
Model CI 306 Series UHF Antenna

Electrical	
Frequency	800 to 870 MHz
VSWR	1.5:1 maximum
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance	50 OHMS
Power RF	50 Watts average
Mechanical	
Weight	0.15 lbs. maximum
Height	4.0" maximum
Material	Nickel plated brass
Finish	Tin nickel alloy
Connector	BNC (female)
Environmental	
Temperature	-55° C to +70° C
Altitude	25,000'
Air Speed	250 Knots TAS @ 25,000'
Order Options	
Connector	P/N
BNC	CI 306
TNC	CI 306-2
C	CI 306-3
N	CI 306-5



Stub-type antenna tuned for the 800-870 MHz radio telephone band. Intended for use on low-flying aircraft and helicopters. CI 306 available with BNC connector and mounts through a single 0.600" diameter hole. CI 306-5 available with a type N connector in which a mounting hole diameter of 0.800" is required. See Order Options for connector choices.

P/N CI 306 Series



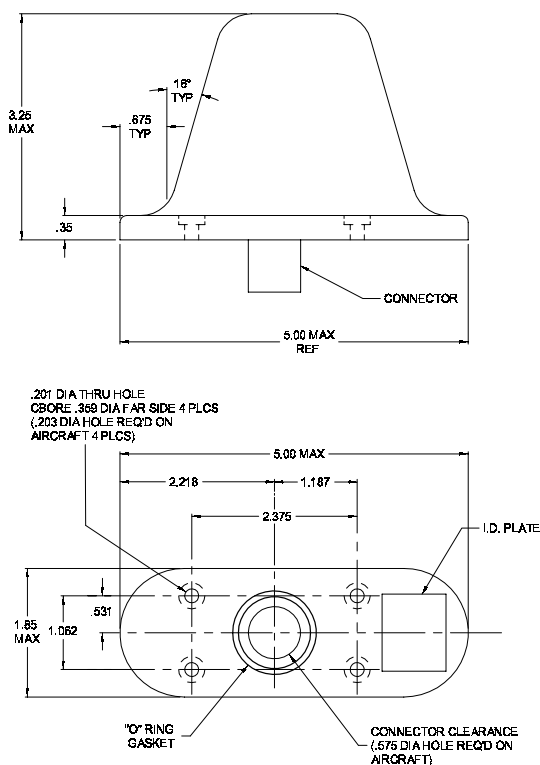
UHF Radiotelephone

Frequency 806-960 MHz & 1030-1090 MHz



L Band/UHF blade antenna designed for high performance aircraft. Low profile, light weight antenna and is packaged in a molded body with metal mounting base to ensure stable environmental performance and resistance to vibration, rain erosion and cleaning solvents. Features vertical/omnidirectional pattern, wide band/high efficiency electrical performance and DC grounding for lightning protection. See Order Options for connector choices.

P/N CI 310 Series



Model CI 310 Series L Band Blade Antenna

Electrical	
Frequency	806 to 960 MHz & 1030 to 1090 MHz
VSWR	1.75:1 @ 806 to 960 MHz 1.5:1 @ 1030 to 1090 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda / 4$ stub
Impedance	50 OHMS
Power RF	50 Watts
Mechanical	
Weight	0.32 lbs. maximum
Height	3.25" maximum
Material	High density polyurethane
Finish	Polyurethane enamel
Connector	See order options
Environmental	
Temperature	-55° C to +70° C
Altitude	50,000'
Air Speed	600 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[A2F2]-AC[CLMY]XRFXXSXXXXXXXXXX
FAA TSO	C74c, Class 1A
RTCA MOPS	DO-144
Order Options	
Connector	P/N
BNC	CI 310-20
TNC	CI 310-22
C	CI 310-23
N	CI 310-25
Color	
White	Standard
Gasket	
Gasket	B29205

DME/Transponder

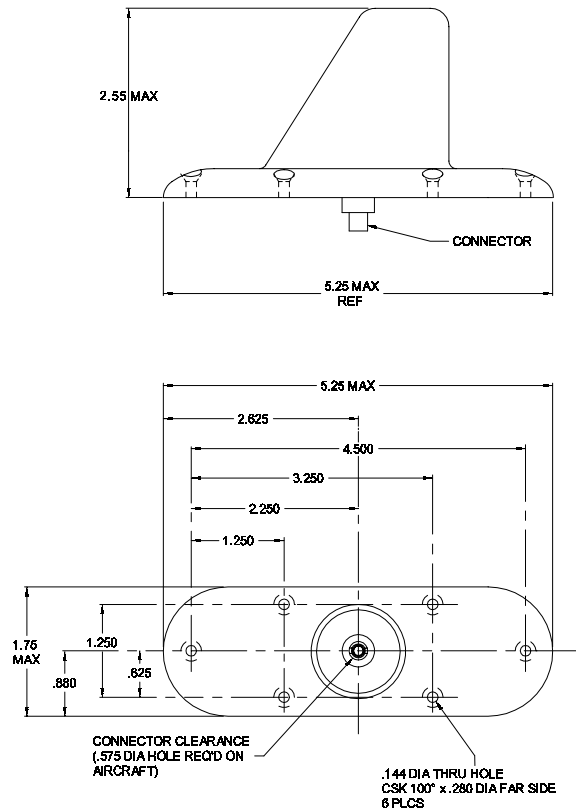
Frequency 960-1220 MHz & 1030-1090 MHz

Model		CI 100 DME / Transponder
Electrical		
Frequency	960 to 1220 MHz & 1030 to 1094 MHz	
VSWR	1.6:1 960 to 1220 MHz 1.4:1 1030 to 1090 MHz	
Polarization	Vertical	
Radiation Pattern	Equivalent of $\lambda/4$ stub	
Impedance RF	50 OHMS	
Resistance DC	Open circuit	
Power RF	2.5 kW @ 55,000'	
Mechanical		
Weight	0.3 lbs. maximum	
Height	2.55" maximum	
Material	Die cast A380 aluminum alloy	
Finish	Polyurethane enamel	
Connector	BNC (female)	
Environmental		
Temperature	-54° C to +55° C	
Altitude	45,000'	
Air Speed	Mach 2.5	
Federal Specifications		
RTCA Environmental	DO-138	
Environmental Category	AASXXXXXXXXX	
FAA TSO	C66a, C74c	
RTCA MOPS	DO-144, DO-189	
Order Options		
Connector	P/N	
BNC	CI 100	
TNC	CI 100-2	
C	CI 100-3	
HN	CI 100-4	
N	CI 100-5	
Color		
White	Standard	
Gasket		
Gasket	B10006	



All Metal Blade DME/Transponder antenna designed and developed for Mach 2 military aircraft. Design is unique in that blade and mounting base are die-cast as one piece with no dielectric material in the airstream. Standard six-hole mounting configuration. See Order Options for available connectors.

P/N CI 100 Series



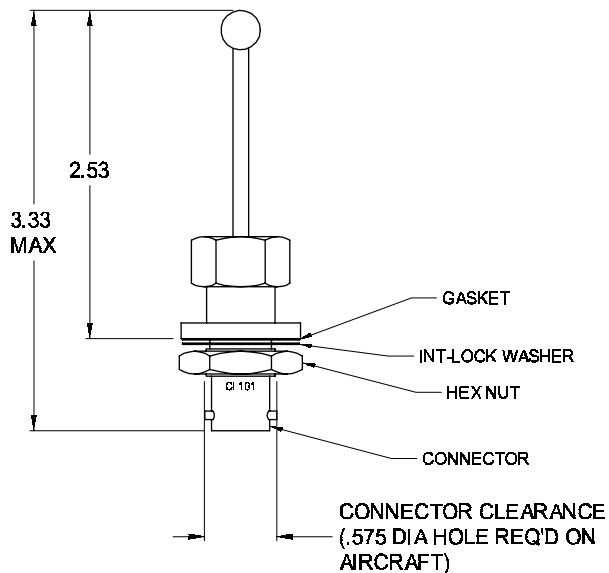
Transponder

Frequency 1030-1090 MHz



Transponder antenna with top loaded stub monopole. Antenna radiator is mechanically captivated and is machined from solid brass for impact resistance. Contact points are made from beryllium copper. Metallic parts are plated with bright nickel for corrosion protection. Mounts through a single 0.600" diameter mounting hole.

P/N CI 101



Model CI 101 Transponder

Electrical	
Frequency	1030 to 1090 MHz
VSWR	1.3:1 1030 MHz
	1.25:1 1090 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance RF	50 OHMS
Resistance DC	Open circuit
Power RF	1.0 kW peak average

Mechanical	
Weight	0.06 lbs. maximum
Height	3.33" maximum
Material	Brass
Finish	Tin nickel alloy
Connector	BNC (female)

Environmental	
Temperature	-54° C to +55° C
Altitude	30,000'
Air Speed	300 Knots TAS

Federal Specifications	
RTCA Environmental	DO-138
Environmental Category	BAJXXXXXXXXX
FAA TSO	C74c
RTCA MOPS	DO-144

Order Options

Connector	
BNC	Standard

DME/Transponder

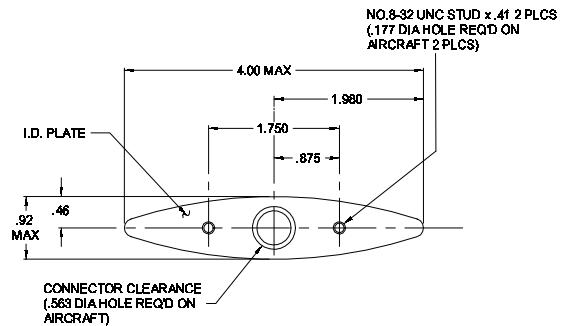
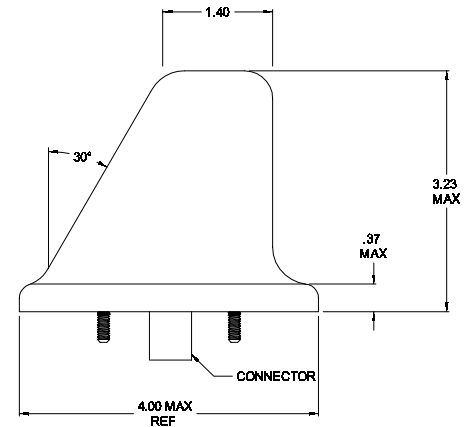
Frequency 960-1220 MHz & 1030-1090 MHz

Model		CI 105 DME / Transponder
Electrical		
Frequency	960 to 1220 MHz & 1030 to 1094 MHz	
VSWR	1.5:1 960 to 1220 MHz 1.3:1 1030 to 1090 MHz	
Polarization	Vertical	
Radiation Pattern	Equivalent of $\lambda/4$ stub	
Impedance RF	50 OHMS	
Resistance DC	Open circuit	
Power RF	2.5 kW peak.	
Mechanical		
Weight	0.24 lbs. maximum	
Height	3.23" maximum	
Material	Molded radome	
Finish	Polyurethane enamel	
Connector	BNC (female)	
Environmental		
Temperature	-54° C to +55° C	
Altitude	70,000'	
Air Speed	400 Knots TAS @ 25,000'	
Federal Specifications		
RTCA Environmental	DO-160C	
Environmental Category	[E1]-B[CLY]XRHXXXXXXXXXXXXXXX	
FAA TSO	C66b, C74c	
RTCA MOPS	DO-144, DO-189	
Order Options		
Connector		
BNC	Standard	
Color		
White	Standard	
Gasket		
Gasket	B10505	



Broadband and rugged antenna designed for DME or transponder use. Antenna assembly encased in a glass reinforced polyester molded shell. Standard two stud mounting configuration. CI 105 includes a BNC connector.

P/N CI 105

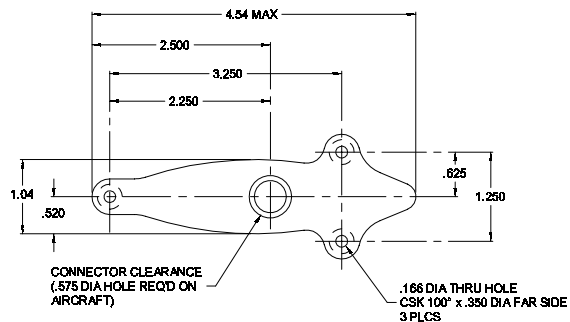
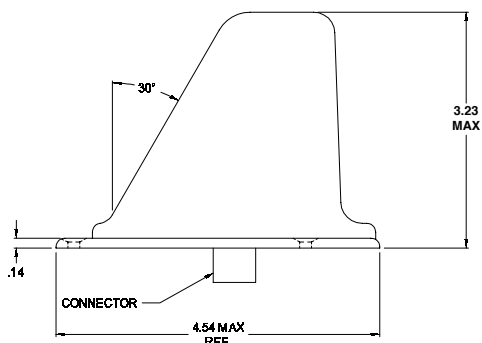


DME/Transponder

Frequency 960-1220 MHz & 1030-1090 MHz



Identical to the CI 105 in operating characteristics. Antenna configuration specifically designed for external applications using a three hole flange mounting. Includes a BNC connector.
P/N CI 105-3



Model CI 105-3 DME / Transponder

Electrical	
Frequency	960 to 1220 MHz & 1030 to 1090 MHz
VSWR	1.5:1 960 to 1220 MHz
	1.25:1 1030 to 1090 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance RF	50 OHMS
Resistance DC	Open circuit
Power RF	2.5 kW peak

Mechanical	
Weight	0.24 lbs. maximum
Height	3.23" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental	
Temperature	-54° C to +55° C
Altitude	70,000'
Air Speed	400 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[E1]-B[CLY]XRHXXXXXXXXXXXXXXX
FAA TSO	C66c, C74c
RTCA MOPS	DO-144, DO-189

Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	B10535

DME/Transponder

Frequency 960-1220 MHz & 1030-1090 MHz

Model CI 105-6 DME / Transponder
CI 105-7 DME / Transponder

Electrical	
Frequency	960 to 1220 MHz & 1030 to 1090 MHz
VSWR	1.5:1 960 to 1220 MHz 1.3:1 1030 to 1090 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance RF	50 OHMS
Resistance DC	Open circuit
Power RF	2.5 kW peak.

Mechanical	
Weight	0.24 lbs. maximum
Height	3.31" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order options

Environmental	
Temperature	-54° C to +55° C
Altitude	70,000'
Air Speed	400 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[E1]-B[CLY]XRHXXXXXXXXXXXXXX
FAA TSO	C66b, C74c
RTCA MOPS	DO-144, DO-189

Order Options	
Connector	P/N
BNC	CI 105-6
C	CI 105-7

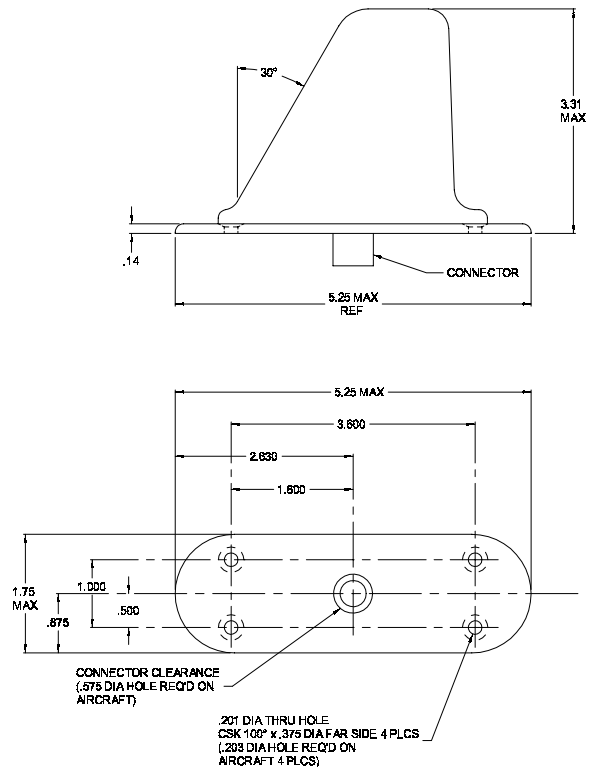
Color	
White	Standard

Gasket	
Gasket	B10006-1



Both are similar in electrical performance to Comant's CI 105, except they provide the popular 4-hole external mounting typical on some turbo-prop and jet aircraft.

P/N CI 105-6 & CI 105-7



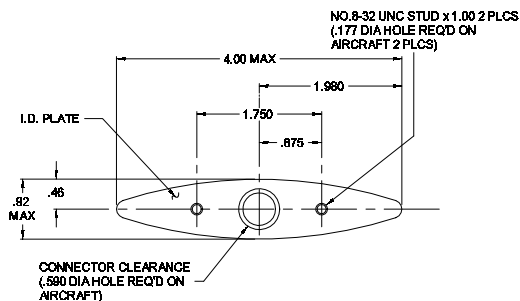
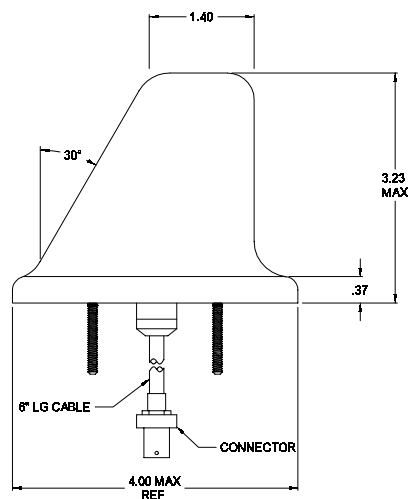
DME/Transponder

Frequency 960-1220 MHz & 1030-1090 MHz



Broadband and rugged antenna designed for DME or transponder use. Antenna assembly encased in a glass reinforced polyester molded shell. CI 105-9 comes standard with a 6" extension coax cable and BNC connector. This model offers standard two stud mounting, where the studs are extended to 1" in length.

P/N CI 105-9



Model CI 105-9 DME / Transponder

Electrical	
Frequency	960 to 1220 MHz & 1030 to 1090 MHz
VSWR	1.5:1 960 to 1220 MHz
	1.3:1 1030 to 1090 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance RF	50 OHMS
Resistance DC	Open circuit
Power RF	2.5 kW peak

Mechanical	
Weight	0.24 lbs.
Height	3.23"
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC (female) on 6" coax cable

Environmental	
Temperature	-54° C to +55° C
Altitude	70,000'
Air Speed	400 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[E1]-B[CLY]XRHXXXXXXXXXXXXXXXXXX
FAA TSO	C66c, C74c
RTCA MOPS	DO-144, DO-189

Order Options

Connector	
BNC	With integral 6" coax cable
Color	
White	Standard
Gasket	
Gasket	B10505

DME/Transponder

Frequency 960-1220 MHz & 1030-1090 MHz

Model CI 105-16 DME Transponder

Electrical	
Frequency	960 to 1220 MHz & 1030 to 1090 MHz
VSWR	1.5:1 960 to 1220 MHz 1.3:1 1030 to 1090 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance RF	50 OHMS
Resistance DC	Open circuit
Power RF	2.5 kW peak

Mechanical	
Weight	0.2 lbs.
Height	3.23"
Material	Molded radome
Finish	White federal standard 595
Connector	BNC (female)

Environmental	
Temperature	-55° C to +85° C
Altitude	70,000'
Air Speed	400 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[E1]-XX[C,C1,F,F1,R]XRFXXSXX [XX][XX]X[XXX]X[XXXX]XXX
FAA TSO	C66c, C74d
RTCA MOPS	DO-144, DO-189

Order Options

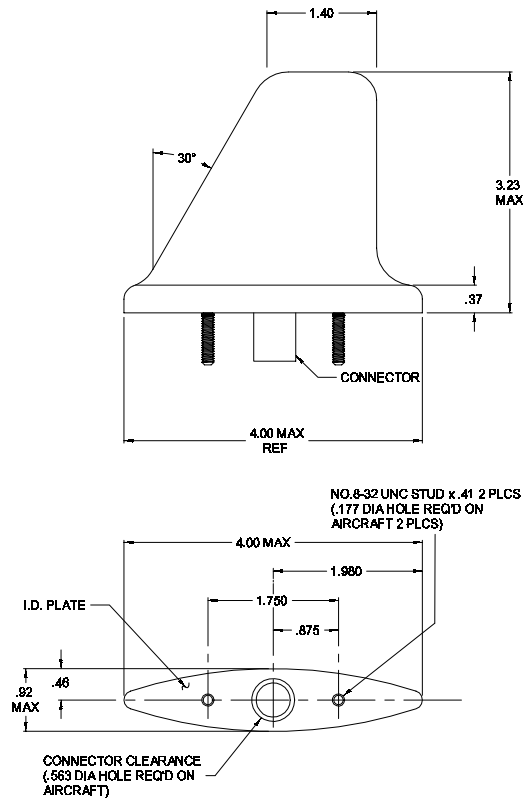
Connector	
BNC	Standard

Color	
White	Standard



Broadband and rugged antenna designed for DME or transponder use. The CI 105-16 was designed specifically for the Honeywell Bendix-King™ KA60. This unit offers the extended length, two stud mounting found on the KA60. Tested to the tougher DO-160D environmental requirements, this antenna offers the best in ruggedness and performance.

P/N CI 105-16



DME/Transponder

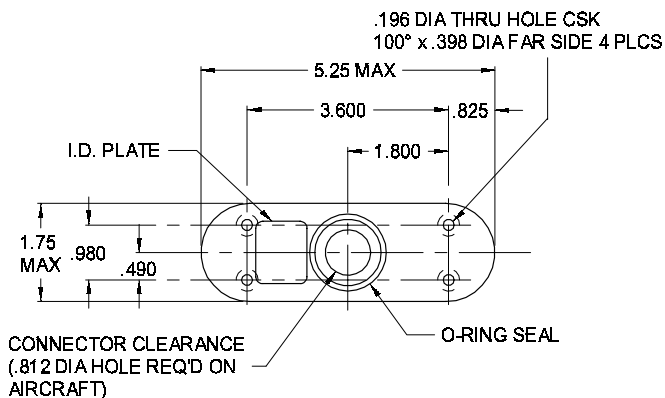
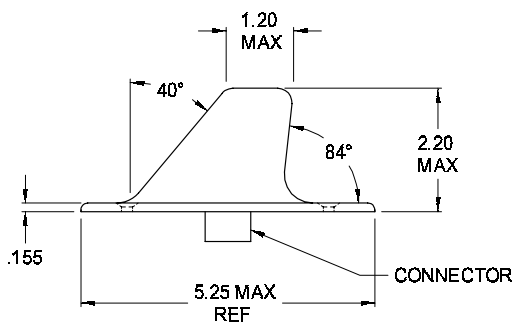
Frequency 960-1220 MHz & 1030-1090 MHz



All metal, low profile antenna is designed for business jet and commercial high speed aircraft. With a popular four hole mount and connector with open path to ground, this antenna is ideally suited for those aircraft equipped with standard transponders and Mode S transponders. Tough, one piece construction provides 175 lbs. side load capability, guarding against breakage from ground equipment. Moisture failure is prevented with completely sealed construction.

Refer to the CI 110-41 or the CI 110-61 for similar antennas offering DC short circuit.

P/N CI 110-40



Model CI 110-40 Series DME / Transponder

Electrical	
Frequency	960 to 1220 MHz & 1030 to 1090 MHz
VSWR	1.7:1 960 to 1220 MHz 1.4:1 1000 to 1100 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance RF	50 OHMS
Resistance DC	Open circuit
Power RF	3 kW peak 100 watts average

Mechanical	
Weight	0.25 lbs. maximum
Height	2.20" maximum
Material	Die cast A380 aluminum alloy
Finish	Polyurethane enamel
Connector	See order options

Environmental	
Temperature	-55° C to +85° C
Altitude	70,000'
Air Speed	600 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[F2X]ACB[S](L)U(F,F1)T(C,C1,R)] XRFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C66c, C74c, C112
RTCA MOPS	DO-144, DO-189, DO-181

Order Options	
Connector	
C	CI 110-40-3

Color	
White	Standard

Gasket	
Gasket	70445 'O' Ring

DME/Transponder

Frequency 960-1220 MHz & 1030-1090 MHz

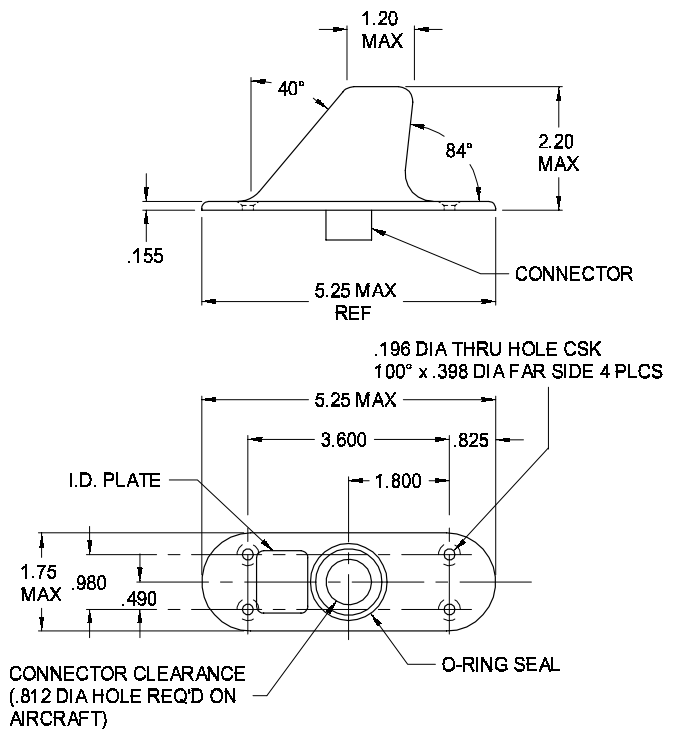
Model	CI 110-41 Series DME/Transponder
Electrical	
Frequency	960 to 1220 MHz & 1030 to 1090 MHz
VSWR	1.7:1 960 to 1220 MHz 1.4:1 1000 to 1100 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub/omnidirectional
Impedance RF	50 OHMS
Resistance DC	Short circuit
Power RF	3 kW peak 100 watts average.
Mechanical	
Weight	0.25 lbs. maximum
Height	2.20" maximum
Material	Die cast A380 aluminum alloy
Finish	Polyurethane enamel
Connector	See order options
Environmental	
Temperature	-55° C to +85° C
Altitude	70,000'
Air Speed	600 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C66c, C74c, C112
RTCA MOPS	DO-144, DO-189, DO-181
Order Options	
Connector	
C	CI 110-41-3
Color	
White	Standard
Gasket	
Gasket	70445 'O' Ring



All metal, low profile antenna is designed for business jet and commercial high speed aircraft. With a popular four hole mount and connector path to ground, this antenna is ideally suited for those aircraft equipped with Mode S transponders. In addition to standard DME, transponder, and Mode S transponder, this antenna can be used for TAS/IHAS installations. Tough, one piece construction provides 175 lbs. side load capability, guarding against breakage from ground equipment. Moisture failure is prevented with completely sealed construction.

Refer to the CI 110-40 or the CI 110-60 for similar antennas offering DC open circuit.

P/N CI 110-41



DME/Transponder

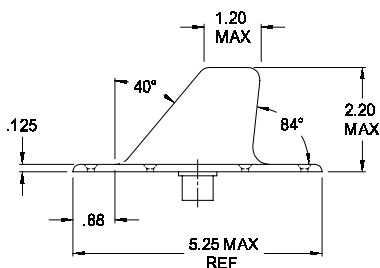
Frequency 960-1220 MHz & 1030-1090 MHz



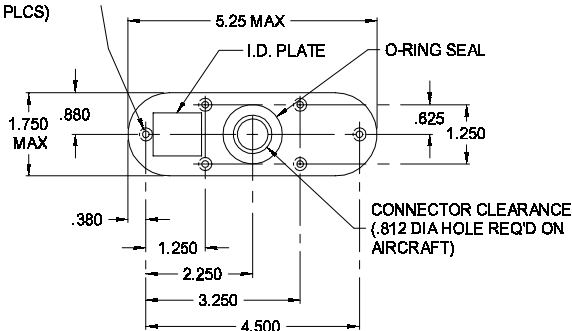
All metal, low profile antenna is designed for business jet and commercial high speed aircraft. With a popular six hole mount and connector with open path to ground, this antenna is ideally suited for those aircraft equipped with standard transponders and Mode S transponders. Tough, one piece construction provides 175 lbs. side load capability, guarding against breakage from ground equipment. Moisture failure is prevented with completely sealed construction.

Refer to the CI 110-41 or the CI 110-61 for similar antennas offering DC short circuit.

P/N CI 110-60



.144 DIA THRU HOLE
CSK 100° x .280 DIA FAR SIDE 6 PLCS
(.154 DIA HOLE REQ'D ON
AIRCRAFT 6 PLCS)



Model CI 110-60 Series DME / Transponder

Electrical	
Frequency	960 to 1220 MHz & 1030 to 1090 MHz
VSWR	1.7:1 960 to 1220 MHz 1.4:1 1000 to 1100 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub/omnidirectional
Impedance RF	50 OHMS
Resistance DC	Open circuit
Power RF	Peak 3 kW average 100 watts

Mechanical	
Weight	0.25 lbs. maximum
Height	2.20" maximum
Material	Die cast A380 aluminum alloy
Finish	Polyurethane enamel
Connector	See order options

Environmental	
Temperature	-55° C to +85° C
Altitude	70,000'
Air Speed	600 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[F2X]ACB[S](L)U(F,F1)T(C,C1,R) XRFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C66c, C74c, C112
RTCA MOPS	DO-144, DO-189, DO-181

Order Options	
Connector	

C	CI 110-60-3
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Color	
White	Standard

Gasket	
Gasket	70445 'O' Ring

DME/Transponder

Frequency 960-1220 MHz & 1030-1090 MHz

Model CI 110-61 Series DME/Transponder

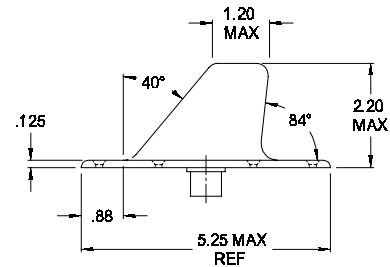
Electrical	
Frequency	960 to 1220 MHz & 1030 to 1090 MHz
VSWR	1.7:1 960 to 1220 MHz 1.4:1 1000 to 1100 MHz
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub/omnidirectional
Impedance RF	50 OHMS
Resistance DC	Short circuit
Power RF	Peak 3 kW average 100 watts
Mechanical	
Weight	0.25 lbs. maximum
Height	2.20" maximum
Material	Die cast A380 aluminum alloy
Finish	Polyurethane enamel
Connector	See order options
Environmental	
Temperature	-55° C to +85° C
Altitude	70,000'
Air Speed	600 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C66c, C74c, C112
RTCA MOPS	DO-144, DO-189, DO-181
Order Options	
Connector	
C	CI 110-61-3
Color	
White	Standard
Gasket	
Gasket	70445 'O' Ring



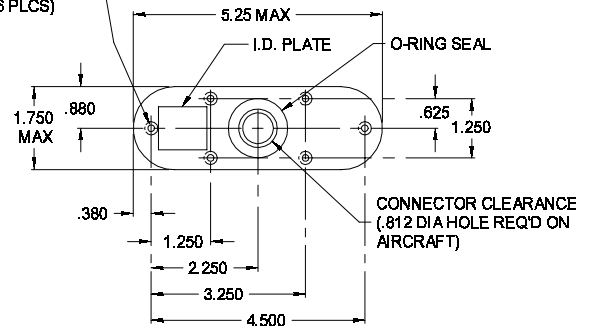
All metal, low profile antenna is designed for business jet and commercial high speed aircraft. With a popular six hole mount and connector path to ground, this antenna is ideally suited for those aircraft equipped with Mode S transponders. In addition to standard DME, transponder, and Mode S transponder, this antenna can be used for TAS/IHAS installations. Though, one piece construction provides 175 lbs. side load capability, guarding against breakage from ground equipment. Moisture failure is prevented with completely sealed construction.

Refer to the CI 110-40 or the CI 110-60 for similar antennas offering DC open circuit.

P/N CI 110-61



.144 DIA THRU HOLE
CSK 100° x .280 DIA FAR SIDE 6 PLCS
(.154 DIA HOLE REQ'D ON
AIRCRAFT 6 PLCS)

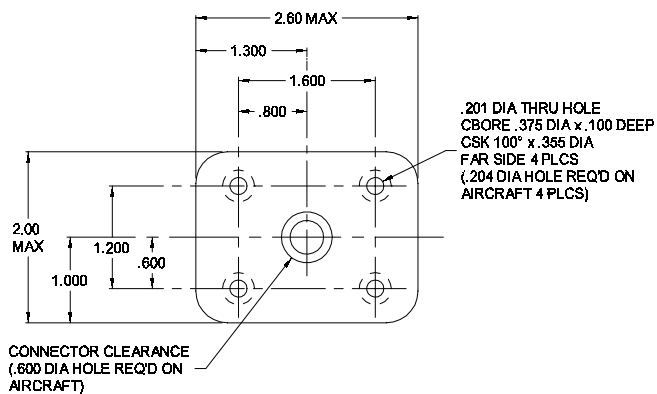
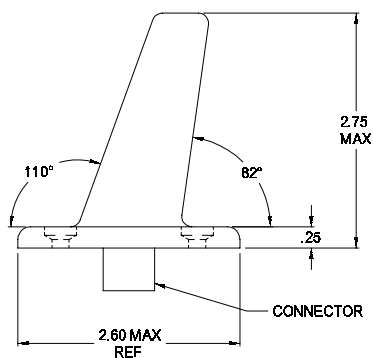


DME/Transponder

Frequency 960-1220 MHz



Miniature high speed DME/transponder, one of the smallest DME/transponder antennas available from Comant. Less than 2.75" high featuring a very low-drag frontal profile. Strong, lightweight and easy to mount using four external mounting holes in the base. **P/N CI 305 Series**



Model CI 305 Series DME / Transponder

Electrical

Frequency	960 to 1220 MHz
VSWR	1.8:1 maximum
Polarization	Vertical
Radiation Pattern	Equivalent of $\lambda/4$ stub
Impedance RF	50 OHMS
Resistance DC	Open circuit
Power RF	1 kW peak

Mechanical

Weight	0.3 lbs. maximum
Height	2.75" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order options

Environmental

Temperature	-55° C to +85° C
Altitude	70,000'
Air Speed	600 Knots TAS @ 35,000'

Federal Specifications

RTCA Environmental	DO-160A
Environmental Category	AE1/A/JXXXXXXXXXXXX
FAA TSO	C66c, C74c
RTCA MOPS	DO-144, DO-189, DO-181

Order Options

Connector P/N

BNC	CI 305
TNC	CI 305-2
C	CI 305-3

Color

White	Standard
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Gasket

Gasket	B30503
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Marker Beacon

Frequency 75 MHz

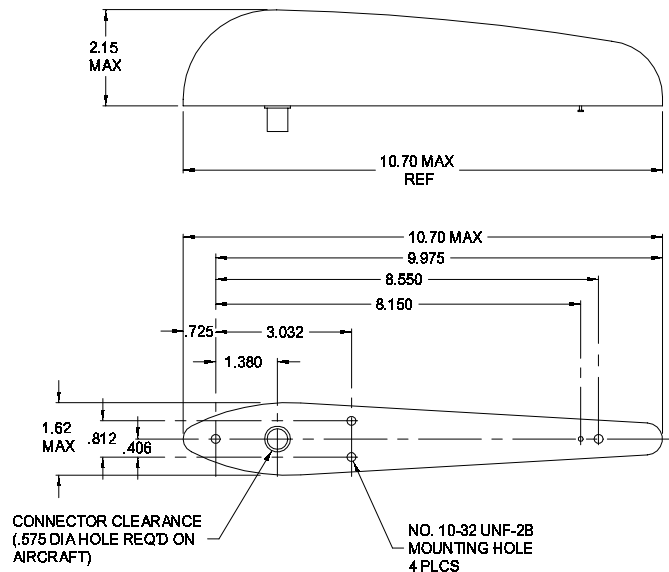
Model CI 102 Marker Beacon

Electrical	
Frequency	75 MHz
VSWR	≤ 1.5:1 maximum
Polarization	Parallel to the mounting plane
Radiation Pattern	Partially downward
Impedance RF	50 OHMS
Resistance DC	DC grounded
Power RF	Receive only
Mechanical	
Weight	0.6 lbs. maximum
Height	2.15" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC
Environmental	
Temperature	-55° C to +85° C
Altitude	45,000'
Air Speed	400 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160A
Environmental Category	AASXXXXXXXXXX
FAA TSO	C35d
RTCA MOPS	DO-138, DO-143
Order Options	
Connector	
BNC	CI 102
TNC	CI 102-2
Color	
White	Standard
Gasket	
Gasket	C10208



Designed for use with modern, high sensitivity marker beacon receivers. Small and lightweight, featuring 4-hole internal mounting for simple installation. Antenna assembly is enclosed in an injection molded radome which is impervious to the tough environments typical of the underside of an aircraft. Skydrol and rain erosion resistant. DC grounded to minimize accumulation of precipitation static.

P/N CI 102



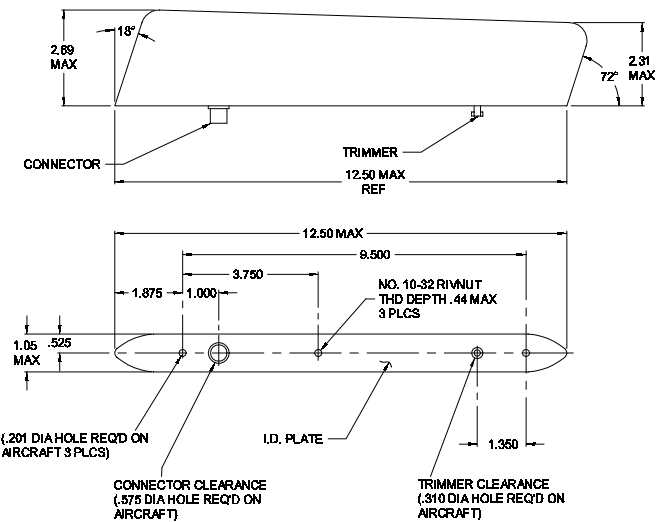
Marker Beacon

Frequency 75 MHz



Designed specifically for high-performance aircraft applications. Features aerodynamic design in a lightweight package. Antenna is a low profile blade-type encased in a molded polyurethane shell. Skydrol and rain erosion resistant.

P/N CI 118



Model CI 118 Marker Beacon

Electrical	
Frequency	75 MHz
VSWR	≤ 1.5:1 maximum
Polarization	Parallel to the mounting plane
Radiation Pattern	Partially downward
Impedance RF	50 OHMS
Resistance DC	DC grounded
Power RF	Receive only

Mechanical	
Weight	0.5 lbs. maximum
Height	2.69" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	45,000'
Air Speed	400 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160A
Environmental Category	AASXXXXXXXXX
FAA TSO	C35d
RTCA MOPS	DO-138, DO-143

Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	C11806

Marker Beacon

Frequency 75 MHz

Model CI 118-1 Marker Beacon

Electrical	
Frequency	75 MHz
VSWR	≤ 1.5:1 maximum
Polarization	Parallel to the mounting plane
Radiation Pattern	Partially downward
Impedance RF	50 OHMS
Resistance DC	DC grounded
Power RF	Receive only

Mechanical	
Weight	0.5 lbs. maximum
Height	2.40" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	45,000'
Air Speed	400 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160A
Environmental Category	AASXXXXXXXXXX
FAA TSO	C35d
RTCA MOPS	DO-138, DO-143

Order Options

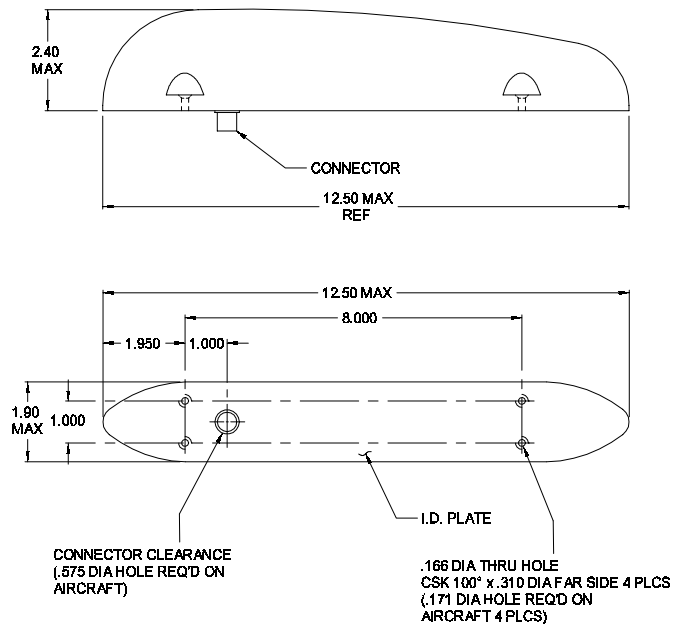
Connector	
BNC	Standard

Color	
White	Standard



Low-drag, lower profile alternative to the popular CI 102 "boat style" marker beacon antenna. Approved for medium- to high-performance single, turbo-prop or jet aircraft and provides simple external mounting. Skydrol and rain erosion resistant. DC grounded to minimize accumulation of precipitation static.

P/N CI 118-1

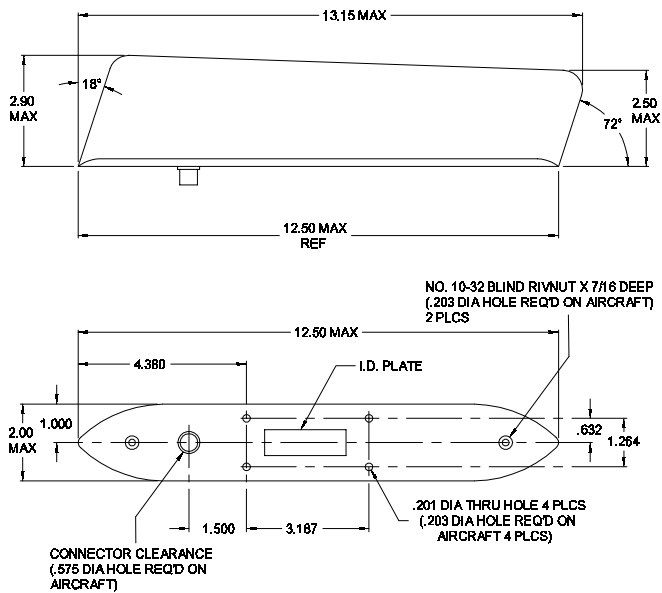


Marker Beacon

Frequency 75 MHz



Identical to CI 118 except the mounting base includes a flange to provide for 4-hole external mounting. Approved for medium to high-performance single, turbo-prop or jet aircraft and provides simple external mounting. Skydrol and rain erosion resistant. DC grounded to minimize accumulation of precipitation static.
P/N CI 118-5



Model CI 118-5 Marker Beacon

Electrical	
Frequency	75 MHz
VSWR	≤ 1.7:1 maximum
Polarization	Parallel to the mounting plane
Radiation Pattern	Partially downward
Impedance RF	50 OHMS
Resistance DC	DC grounded
Power RF	Receive only

Mechanical	
Weight	0.5 lbs. maximum
Height	2.90" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	45,000'
Air Speed	400 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160A
Environmental Category	AASXXXXXXXXX
FAA TSO	C35d
RTCA MOPS	DO-138, DO-143

Order Options

Connector	
BNC	Standard

Color	
White	Standard

Marker Beacon

Frequency 75 MHz

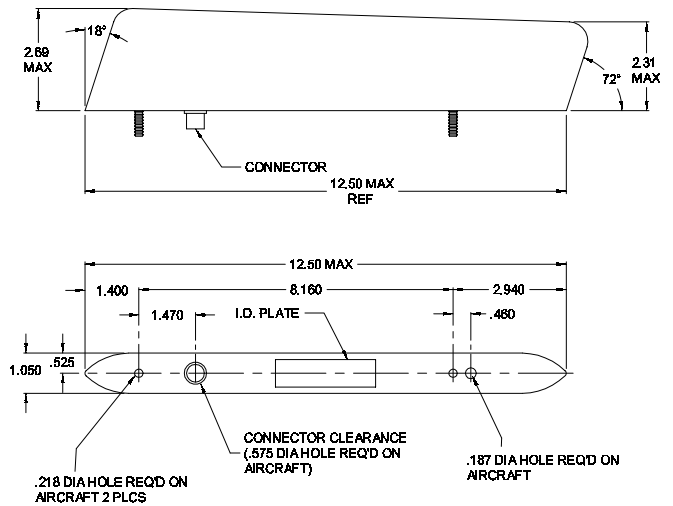
Model CI 118-9 Marker Beacon

Electrical	
Frequency	75 MHz
VSWR	≤ 1.5:1 maximum
Polarization	Parallel to the mounting plane
Radiation Pattern	Partially downward
Impedance RF	50 OHMS
Resistance DC	DC grounded
Power RF	Receive only
Mechanical	
Weight	0.65 lbs. maximum
Height	2.69" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC
Environmental	
Temperature	-55° C to +85° C
Altitude	45,000'
Air Speed	400 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160A
Environmental Category	[D2]-XAX[S(C,F,Y)XRFDXSX [X]XXX[XXX]X[XXXX]XXX
FAA TSO	C35d
RTCA MOPS	DO-138, DO-143
Order Options	
Connector	
BNC	Standard
Color	
White	Standard



Identical to CI 118 except the mounting configuration allows for a "drop-in" replacement to the Honeywell Bendix-King™ KA26 Marker Beacon. This Comant design has been tested to the tough DO-160D environmental standards. Skydrol and rain erosion resistant. DC grounded to minimize accumulation of precipitation static.

P/N CI 118-9

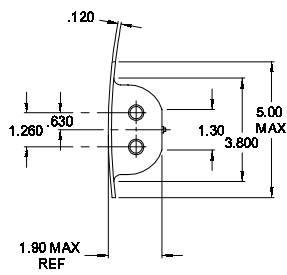
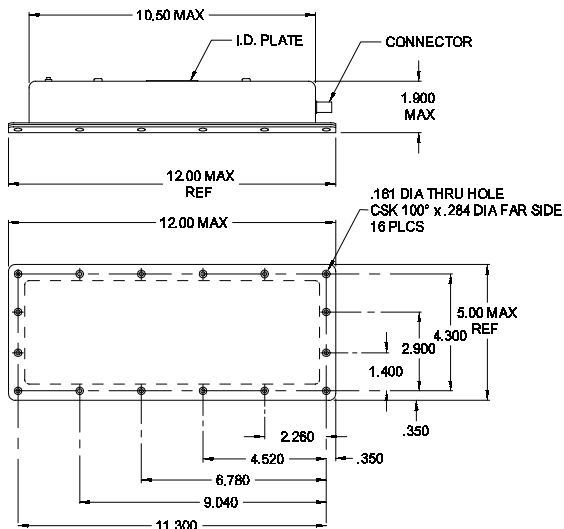


Marker Beacon

Frequency 75 MHz



Lightweight flush mount antenna was originally designed for use on military aircraft. Provides for dual marker beacon signal outputs at the antenna, eliminating the need for a separate marker beacon splitter. Antenna is housed in an aluminum enclosure with a glass laminate cover. Internal components are potted in place for mechanical integrity. The CI 164 is designed for curved "crown" surface mounting as is currently used on the Cessna™ Citation I and II.
P/N CI 164



Model CI 164 Marker Beacon

Electrical	
Frequency	75 MHz
VSWR	1.5:1 maximum @ 75 MHz 5.0:1 maximum @ ± 15 MHz
Polarization	Horizontal
Isolation Between Ports	22dB minimum
Impedance RF	50 OHMS
Resistance DC	DC grounded
Power RF	Receive only

Mechanical	
Weight	1.0 lbs. maximum
Height	Flush mount
Material	Aluminum housing/ Glass laminate cover
Finish	Polyurethane enamel
Connector	BNC (Two places)

Environmental	
Temperature	-55° C to +85° C
Altitude	45,000'
Air Speed	600 Knots TAS @ 55,000'

Federal Specifications	
RTCA Environmental	DO-160A
Environmental Category	AASXXXXXXXXX
FAA TSO	C35d
RTCA MOPS	DO-138, DO-143

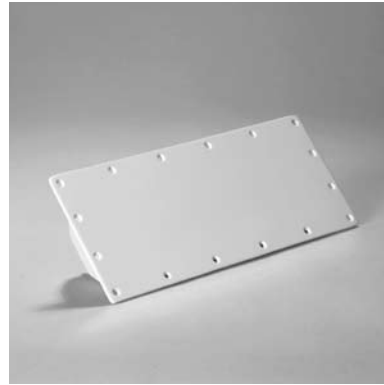
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	D16404

Marker Beacon

Frequency 75 MHz

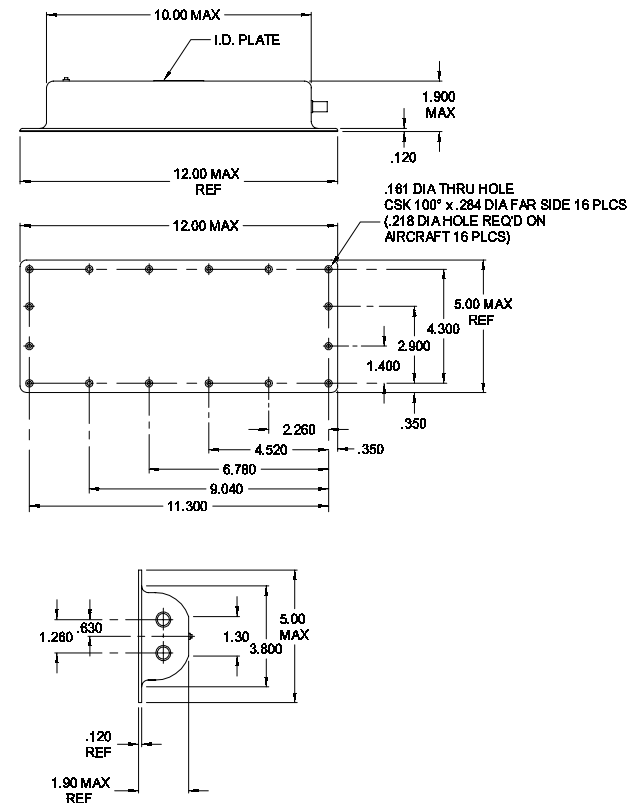
Model CI 165 Marker Beacon

Electrical	
Frequency	75 MHz
VSWR	1.5:1 maximum @ 75 MHz 5.0:1 maximum @ ± 15 MHz
Polarization	Horizontal
Isolation Between Ports	22 dB minimum
Impedance RF	50 OHMS
Resistance DC	DC grounded
Power RF	Receive only
Mechanical	
Weight	1.0 lbs. maximum
Height	Flush mount
Material	Aluminum housing/ Glass laminate cover
Finish	Polyurethane enamel
Connector	BNC (two places)
Environmental	
Temperature	-55° C to +85° C
Altitude	45,000'
Air Speed	600 Knots TAS @ 55,000'
Federal Specifications	
RTCA Environmental	DO-160A
Environmental Category	AASXXXXXXXXX
FAA TSO	C35d
RTCA MOPS	DO-138, DO-143
Order Options	
Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	D16404



Lightweight flush mount antenna was originally designed for use on military aircraft. Provides for dual marker beacon signal outputs at the antenna, eliminating the need for a separate marker beacon splitter. Antenna is housed in an aluminum enclosure with a glass laminate cover. Internal components are potted in place for mechanical integrity. The CI 165 is designed for flat surface mounting and is used on the Citation III™.

P/N CI 165



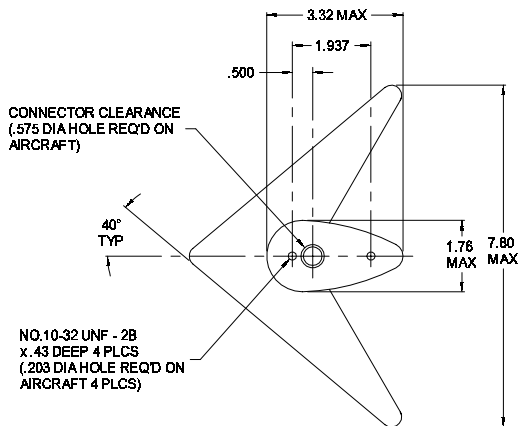
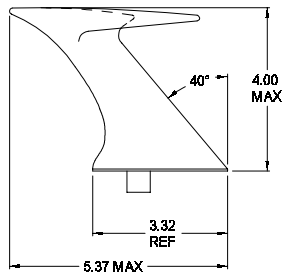
Glide Slope

Frequency 329-335 MHz



Half wave dipole in "V" configuration. Features an aerodynamic shape with 2-hole mounting for simple installation and a unique ferrite balun which is integral to the antenna.

P/N CI 104



Model CI 104 Glide Slope Antenna

Electrical	
Frequency	329 to 335 MHz
VSWR	5.0:1 maximum
Polarization	Horizontal
Radiation Pattern	Forward coverage $\pm 60^\circ$ azimuth $+20^\circ$ elevation
Impedance	50 OHMS (nominal)
Power	Low power
Mechanical	
Weight	0.5 lbs. maximum
Height	4.00" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC
Environmental	
Air Speed	350 Knots TAS @ 25,000'
Order Options	
Connector	
BNC	Standard
Color	
White	Standard

Glide Slope

Frequency 329-335 MHz

Model CI 193 Glide Slope Antenna

Electrical	
Frequency	329 to 335 MHz
VSWR	2.0:1 maximum
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS
Power RF	Receive only
Gain	2.0 dB (nominal)

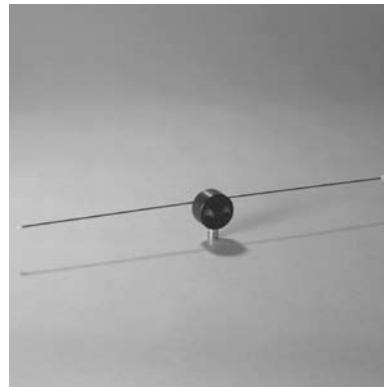
Mechanical	
Weight	0.15 lbs. maximum
Height	1.5" maximum
Material	Delrin housing/brass radiators
Finish	Black/nickel
Connector	BNC

Environmental	
Temperature	-55° C to +55° C Internal mount

Federal Specifications	
RTCA Environmental	D0-160
Environmental Category	D2ALXXXXXXXXXXXX
FAA TSO	C34c
RTCA MOPS	D0-192

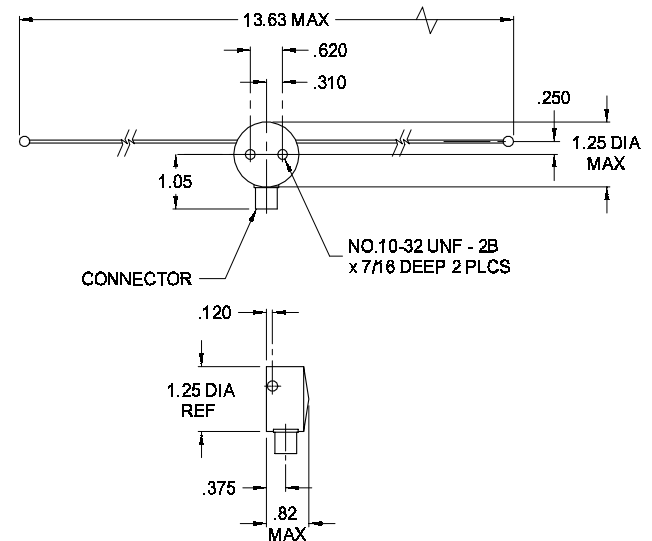
Order Options

Connector	
BNC	Standard



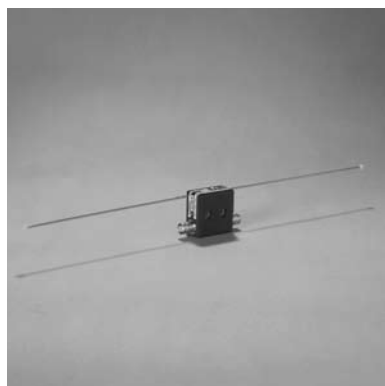
Half wave dipole designed for interior mounting. Integral ferrite balun can result in improved performance when propeller modulation is a problem.

P/N CI 193



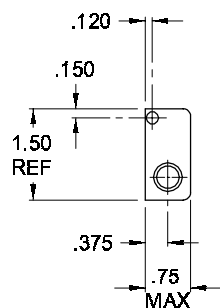
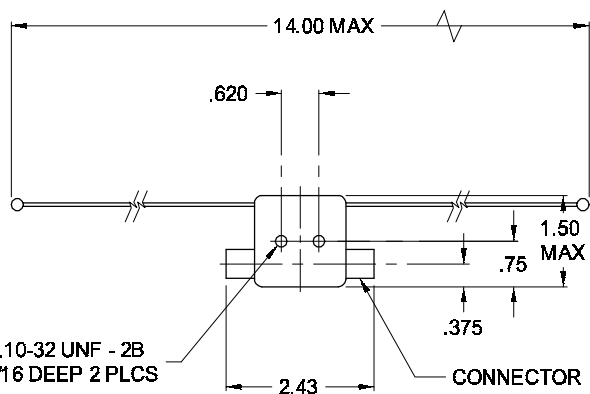
Glide Slope

Frequency 329-335 MHz



Similar to the CI 193 except it provides dual glide slope outputs without the need for a separate glide slope coupler.

P/N CI 193-2



Model CI 193-2 Glide Slope Antenna

Electrical

Frequency	329 to 335 MHz
VSWR	2.0:1 maximum
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS
Power RF	Low power
Gain	2.0 dB (nominal)

Mechanical

Weight	0.15 lbs. maximum
Height	2.50" maximum
Material	Delrin housing/brass radiators
Finish	Black/nickel
Connector	BNC

Environmental

Temperature	-55° C to +55° C
	Internal mount

Federal Specifications

RTCA Environmental	DO 160
Environmental Category	D2ALXXXXXXXXXX
FAA TSO	C34c
RTCA MOPS	DO 192

Order Options

Connector

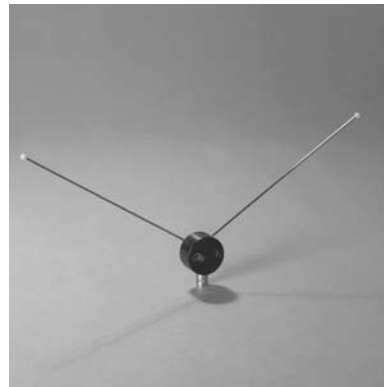
BNC	Standard
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Glide Slope

Frequency 329-335 MHz

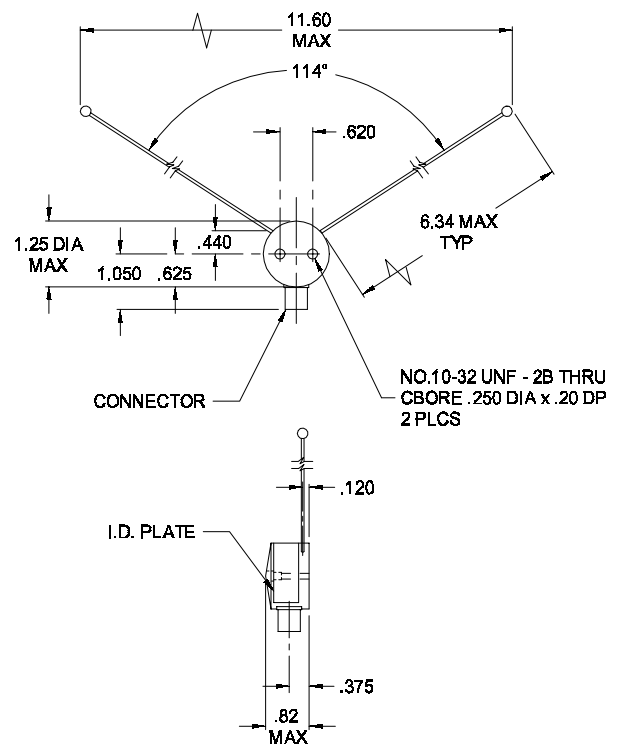
Model CI 212 Glide Slope Antenna

Electrical	
Frequency	329 to 335 MHz
VSWR	2.0:1 maximum
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS
Power RF	Receive only
Gain	2.0 dB (nominal)
Mechanical	
Weight	0.15 lbs. maximum
Height	6.50" maximum
Material	Delrin housing/brass radiators
Finish	Black/nickel
Connector	BNC
Environmental	
Temperature	-55° C to +55° C Internal mount
Federal Specifications	
RTCA Environmental	DO-160
Environmental Category	D2ALXXXXXXXXXX
FAA TSO	C34c
RTCA MOPS	DO-192
Order Options	
Connector	
BNC	Standard



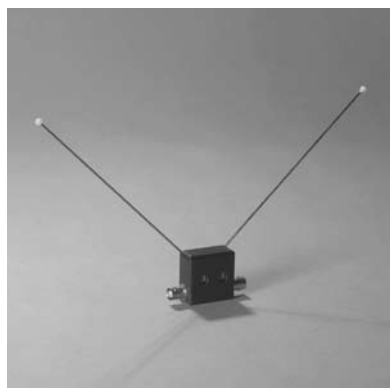
"V" glide slope designed specifically for mounting inside the nose cone of twin-engine aircraft. Provides a -3dB reduction in gain at the +30 degree points and +6.0 dB gain looking forward relative to standard glide slope antennas. Antenna radiation characteristics eliminate or significantly reduce problems associated with propeller modulation.

P/N CI 212



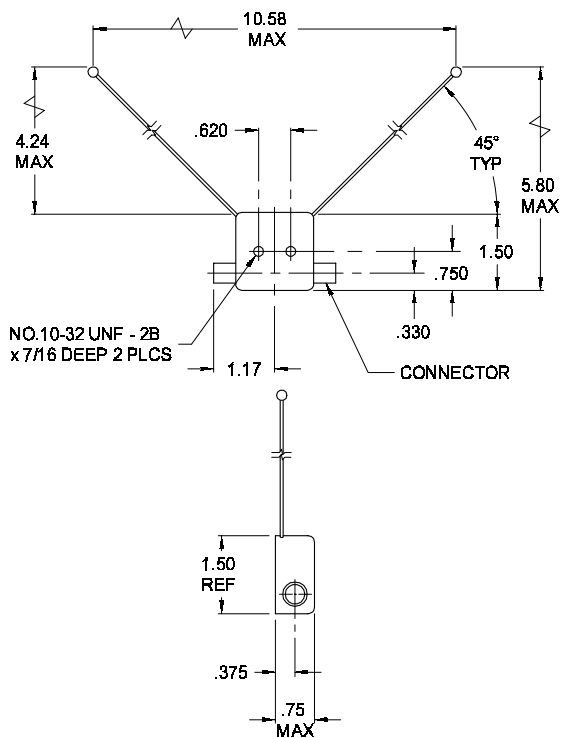
Glide Slope

Frequency 329-335 MHz



"V" Glide Slope similar to the CI 212 except provides two output signals for dual glide slope receiver installation without the need for a glide slope coupler. Configured in a "V" for internal mounting in aircraft nose radome.

P/N CI 212-2



Model CI 212-2 Glide Slope Antenna

Electrical

Frequency	329 to 335 MHz
VSWR	2.0:1 maximum
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS
Power RF	Receive only
Gain	2.0 dB (nominal)

Mechanical

Weight	0.15 lbs. maximum
Height	6.50" maximum
Material	Delrin housing/brass radiators
Finish	Black/nickel
Connector	BNC

Environmental

Temperature	-55° C to +55° C
	Internal mount

Federal Specifications

RTCA Environmental	DO 160
Environmental Category	D2ALXXXXXXXXXX
FAA TSO	C34c
RTCA MOPS	DO 192

Order Options

Connector

BNC	Standard
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VOR/LOC/GS

Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)

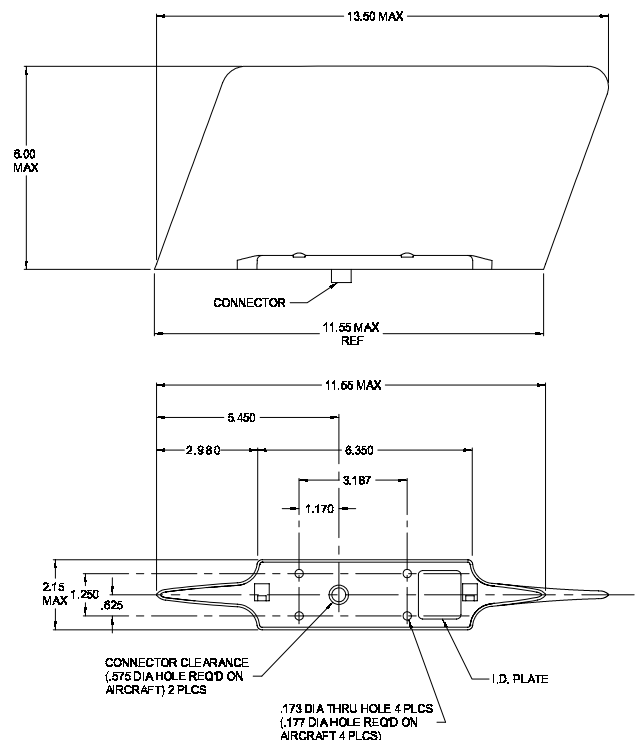
Model		CI 120G/S VOR/GS Antenna
Electrical		
Frequency	108 to 118 MHz (VOR/LOC)	329 to 335 MHz (glide slope)
VSWR	6.0:1 108 to 118 (VOR/LOC)	3.5:1 329 to 335 MHz (glide slope)
Polarization	Horizontal	
Radiation Pattern	Omnidirectional	
Impedance	50 OHMS (nominal)	
Power RF	Receive only	
Mechanical		
Weight	1.4 lbs. per blade	
Height	6.0" maximum	
Material	Molded radome	
Finish	Polyurethane enamel	
Connector	BNC/single output combiner	
Environmental		
Temperature	-55° C to +85° C	
Altitude	50,000'	
Air Speed	600 Knots TAS @ 25,000'	
Federal Specifications		
RTCA Environmental	DO-160D	
Environmental Category	[(F2)X]ACE[(T)E1P] XRXXSXXXXXXXXCX	
FAA TSO	C34e, C36e, C40c	
RTCA MOPS	DO-192, DO-195, DO-196	
Order Options		
Connector		
BNC	Standard	
Color		
White	Standard	
Gasket		
Gasket	B12014	



VOR/GS navigation antenna set provides optimum VOR performance when used for area navigation. Antenna system qualified for use on single, twin, jet and helicopter aircraft. Also provides glide slope reception capability. Complete set includes a pair (2) of blades, each with single BNC connector output, two coax interconnect cables and a signal combiner with single BNC connector output providing for a single cable run to the avionics installation. View the footprint of this combiner (CI 120-3).

For dual VOR/Single Glide Slope operation with NAV 1 and NAV 2 receivers, use CI 505 diplexer. Dual VOR/dual glide slope operation is available when used with the CI 1125 diplexer.

P/N CI 120G/S



VOR/LOC/GS

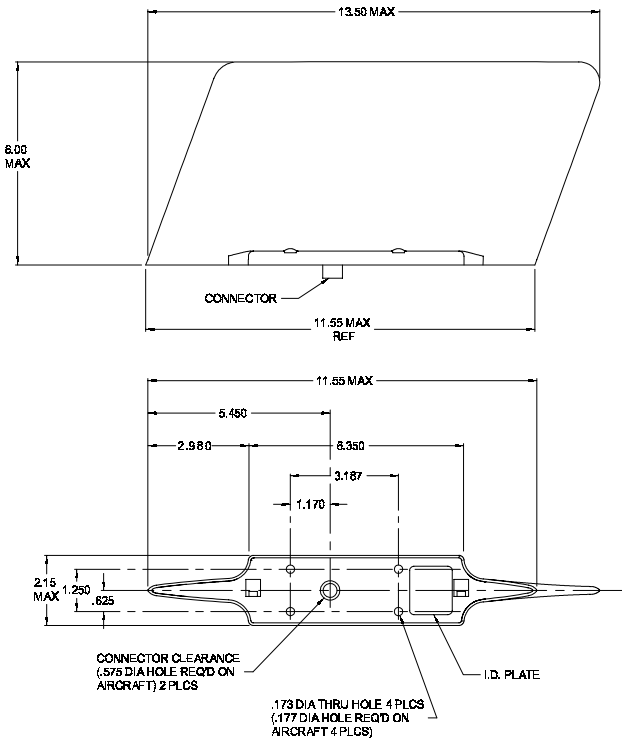
Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)



VOR/GS navigation antenna set provides optimum VOR performance when used for area navigation. Antenna system qualified for use on single, twin, jet and helicopter aircraft. Also provides glide slope reception capability. Complete set includes a pair (2) of blades, each with single BNC connector output, and two coax interconnect cables. Dual BNC output combiner, providing for a separate RF cable run to the avionics installation for NAV 1 and NAV 2 receivers, is included. View the footprint of this combiner (CI 120-4).

Dual VOR/Dual Glide Slope operation is available when used with a pair of CI 507 diplexers.

P/N CI 120-200G/S



Model CI 120-200G/S VOR/GS Antenna

Electrical	
Frequency	108 to 118 MHz (VOR/LOC) 329 to 335 MHz (glide Slope)
VSWR	6.0:1 108 to 118 MHz (VOR/LOC) 3.5:1 329 to 335 MHz (glide Slope)
Polarization	Horizontal
Radiation Pattern	Omnidirectional
Impedance	50 OHMS (nominal)
Power RF	Receive only
Gain	2.0 dB (nominal)

Mechanical	
Weight	1.4 lbs. per blade
Height	6.0" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC/single output combiner

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	600 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO 160D
Environmental Category	[(F2)X]ACE(T)E1P] XRXXSXXXXXXXXXXCX
FAA TSO	C34c, C36e, C40c
RTCA MOPS	DO-192, DO-195, DO-196

Order Options

Connector	
BNC	Standard
Color	
White	Standard
Gasket	
Gasket	B12014

VOR/LOC/GS

Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)

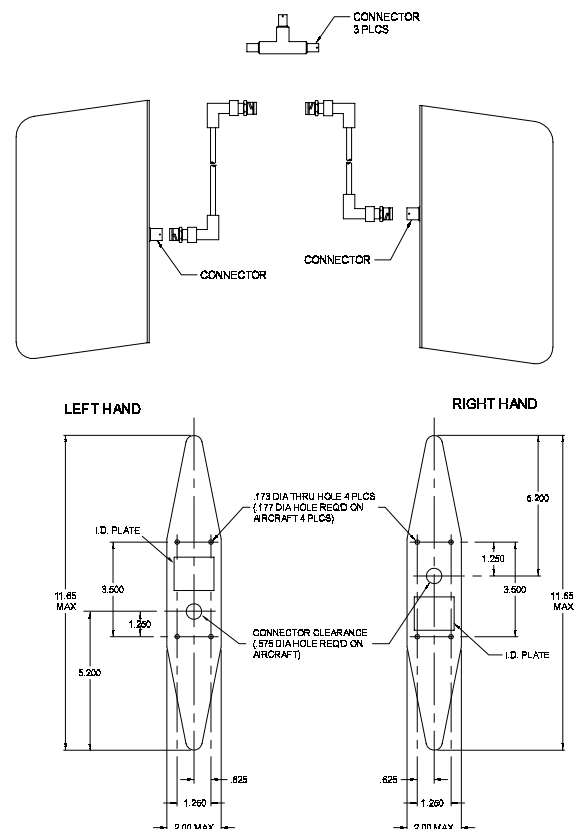
Model		CI 120-400 VOR/GS Antenna
Electrical		
Frequency	108 to 118 MHz (VOR/LOC) 329 to 335 MHz (glide Slope)	
VSWR	6.0:1 108 to 118 MHz (VOR/LOC) 3.5:1 329 to 335 MHz (glide Slope)	
Polarization	Horizontal	
Radiation Pattern	Omnidirectional	
Impedance	50 OHMS (nominal)	
Power RF	Receive only	
Mechanical		
Weight	1.4 lbs. per blade	
Height	6.0" maximum	
Material	Glass reinforced radome	
Finish	Polyurethane enamel	
Connector	BNC/single output combiner	
Environmental		
Temperature	-55° C to +85° C	
Altitude	50,000'	
Air Speed	300 Knots TAS @ 25,000'	
Federal Specifications		
RTCA Environmental	DO 160D	
Environmental Category	[(D2)X]AXB(S)E XRFDXSXXXXXXXXXX	
FAA TSO	C34e, C36e, C40c	
RTCA MOPS	DO-192, DO-195, DO-196	
Order Options		
Connector		
BNC	Standard	
Color		
White	Standard	



Comant designed this VOR/GS navigation antenna blade set for the Cessna 182 Series. Unique design and manufacturing techniques keep this set competitively priced while offering the reduced-drag advantages of a blade set.

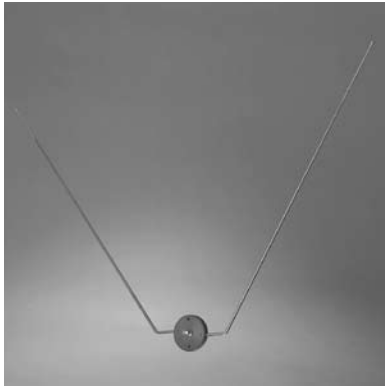
Provides for VOR/LOC/GS. Complete set includes a pair (2) of blades, each with single BNC connector output, and two coax interconnect cables. Single BNC output phasing combiner providing for a single RF cable run to the avionics installation.

P/N CI 120-400



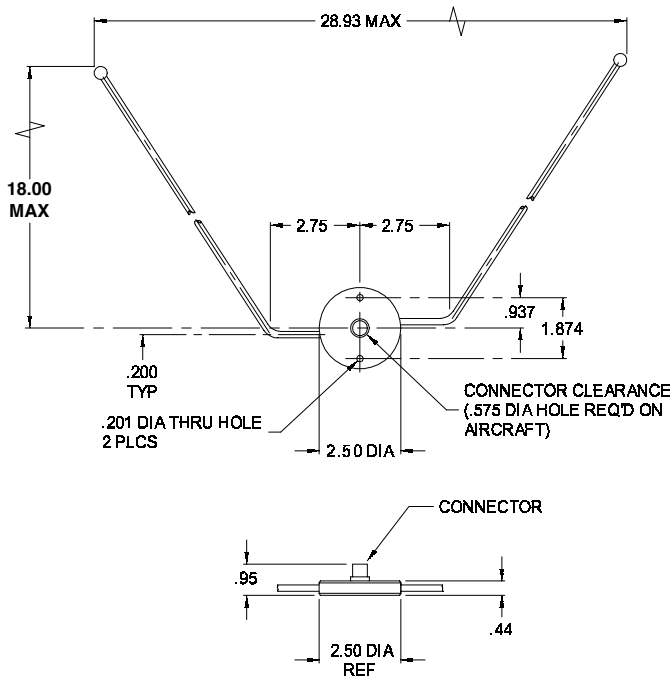
VOR/GS

Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)



"V" Dipole VOR/Glide Slope Antenna with fixed elements designed specifically for compatibility with the Piper Aircraft mounting. Integral ferrite balun provides for higher radiation efficiency replacing cumbersome coaxial baluns previously utilized. Radiating elements are not removable. Not approved for helicopter installations.

P/N CI 157P



Model CI 157P V-Dipole

Electrical	
Frequency	108 to 118 MHz (VOR/LOC) 329 to 335 MHz (glide slope)
VSWR	6.0:1 108 to 118 (VOR/LOC) 2.5:1 329 to 335 MHz (glide slope)
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS (nominal)
Power RF	Receive only

Mechanical	
Weight	0.5 lbs. per blade
Height	18.00" maximum
Material	Delrin housing/stainless whips
Finish	Black housing/stainless whips
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS @ 25,000'

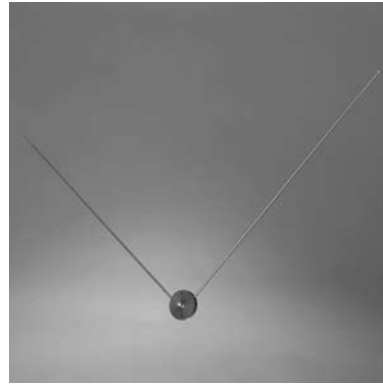
Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[A2F2]-CA[CLM] XRFXXXXXXXXXXC
FAA TSO	C34c, C38c, C40c
RTCA MOPS	DO-192, DO-195, DO-196

Order Options	
Connector	
BNC	Standard

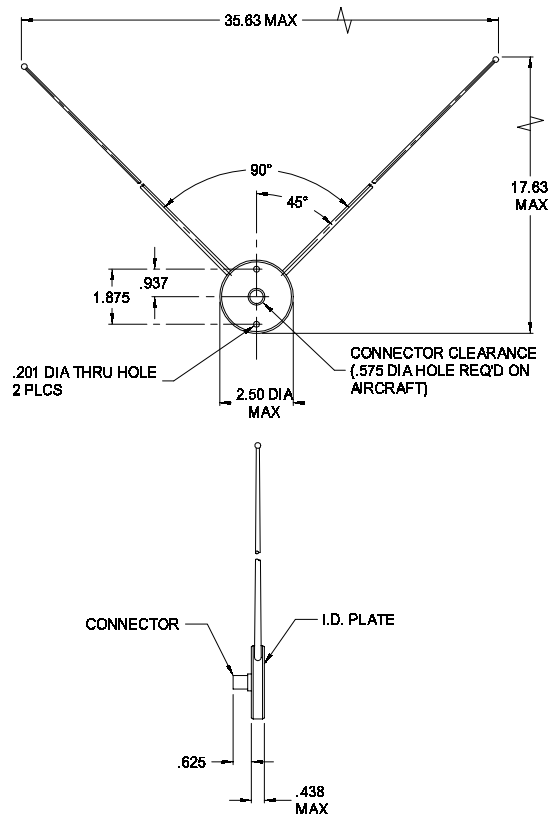
VOR/GS

Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)

Model		CI 158C V-Dipole
Electrical		
Frequency	108 to 118 MHz (VOR/LOC)	329 to 335 MHz (glide slope)
VSWR	6.0:1 108 to 118 MHz (VOR/LOC)	2.5:1 329 to 335 MHz (glide slope)
Polarization	Horizontal	
Radiation Pattern	Dipole	
Impedance	50 OHMS (nominal)	
Power RF	Receive only	
Mechanical		
Weight	0.35 lbs. maximum	
Height	17 5/8" maximum	
Material	Delrin housing/stainless whip	
Finish	Black housing/stainless whip	
Connector	BNC	
Environmental		
Temperature	-55° C to +85° C	
Altitude	50,000'	
Air Speed	250 Knots TAS @ 25,000'	
Federal Specifications		
RTCA Environmental	DO 160	
Environmental Category	B2ALXXXXXXXXXX	
FAA TSO	C34c, C38c, C40c	
RTCA MOPS	DO-192, DO-195, DO-196	
Order Options		
Connector		
BNC	Standard	

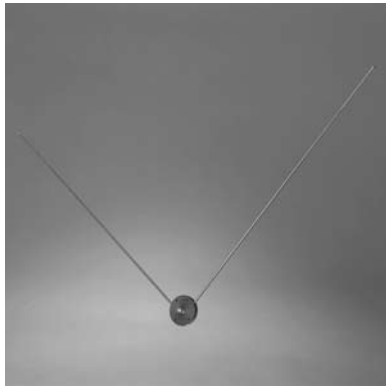


"V" Dipole VOR/Glide Slope Antenna with detachable elements mounts on top of the vertical fin stabilizer for most single engine general aviation aircraft. RF design similar to the CI 157P. Integral ferrite balun provides for higher radiation efficiency. Detachable element results in a significantly smaller shipping and storage carton than fixed element versions. Not approved for helicopter installations.
P/N CI 158C



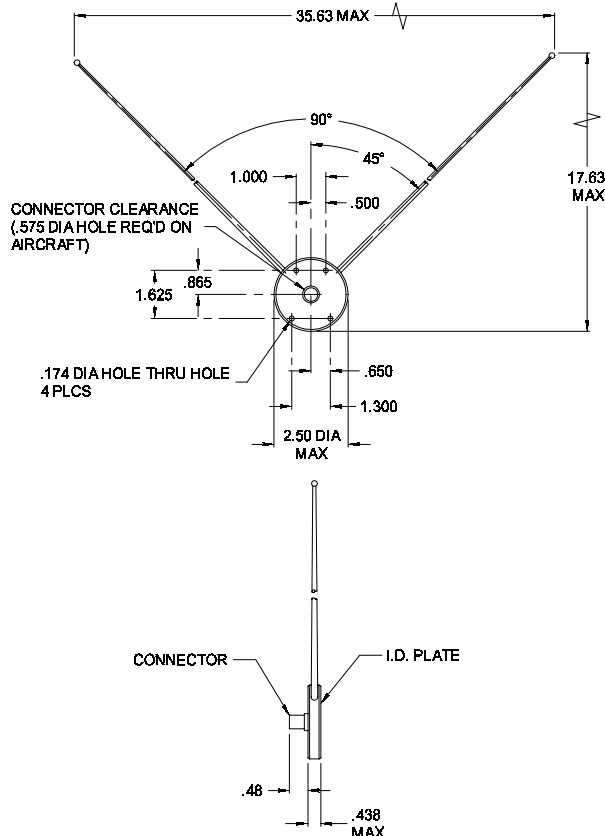
VOR/GS

Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)



"V" Dipole VOR/Glide Slope Antenna with detachable elements mounts on top of the vertical fin stabilizer offering the four-hole mounting configuration found on many Beech aircraft. RF design similar to the CI 157P. Integral ferrite balun provides for higher radiation efficiency. Detachable element results in a significantly smaller shipping and storage carton than fixed element versions. Not approved for helicopter installations.

P/N CI 158C-2



Model CI 158C-2 V-Dipole

Electrical	
Frequency	108 to 118 MHz (VOR/LOC) 329 to 335 MHz (glide slope)
VSWR	6.0:1 108 to 118 (VOR/LOC) 2.5:1 329 to 335 MHz (glide slope)
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS (nominal)
Power RF	Receive only

Mechanical	
Weight	0.35 lbs. maximum
Height	17 5/8" maximum
Material	Delrin housing/stainless whips
Finish	Black housing/stainless whips
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS @ 25,000'

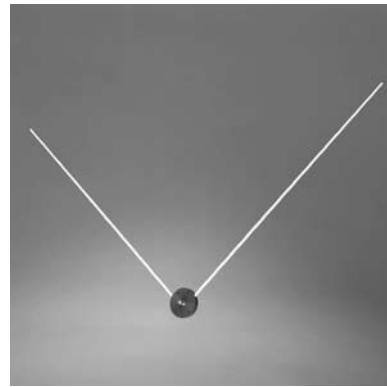
Federal Specifications	
RTCA Environmental	DO-160
Environmental Category	B2ALXXXXXXXXXX
FAA TSO	C34c, C38c, C40c
RTCA MOPS	DO-192, DO-195, DO-196

Order Options	
Connector	
BNC	Standard

VOR/GS

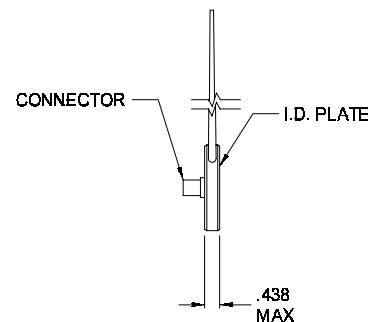
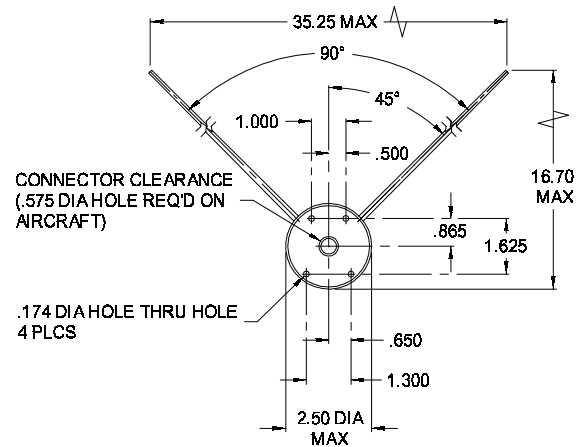
Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)

Model	
CI 158C-3 V-Dipole	
Electrical	
Frequency	108 to 118 MHz (VOR/LOC) 329 to 335 MHz (glide slope)
VSWR	6.0:1 108 to 118 MHz (VOR/LOC) 2.5:1 329 to 335 MHz (glide slope)
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS (nominal)
Power RF	Receive only
Mechanical	
Weight	0.35 lbs. maximum
Height	16.70" maximum
Material	Delrin housing/polyester glass laminate over stainless radiators
Finish	Black housing/polyurethane paint over P-Stat paint
Connector	BNC
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160
Environmental Category	B2ALXXXXXXXXXX
FAA TSO	C34c, C38c, C40c
RTCA MOPS	DO-192, DO-195, DO-196
Order Options	
Connector	
BNC	Standard
Color	
White	Radiators only



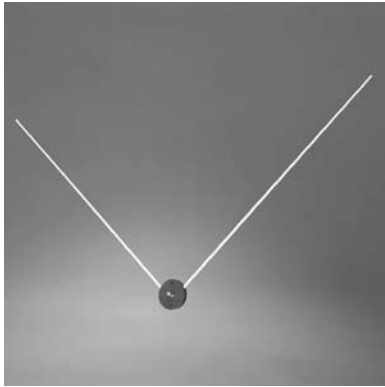
"V" Dipole VOR/Glide Slope Antenna with detachable elements was developed specifically for Beech Bonanza aircraft and encompasses reduced static capability with the use of P-Stat paint and bleeder resistors. Integral ferrite balun provides for higher radiation efficiency. Not approved for helicopter installations.

P/N CI 158C-3



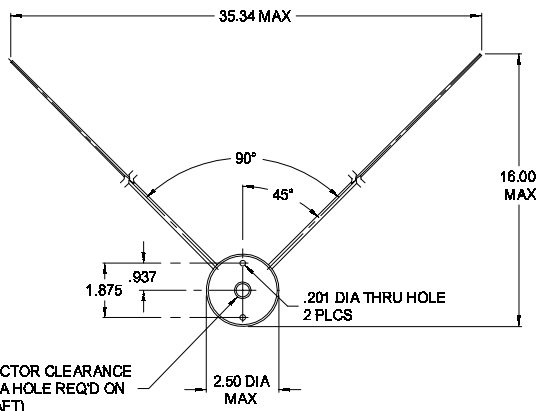
VOR/GS

Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)

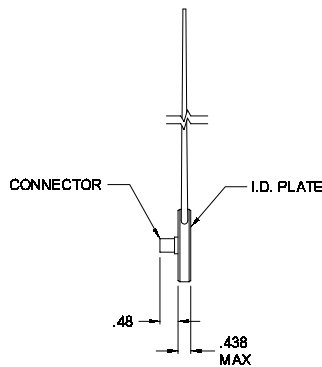


"V" Dipole VOR/Glide Slope Antenna with detachable elements is similar to the CI 158C-3 with the exception of offering 2-hole mount instead of a 4-hole mount. This V Dipole encompasses reduced static capability with the use of P-Stat paint. Integral ferrite balun provides for higher radiation efficiency. Not approved for helicopter installations.

P/N CI 159C



CONNECTOR CLEARANCE (.575 DIA HOLE REQ'D ON AIRCRAFT)



Model CI 159C V-Dipole

Electrical	
Frequency	108 to 118 MHz (VOR/LOC) 329 to 335 MHz (glide slope)
VSWR	6.0:1 108 to 118 (VOR/LOC) 2.5:1 329 to 335 MHz (glide slope)
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS (nominal)
Power RF	Receive only

Mechanical	
Weight	0.35 lbs. maximum
Height	16.00" maximum
Material	Delrin housing/glass laminate whips/ SS radiators
Finish	Black housing/polyurethane enamel over P-Stat paint
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160
Environmental Category	B2ALXXXXXXXXXX
FAA TSO	C34c, C38c, C40c
RTCA MOPS	DO-192, DO-195, DO-196

Order Options	
Connector	
BNC	Standard

Color	
White	Radiators only

VOR/GS

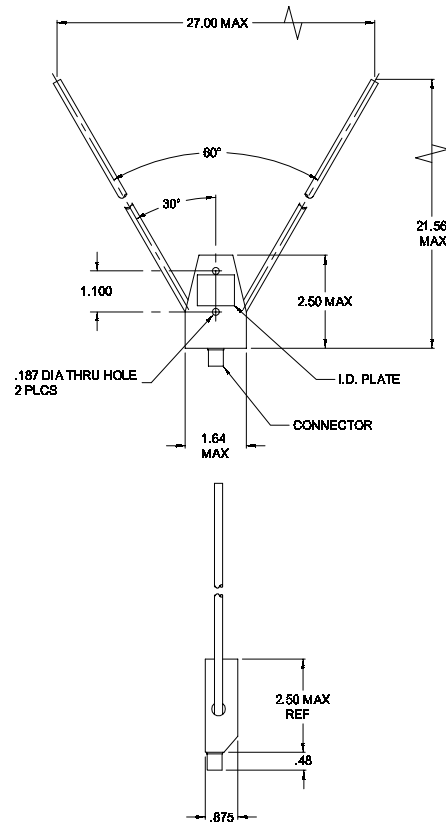
Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)

Model	CI 182 V-Dipole
Electrical	
Frequency	108 to 118 MHz (VOR/LOC) 329 to 335 MHz (glide slope)
VSWR	6.0:1 108 to 118 MHz (VOR/LOC) 2.5:1 329 to 335 MHz (glide slope)
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS (nominal)
Power RF	Receive only
Mechanical	
Weight	0.47 lbs. maximum
Height	21 9/16" maximum
Material	Delrin housing/glass radiators/ glass whips
Finish	Black housing/polyurethane enamel
Connector	BNC
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS @ 25,000'
Order Options	
Connector	
BNC	Standard
Color	
White	Radiators only



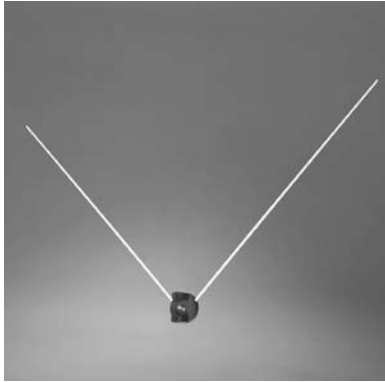
"V" Dipole VOR/Glide Slope Antenna with detachable elements was developed specifically for Commander aircraft. Mounts inside top of vertical stabilizer for improved aerodynamics. RF design is similar to the CI 157P. Integral ferrite balun provides for higher radiation efficiency. Not approved for helicopter installations.

P/N CI 182



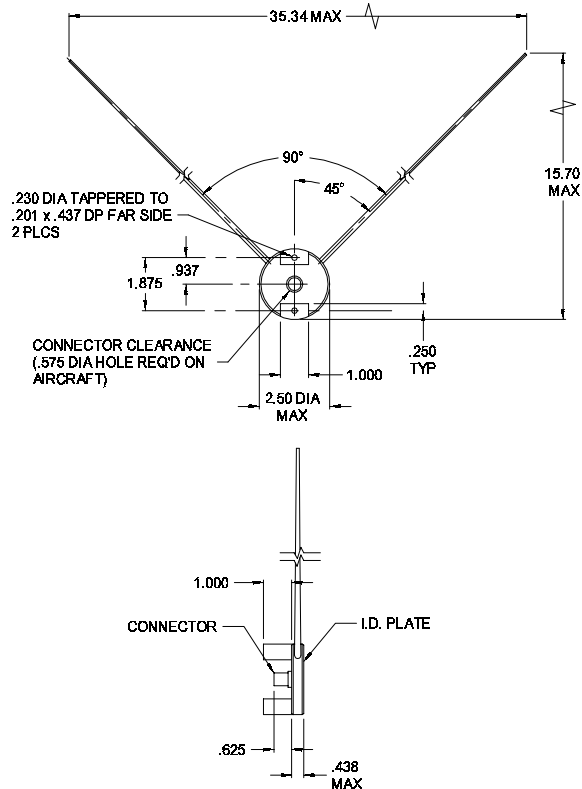
VOR/GS

Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)



"V" Dipole VOR/Glide Slope Antenna with Detachable Elements features two integrally molded mounting legs or "spacers" for increased strength. Radiating elements are laminated with polyester glass material for improved precipitation static protection. Interchangeable with the VOR/GS antenna used on most Cessna single-engine aircraft since 1980 including the Cessna 182 and 210 models. Not approved for helicopter installations.

P/N CI 215



Model CI 215 V-Dipole

Electrical	
Frequency	108 to 118 MHz (VOR/LOC) 329 to 335 MHz (glide slope)
VSWR	6.0:1 108 to 118 MHz (VOR/LOC) 3.0:1 329 to 335 MHz (glide slope)
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS (nominal)
Power RF	Receive only

Mechanical	
Weight	0.35 lbs. maximum
Height	16.00" maximum
Material	Delrin housing/glass laminate whips/ SS radiators
Finish	Black housing/polyurethane enamel
Connector	BNC

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	250 Knots TAS @ 25,000'

Order Options

Federal Specifications	
RTCA Environment	DO-160
Environmental Category	C2AL XXXXXXXXXXXX
FAA TSO	C34c, C36c, C40a
RTCA MOPS	DO-192, DO-195, DO-196

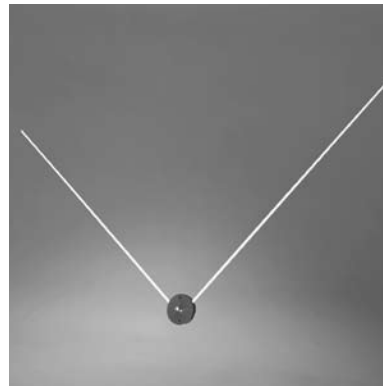
Connector	
BNC	Standard

Color	
White	Radiators only

VOR/GS

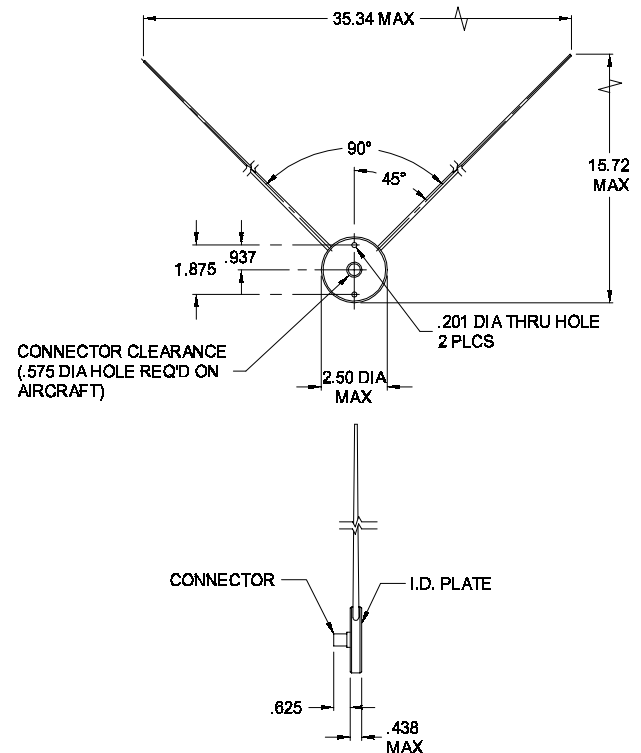
Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)

Model	CI 259E V-Dipole
Electrical	
Frequency	108 to 118 MHz (VOR/LOC) 329 to 335 MHz (glide slope)
VSWR	6.0:1 108 to 118 (VOR/LOC) 3.0:1 329 to 335 MHz (glide slope)
Polarization	Horizontal
Radiation Pattern	Dipole
Impedance	50 OHMS (nominal)
Power	Receive only
Mechanical	
Weight	0.35 lbs. maximum
Height	16.00" maximum
Material	Delrin mounts/glass laminate whips/ SS radiators
Finish	Black housing/polyurethane enamel
Connector	BNC
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	300 Knots TAS @ 25,000'
Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	D2A/UV/XXXXXXXX
FAA TSO	C34c, C38c, C40c
RTCA MOPS	DO-192, DO-195, DO-196
Order Options	
Connector	
BNC	Standard
Color	
White	Radiators only



"V" Dipole VOR/Glide Slope Antenna with Fixed Elements is approved for use on helicopter aircraft. Features an integral ferrite balun and fixed element construction. Mechanically designed to withstand the severe low frequency vibration environment experienced in typical helicopter installations. APPROVED for use on helicopter aircraft.

P/N CI 259E



VOR

Frequency 108-118 MHz



VOR High Performance Balanced-Loop Set/Single Output Combiner with single output combiner is designed primarily for large airframe turbo-jet aircraft installations where the VOR and glide slope signal reception is provided by separate antennas. Antenna set provides for reception of VOR, area navigation and localizer signals when mounted high on the aircraft vertical stabilizer. Features low drag "knife-edge" aerodynamic shape, rugged mounting base, horizontal/omnidirectional pattern, wide band/high efficiency/ high gain electrical performance, DC grounding for lightning protection and "industry standard" 8-hole mounting. Complete set includes a pair (2) of blades, each with single BNC connector output, two coax interconnect cables and a CI 120-3 signal combiner with single BNC connector output. Set provides for a single cable routing to the avionics installation for NAV 1 receiver. Use the CI 502 diplexer for dual VOR operation with NAV 1 and NAV 2 receivers.

P/N CI 135-100

Model CI 135-100 VOR Antenna

Electrical	
Frequency	108 to 119 MHz
VSWR	3.0:1
Polarization	Horizontal
Radiation Pattern	Omnidirectional
Impedance	50 OHMS (nominal)
Power	Receive only

Mechanical	
Weight	2.44 lbs. per blade
Height	7.20" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC/single output combiner

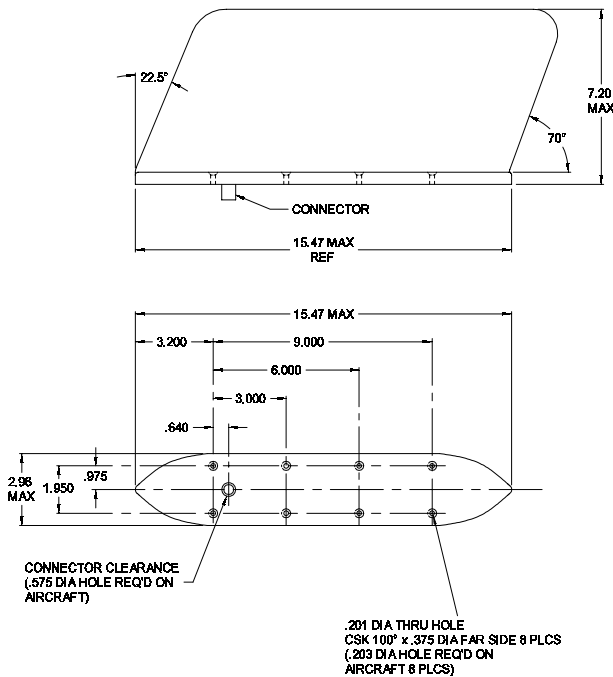
Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	600 Knots TAS @ 25,000'

Order Options

Federal Specifications	
RTCA Environment	DO-160C
Environmental Category	F2-XCCXXXXXXXXXXXXXXXXXX
FAA TSO	C40c
RTCA MOPS	DO-196

Connector	
BNC	Standard

Color	
White	Radiators only



VOR

Frequency 108-118 MHz

Model CI 135-200 VOR Antenna

Electrical	
Frequency	108 to 118 MHz
VSWR	3.0:1
Polarization	Horizontal
Radiation Pattern	Omnidirectional
Impedance	50 OHMS (nominal)
Power	Receive only

Mechanical	
Weight	2.44 lbs. per blade
Height	7.20" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC/single output combiner

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	600 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	F2-XCCXXXXXXXXXXXXXXXXXX
FAA TSO	C40c
RTCA MOPS	DO-196

Order Options

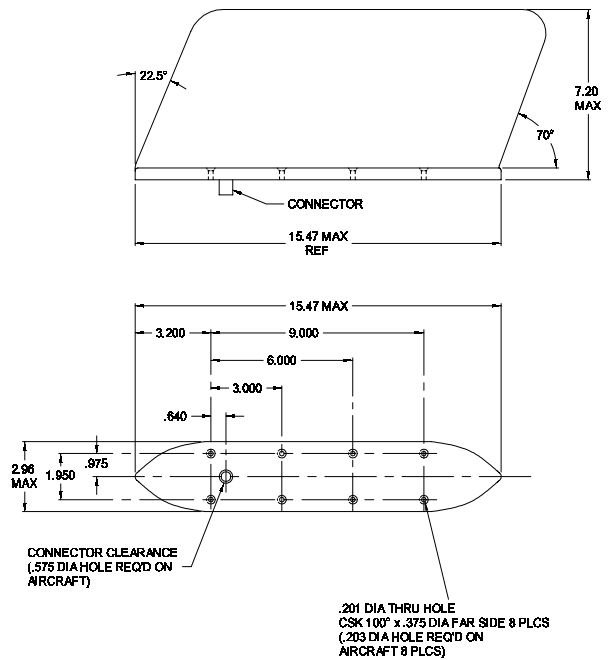
Connector	
BNC	Standard

Color	
White	Standard



VOR High Performance Balanced-Loop set with BNC connectors is identical to the CI 135-100 set except that the CI 120-4 signal combiner is supplied with dual BNC connectors. The CI 135-200 provides for two separate cable runs to the avionics installation for NAV 1 and NAV 2 receivers.

P/N CI 135-200



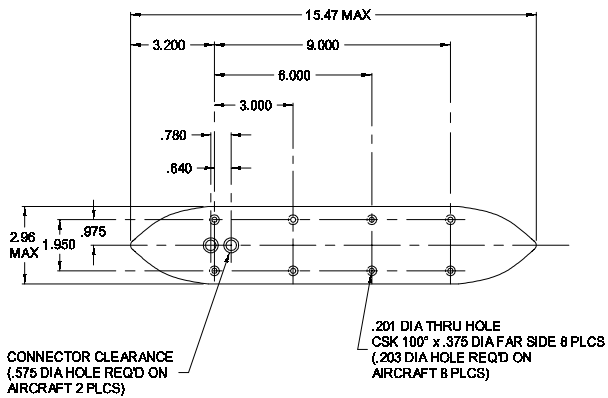
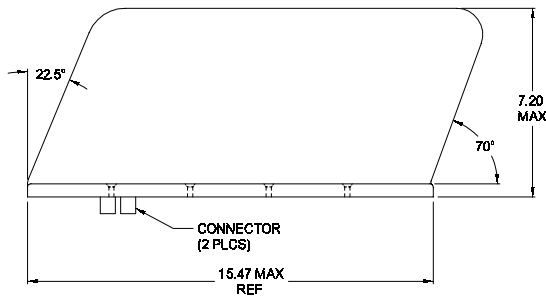
VOR

Frequency 108-118 MHz



VOR High Performance Balanced-Loop Set is identical to the CI 135-100 set except that a pair (2) of blades, each with dual BNC connectors, is included in place of the single BNC connector blade type. Four coax interconnect cables are included in place of two interconnect cables. Pair of (2) CI 120-3 signal combiners are included each with single BNC connector output. Set provides for a completely independent pair (2) of channel connection and cable runs to the avionics installation for NAV 1 and NAV 2 receivers.

P/N CI 135-300



Model CI 135-300 VOR Antenna

Electrical	
Frequency	108 to 119 MHz
VSWR	3.0:1
Polarization	Horizontal
Radiation Pattern	Omnidirectional
Impedance	50 OHMS (nominal)
Power	100 watts maximum average

Mechanical	
Weight	2.44 lbs. per blade
Height	7.20" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	Dual BNC/dual output combiner

Environmental	
Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	600 Knots TAS @ 25,000'

Federal Specifications	
RTCA Environment	DO-160C
Environmental Category	F2-XCCXXXXXXXXXXXXXXXXXX
FAA TSO	C40c
RTCA MOPS	DO-196

Order Options

Connector	
BNC	Dual to Standard

Color	
White	Standard

VOR/GS

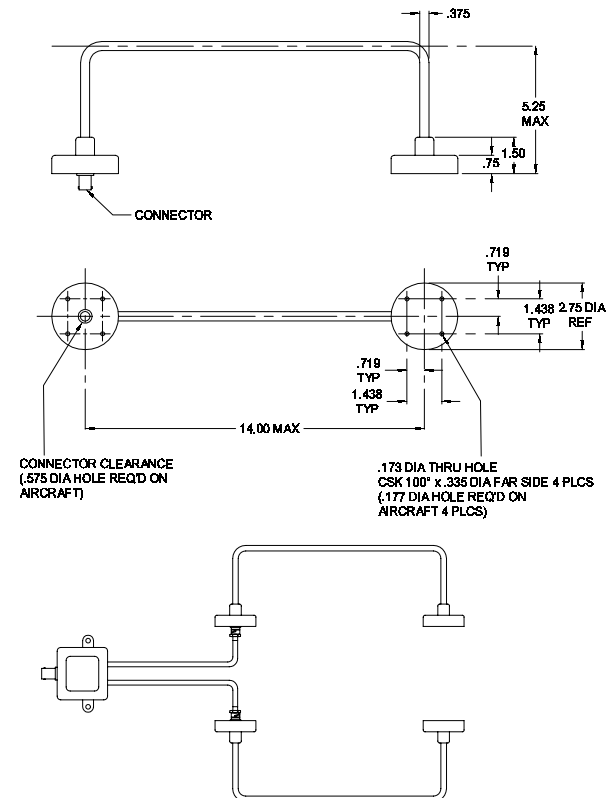
Frequency 108-118 MHz (VOR/LOC) 329-335 MHz (Glide Slope)

Model		CI 205-3 Towel Bar Set
Electrical		
Frequency	108 to 118 MHz (VOR/LOC)	329 to 335 MHz (glide slope)
VSWR	5.0:1 108 to 118 (VOR/LOC)	5.25:1 329 to 335 MHz (glide slope)
Polarization	Horizontal	
Radiation Pattern	Dipole	
Impedance	50 OHMS (nominal)	
Power	Receive only	
Mechanical		
Weight	1.75 lbs. maximum	
Height	5.25" maximum	
Material	Delrin mounts/aluminum "towel bar"	
Finish	Polyurethane enamel	
Connector	BNC	
Environmental		
Temperature	-55° C to +85° C	
Altitude	50,000'	
Air Speed	300 Knots TAS @ 25,000'	
Federal Specifications		
RTCA Environmental	DO-160C	
Environmental Category	F2-XC[CVY4UW] XXXXXXXXXXXX[1B]X	
FAA TSO	C34c, C38c, C40c	
RTCA MOPS	DO-196	
Order Options		
Connector		
BNC	Standard (with 4' cables)	
Color		
White	Standard	



VOR/Glide Slope High Performance Navigation Antenna Set is designed for mounting on the aircraft vertical stabilizer or helicopter tail boom. Features low weight/drag, tubular structure to minimize helicopter rotor "down wash" forces, wide band/high efficiency electrical performance and DC grounding for lightning protection. Set includes a pair (2) of "towel bar" sensor elements each with single BNC output connector and a one-piece dual coax interconnect signal combiner harness with single BNC connector output. Provides for a single cable routing to the avionics location. Use the CI 502 coupler for dual VOR operation with NAV 1 and NAV 2 receivers. Single or dual VOR/Single Glide Slide operation is available when used with the CI 507 or CI 505 duplexers respectfully in NAV 1 and NAV 2 installations. Use the CI 1125 for dual VOR/dual Glide Slope operation.

P/N CI 205-3



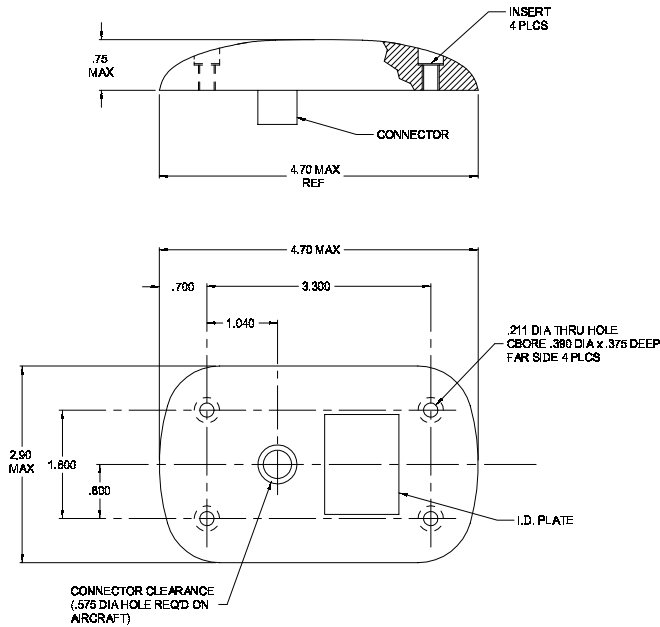
GPS

Frequency 1575.42 MHz 26dB Gain



Active GPS antenna designed for airborne applications for aircraft up to 600 knots. Certified to TSO C-129a, complies to ARINC 743 specifications, and DO-208 Minimum Operation Performance requirements. All 401 Series antennas offer DC grounding and have passed rigorous Lightning Direct Effects testing as prescribed in DO-160C. Available in many standard formats as listed. Additional designs with various gain and filter configurations are available.

P/N CI 401 Series/Active



Model	CI 401 Series
Electrical	
Frequency	1575.42 MHz
Polarization	RHCP
Axial Ratio (Boresight)	3 dB maximum
Power Handling	1 watt
Radiation Coverage (Gain)	-1.0 dBic $\leq \theta < 75^\circ$ -2.5 dBic $\leq \theta < 80^\circ$ -4.5 dBic $\leq \theta < 85^\circ$ -7.5 dBic $\leq \theta = 90^\circ$ (horizon) +5.0 dBic (nominal) @ $\theta = 0^\circ$ (zenith)
Amplifier	
Voltage	5 or 12VDC (specify to order options)
Gain	26 dB
Noise Figure	2.0 dB (nominal)/3.8 dB maximum
Impedance	50 OHMS
VSWR	1.7:1 maximum output
Out of Band Rejection	35 dB minimum @ 1626 MHz
Power Handling	50 mA maximum
Lightning	DC grounded
Mechanical	
Weight	0.5 lbs.
Height	0.75" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	See order options
Footprint	ARINC 743
Environmental	
Temperature	-55° C to +85° C
Altitude	55,000'
Air Speed	600 Knots TAS
Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[A2F2]AC[CLMY] XRFXXSAX[AB][BZ]AVAL[2A]C
FAA TSO	C129a
RTCA MOPS	DO-208
Color	
White	Standard

GPS

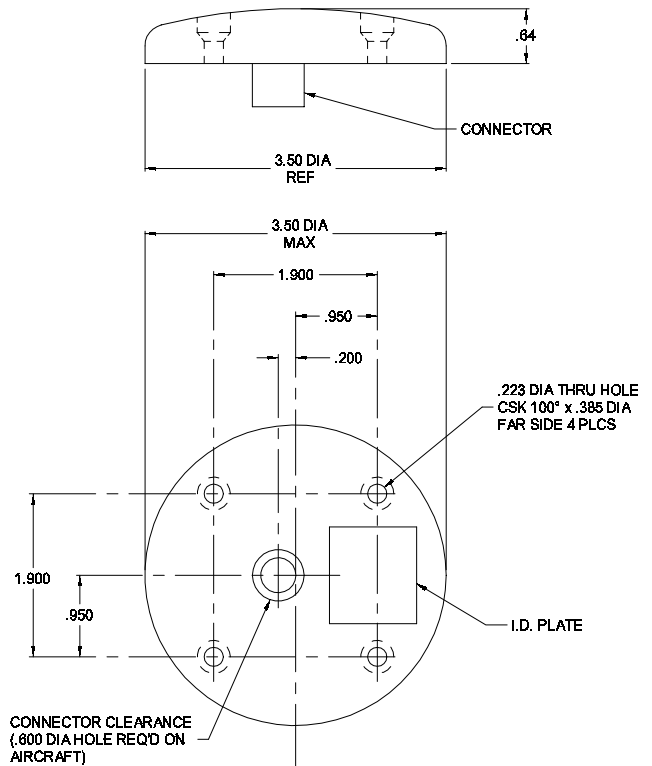
Frequency 1575.42 MHz 28dB Gain

Model	CI 408-20	
Electrical		
Frequency	1575.42 MHz	
Polarization	RHCP	
Axial Ratio	< 3 dB @ 90°	
Radiation Coverage (Gain)	3.0 dBic 0° ≤ θ ≤ 60° 0.0 dBic 0° ≤ θ ≤ 75° -3.0 dBic 0° ≤ θ ≤ 80° -4.5 dBic 0° ≤ θ ≤ 85° -7.5 dBic θ = 90°	
Amplifier		
Voltage	7.0 to 24VDC	
Gain	26.5 minimum/28 dB (nominal)	
Noise Figure	2.0 dB (nominal)/3.8 dB maximum	
VSWR	2.0:1 maximum output	
Out of Band Rejection	35 dB minimum @ 1626 MHz	
Power Handling	50 mA maximum	
Lightning Protection	DC grounded	
Mechanical		
Weight	0.45 lbs. maximum	
Height	0.64" maximum	
Material	Molded radome	
Finish	Polyurethane enamel	
Connector	TNC (female)	
Footprint	Round mount configuration	
Environmental		
Temperature	-55° C to +85° C	
Altitude	55,000'	
Air Speed	600 Knots TAS	
Federal Specifications		
RTCA Environmental	DO-160D	
Environmental Category	[F2]-AC[S2] XRFXXSXXXXXX[2A]C	
FAA TSO	C144	
RTCA MOPS	DO-228	
Order Options		
Voltage	Connector	Model
7.0 to 24.0VDC	TNC	CI 408-20
Color		
White		Standard



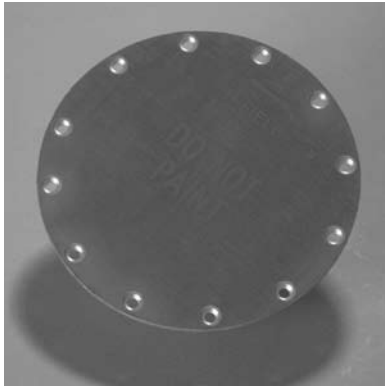
Active GPS antenna designed for airborne applications for aircraft up to 600 knots. Certified to TSO C-144, and DO-228 Minimum Operation Performance requirements. This antenna offers DC grounding and has passed rigorous Lightning Direct Effects testing as prescribed in DO-160D. Round footprint allows for drop-in replacement in many popular GPS applications.

P/N CI 408-20/Active



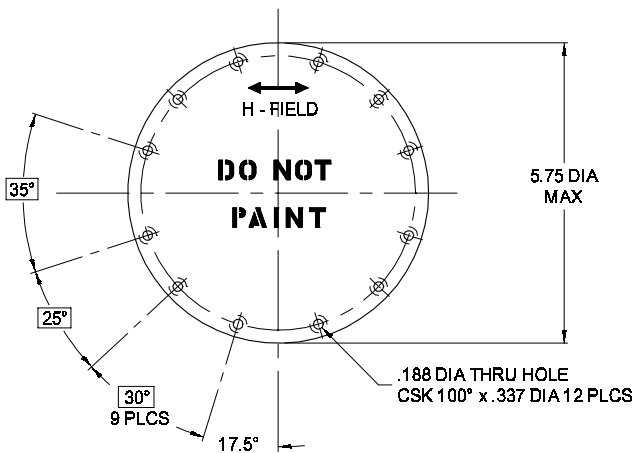
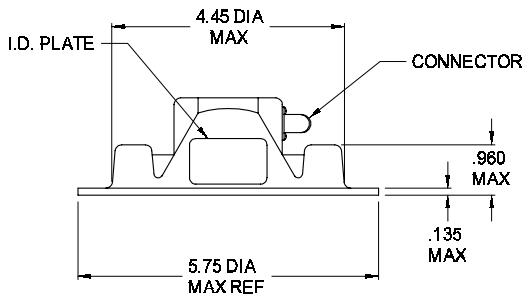
Radar Altimeter

Frequency 4250-4350 MHz



Flush mounted radar altimeter antenna encased in a 5.75" diameter aluminum die casting. Internal components are potted in place for mechanical integrity. Used in pairs, CI 152s comply with ARINC 552 and exhibit very high isolation.

P/N CI 152



Model CI 152 Radar Altimeter

Electrical	
Frequency	4250 to 4350 MHz
VSWR	1.2:1 @ 4350 MHz 1.3:1 @ 4250 & 4350 MHz
Polarization	Vertical to linear
Gain	10.5 dB minimum @ 4300 MHz
Duty Cycle	0.002
Radiation Pattern	E Plane 45° ± 5° @ 3 dB H Plane 45° ± 5° @ 3 dB
Signal Rejection	50 dB @ 8500-8700 MHz 25 dB @ 8200-8850 MHz
Isolation	H Plane coupled @ 2', 85 dB
Beamwidth	35° x 35° minimum
Input	50 Ohm
Power Handling	1 kW peak

Mechanical	
Weight	0.6 lbs.
Height	Flush mount
Material	Die cast alloy aluminum
Finish	MIL-C 5541, CL2
Connector	TNC

Environmental	
Temperature	-55° C to +85° C
Altitude	70,000'
Air Speed	No drag to flush mount

Federal Specifications	
Military	MIL-A-81605D(AS)
RTCA Environmental	DO 160A
Environmental Category	MIL-STD-810
FAA TSO	C87
Test per ATP	01-34-4550

Order Options

Connector	
TNC	CI 152

Gasket	
Gasket	B15215

Data Link CI 268-10

Frequency–Orbcomm Data Link 137.0-150.5 MHz

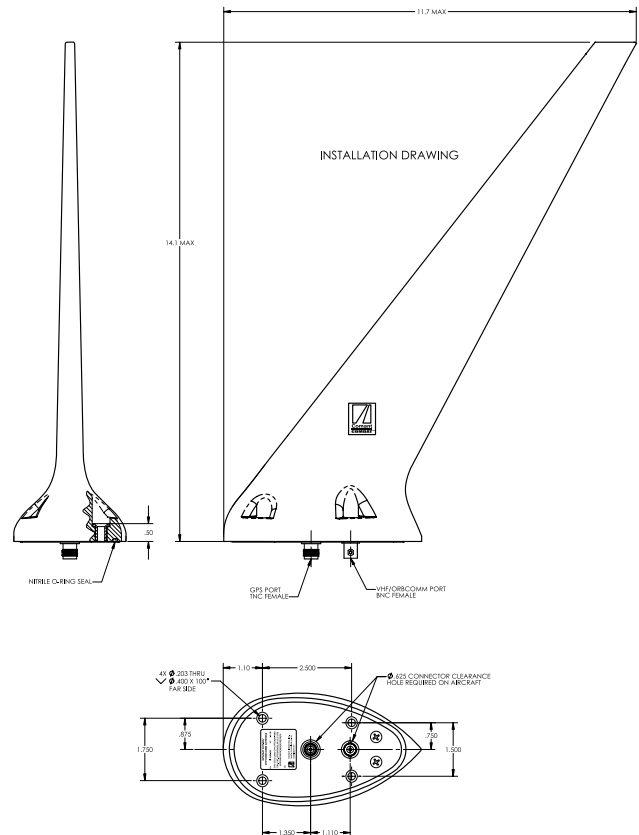
Model		CI 268-10
RF Characteristics		Orbcomm
Frequency		137.00-150.05 MHz
VSWR		2.5:1
Polarization		Vertical
Radiation Pattern		Omnidirectional
Power Rating		50 watts
Impedance		50 OHMS
Mechanical/Environmental		
Weight		1.25 lbs. maximum
Connector		BNC
Air Speed		325 KIAS maximum @ sea level
Service Ceiling		35,000' maximum
TSO		C37d, C38d
Environmental Category		[F2X]ACB[S(C,L,M)T(C1,Y,R)]XSFDXSXXXX [XX][XXXX][XX]CX



The CI 268-10 offers the best Orbcomm functionality. Weather data on today's larger and faster aircraft is a quick and easy install with this all-new ComDat®. This model features a super-tough nickel plated aluminum base plate with integral Nitrile 'O' ring for pressurized applications, and a heavy duty radome for demanding installations.

The CI 268-10 operates at Orbcomm frequencies, providing weather data service to the cockpit.

P/N CI 268-10



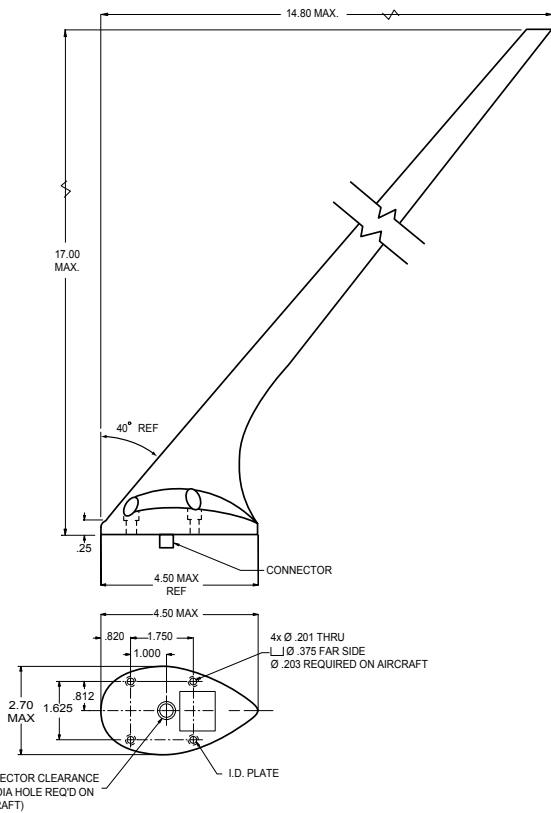
COMDAT™ Data Link

Frequency 137-150.5 MHz



The CI 248-10 is specifically designed for use with Weather/Data or WX systems, bringing e-mail and weather data to the cockpit. The CI 248-10 links to the ORBCOMM™ LEO satellite constellation to bring real time weather and e-mail within easy reach of any pilot. This was built for pure electrical performance.

P/N CI 248-10



Model CI 248-10 Data Link/ WX Antenna

Electrical

Frequency	137 to 150.5 MHz
VSWR	2.5:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts

Mechanical

Weight	0.52 lbs. maximum
Height	17" maximum
Material	Molded radome
Finish	Polyurethane enamel
Connector	BNC

Environmental

Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	350 Knots TAS @ 25,000'

Federal Specifications

RTCA Environmental	DO-160D
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFDXSXXXX[XX]X[XXXX]XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector

BNC	Standard
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Color

White	Standard
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COMDAT™ VHF/Data Link Combo

Frequency 118-137 MHz 137-150.5 MHz

Model CI 248-30 VHF Orbcomm Antenna		
Electrical	VHF	Orbcomm
Frequency	118 to 135 MHz	137 to 150.5 MHz
VSWR	2.5:1 maximum	2.0:1 maximum
Polarization	Vertical	
Radiation Pattern	Omnidirectional	
Impedance	50 OHMS	
Power	25 Watts	
Mechanical		
Weight	0.5 lbs. maximum	
Height	17.00" maximum	
Material	Molded radome	
Finish	Polyurethane enamel	
Connector	BNC (female)	
Environmental		
Temperature	-55° C to +85° C	
Altitude	50,000'	
Air Speed	350 Knots TAS	
Federal Specifications		
RTCA Environmental	DO-160D	
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFDXSXXXX[XX]X[XXXX]XAX	
FAA TSO	C37d, C38d	
RTCA MOPS	DO-186A	
Order Options		
Connector		
BNC	Standard	
Color		
White	Standard	
Gasket		
Gasket	B24809 cork neoprene	

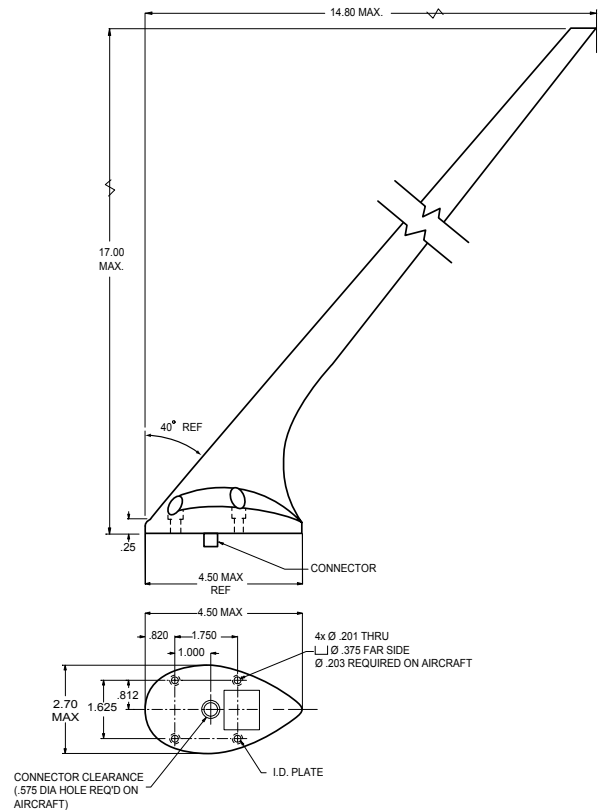


Brand new in concept, this COMDAT™ antenna combines VHF and ORBCOMM™ into a single footprint, allowing you to add ORBCOMM™ without adding another antenna.

Comant worked in conjunction with Avidyne™ to offer this unique system. Fully TSO'd this is the only antenna of its type on the market today.

Built-in high performance notch filter, eliminates the need for the in-line filters. Installations are not constrained with GPS/VHF spacing consideration.

P/N CI 248-30



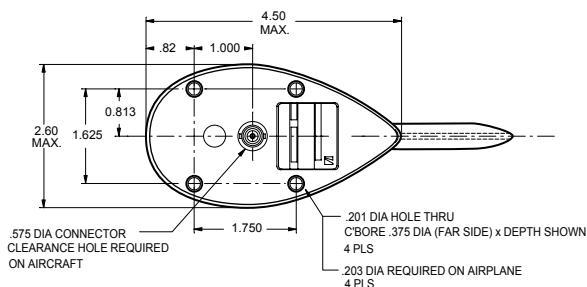
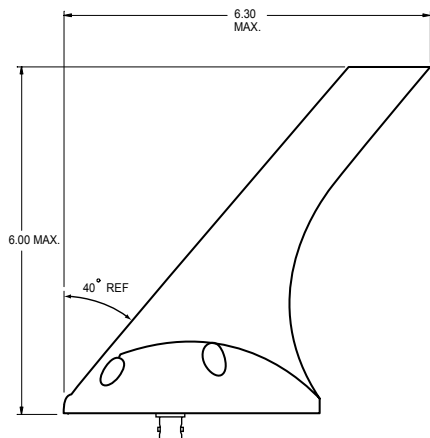
COMDAT™ FIS Data Link

Frequency 137-150.5 MHz



The new Bendix-King KDR 510™ Data Link receiver from Honeywell provides continuously transmitted weather information through high-speed VDL Mode 2. NEXRAD, METARs and TAFs are displayed for any area of the country at any time, providing greater situational awareness for pilots and aircraft equipped with the system.

Now Comant assures positive FIS performance with the new CI 248-180 FIS Data Link Antenna. Designed specifically to bring NEXRAD, METARs, and TAFs frequencies to the cockpit, the CI 248-180 offers superior performance in a rugged package.
P/N CI 248-180



Model CI 248-180 FIS Data Link Antenna

Electrical

Frequency	136.450 to 136.475 MHz
VSWR	2.0:1 maximum
Polarization	Vertical
Radiation Pattern	Omnidirectional
Impedance	50 OHMS
Power	25 Watts

Mechanical

Weight	0.32 lbs. maximum
Height	6.00" maximum
Material	Glass reinforced nylon
Finish	Polyurethane enamel
Connector	BNC (female)

Environmental

Temperature	-55° C to +85° C
Altitude	50,000'
Air Speed	650 Knots TAS @ 35,000'

Federal Specifications

RTCA Environmental	DO-160D
Environmental Category	[F2X]ACB[S(L)U(F,F1)T(C,C1,R)] XRFDXSXXXX[XX](XXXX)XAX
FAA TSO	C37d, C38d
RTCA MOPS	DO-186A

Order Options

Connector

BNC	Standard
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Color

White	Standard
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Gasket

Gasket	B24809 cork neoprene
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Satellite Radio/GPS CI 401-420

Frequency GPS 1575.42 MHz +/- 3 MHz
 Satellite Radio 2320.0-2345.0 MHz

Model CI 401-420 ComDat

Preamplifier	
Characteristics	(T _A = -55° C to +70° C)
Frequency	1575.42 ±3 MHz
Output Impedance	50 OHMS (nominal)
Output VSWR	1.7:1 maximum (RL-11.73 dB)
Gain at 1575.42	26.5 dB minimum/31.5 dB maximum
Noise Figure	3.8 dB maximum
Selectivity	-40 dB minimum Satcom (1625.5 MHz)
DC Voltage	4 to 24VDC
DC Current	25 MA minimum/40 MA maximum
Burnout Protection	30 Bm/1.0 W CW unmodulated

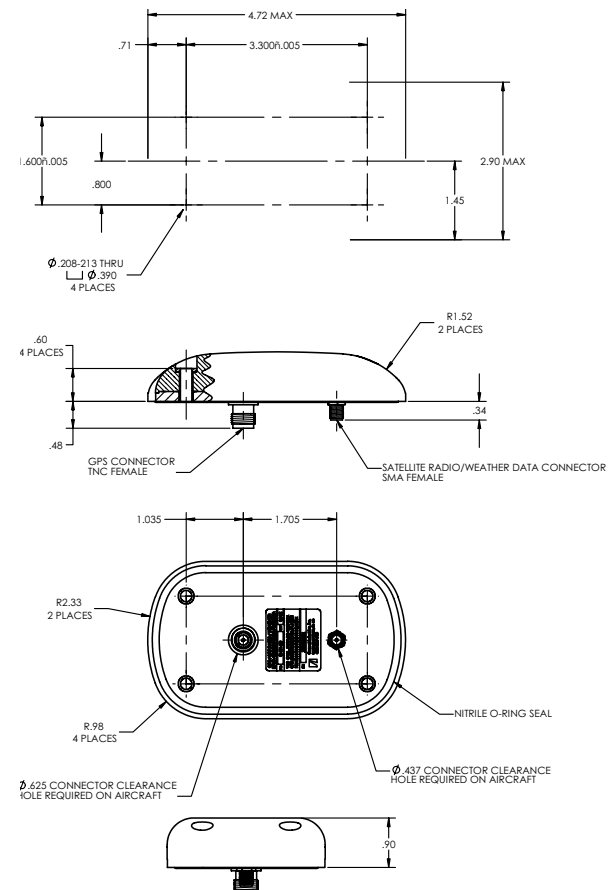
Sat. Radio/Weather Data	
Characteristics	(T _A = -55° C to +70° C)
Frequency	2320.0 to 2345.0 MHz
Polarization	LHCP
Radiation Gain Pattern	Hemispherical
Output Impedance	50 OHMS (nominal)
Output VSWR	1.5:1 maximum (RL -14.0 dB)
Amplifier Gain	26.0 dB minimum/30.0 dB maximum
Noise Figure	2.7 dB maximum
Selectivity	-20 dB minimum (FC 230 MHz)
DC Voltage	4 to 24VDC
DC Current	45 mA typical/55 mA maximum

Mechanical/Environmental	
Weight	6.5 oz. maximum
Connector	TNC female GPS/SMA female SAT
Air Speed	600 Knots @ 55,000'
Environmental Category	[F2X]ACB[S(L)T(C,C1,R)] XRFDXSXXXX[XX]X[XXXX][1B]CX
FAA TSO	C144/DO-160D/DO-228



The CI 401-420 is set apart from other antennas because, in addition to GPS, the antenna provides popular Satellite Radio and Weather Data signal capability. Now installers can quickly place this TSO'd antenna on limited space areas. What's more, installers can provide satellite entertainment and/or weather data systems for their customers without adding another antenna.

The newly redesigned 401 Series ARINC footprint has proven to be a versatile antenna. This model contains a highly stable GPS amplifier that offers gain performance at 27.0 to 31.5 dB while providing excellent Satcom rejection at 40 dB minimum.
P/N CI 401-420



Globalstar™ CI 480-1

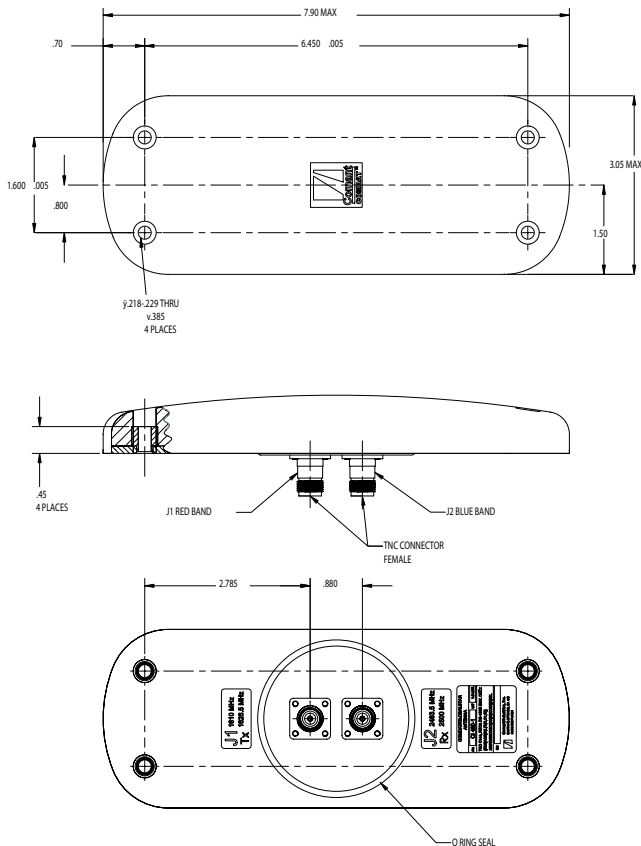
Frequency J1 TX 1610-16226.5 MHz
 J1 RX 2483.5-2500 MHz



Dual-band active antenna operates at Globalstar™ Frequencies, with continuous TX coverage from 1610 to 1626.5 MHz and RX band from 2483.5 to 2500 MHz. Receive side features a 29 dB gain amplifier with high-performance filtration and a built-in voltage regulator for DC bias operation of +3.3 to +28VDC.

The ComDat™ CI 480-1 is standard equipment with Northern Airborne Technology's STX100 Airborne Satellite Communications System™, capable of both voice and data operations. Learn more about this system at www.northernairborne.com.

P/N CI 480-1



Model CI 480-1 ComDat™

RF Characteristics	
Frequency	
J1 TX	1610 to 1626.5 MHz
J2 RX	2483.5 to 2500 MHz
Polarization	LHCP
Power Handling	
J1 TX	60 Watts
J2 RX	1 Watt
Radiation Pattern	Hemispherical
Impedance	50 OHMS
Gain	≤ 3.0 dB @ zenith
Lightning Protection	DC Grounded

Amplifier Characteristics	
Gain	29 dB ± 1.5 dB
DC Voltage	+3.3 to +28VDC
DC Current	50 mA maximum
Noise Figure	2.5 dB maximum

Mechanical	
Weight	1.0 lbs.
Height	0.95" maximum
Finish	Gloss white enamel
Connector	TNC female (2)

Environmental	
Temperature/Altitude	-55° C to +85° C @ 55,000'
Air Speed	600 Knots @ 55,000'

Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[F2X]ACB[S(L)T(C,C1,R)] XRFDXSXXXXX[XX]X[XXXX][X]XX
FAA TSO	C144
RTCA MOPS	DO-228

Iridium™ CI 490-1

Frequency Iridium 1616-1626.5 MHz
GPS 1575 ±10 MHz

Model	CI 490-1
RF Characteristics	
Frequency	
Iridium™	1616 to 1626.5 MHz
GPS	1575 ±10 MHz
Polarization	RHCP
Power Handling	60 Watts
Radiation Pattern	Hemispherical
Impedance	50 OHMS
Gain	≤ 3.0 dB @ zenith
Lightning Protection	DC grounded
Mechanical	
Weight	0.5 lbs.
Height	0.75" maximum
Finish	Gloss white enamel
Connector	TNC (female)
Environmental	
Temperature/Altitude	-55° C to +85° C @ 55,000'
Air Speed	600 Knots @ 55,000'
Federal Specifications	
RTCA Environmental	DO-160D
Environmental Category	[F2X]ACB[T(E,E1,R)] XRFDXSXXXX[XX]X[XXXX]XCX
FAA TSO	C144
RTCA MOPS	DO-228

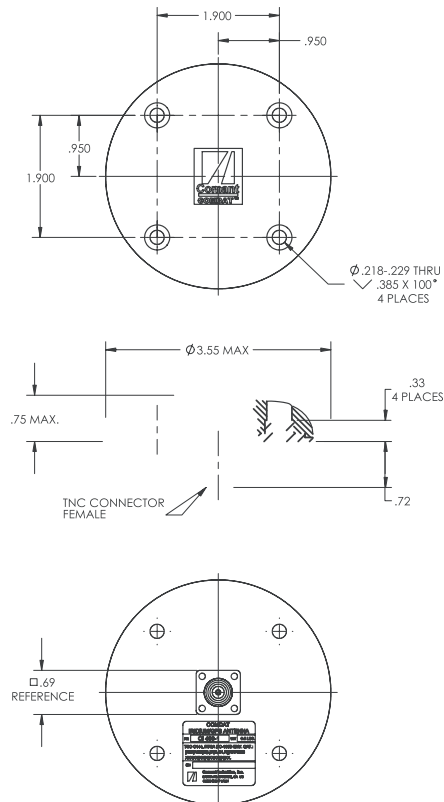


Dual-band passive antenna operates at Iridium™ frequencies, with continuous transmit and receive coverage from 1616 to 1626.5 MHz. Can also operate as a passive GPS antenna.

The ComDat™ CI 490-1 is a high performance communications antenna specifically designed for Iridium™ systems, and features our standard round-format footprint and mounting.

Through a constellation of 66 low-earth orbiting (LEO) satellites, Iridium™ delivers essential communications services to and from areas where terrestrial communications are not available.

P/N CI 490-1



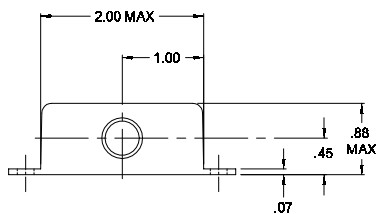
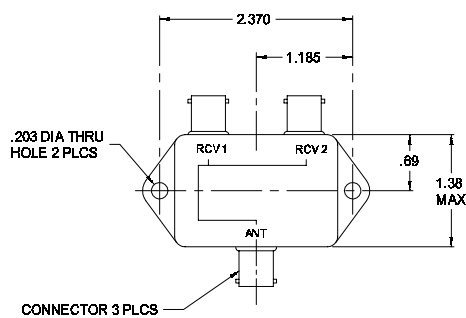
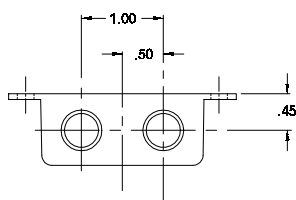
Coupler VOR

Frequency 108-118 MHz



Dual VOR coupler allows the simultaneous use of two VOR receivers from one VOR antenna. Compact design makes installation easy.

P/N CI 502



Model CI 502 Coupler VOR

Electrical	
Frequency	108 to 118 MHz
VSWR	1.5:1 @ maximum
Insertion Loss	0.5 dB maximum
Isolation	20 dB minimum
Duty Cycle	0.002
Impedance RF	50 OHMS
Mechanical	
Weight	0.20 lbs. maximum
Height	0.88" maximum
Material	Die cast aluminum
Finish	Aluminum
Connector	BNC
Environmental	
	Internal mount
Federal Specifications	
FAA TSO	C36c, C40c
Order Options	
Connector	
BNC	CI 502
TNC	CI 502-2

Coupler Glide Slope

Frequency 329-335 MHz

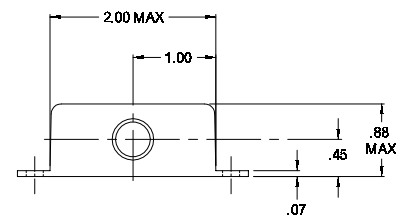
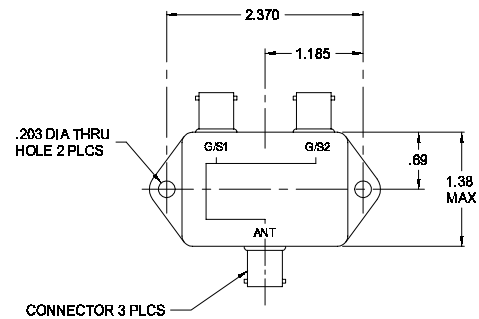
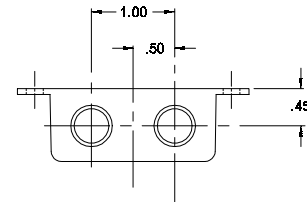
Model CI 503 Coupler Glide Slope
329 to 335 MHz

Electrical	
Frequency	329 to 335 MHz
VSWR	1.5:1 @ maximum
Insertion Loss	0.5 dB maximum
Isolation	20 dB minimum
Impedance RF	50 OHMS
Mechanical	
Weight	0.20 lbs. maximum
Height	0.88" maximum
Material	Die cast aluminum
Finish	Aluminum
Connector	BNC (female)
Environmental	
	Internal mount
Federal Specifications	
FAA TSO	C34c
Order Options	
Connector	
BNC	Standard



Dual glide slope coupler designed to allow the operation of two glide slope receivers from one glide slope antenna. Compact design makes installation easy.

P/N CI 503



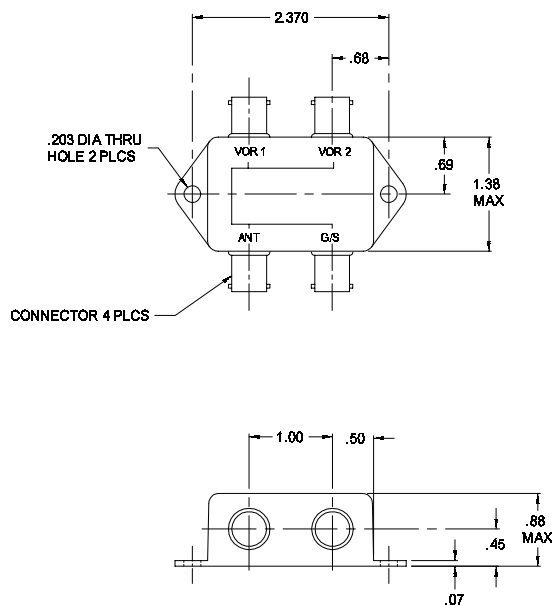
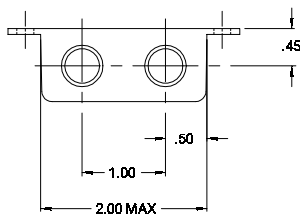
Diplexer Dual VOR Glide Slope

Frequency 108-118 MHz & 329-335 MHz



Dual VOR coupler/single glide slope diplexer allows the operation of two VOR receivers and one glide slope receiver from one VOR/glide slope antenna. Compact design makes installation easy. Also available with TNC connectors.

P/N CI 505



Model CI 505 Diplexer Dual VOR/Glide Slope

Electrical	
Frequency	108 to 118 & 329 to 335 MHz
VSWR	1.5:1 maximum
Insertion Loss	0.5 dB maximum
Isolation	20 dB minimum between any receiver port
Impedance RF	50 OHMS
Mechanical	
Weight	0.20 lbs. maximum
Height	0.88" maximum
Material	Die cast aluminum
Finish	Aluminum
Connector	BNC (female)
Environmental	
	Internal mount
Federal Specifications	
FAA TSO	C34c, C36c, C40a
Order Options	
Connector	
BNC	CI 505
TNC	CI 505-TNC

Diplexer VOR/Glide Slope

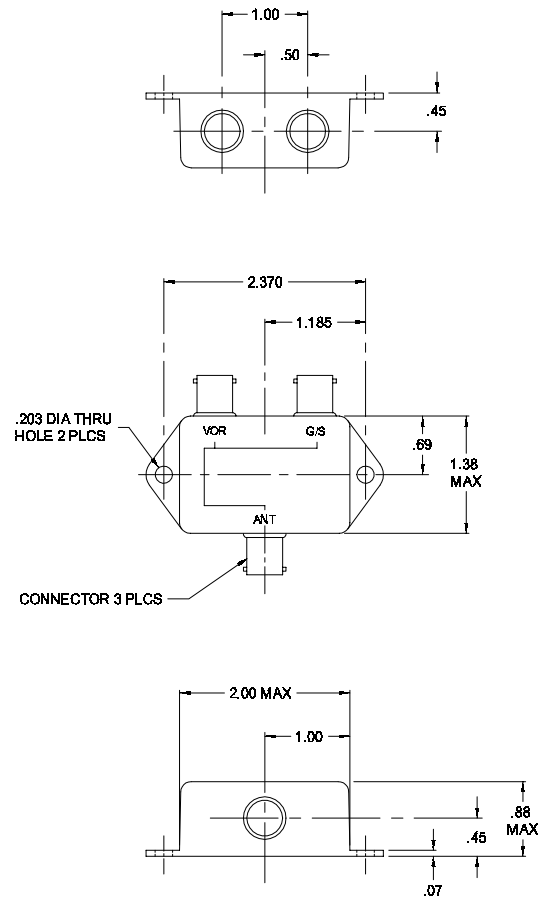
Frequency 108-118 MHz & 329-335 MHz

Model		CI 507 Diplexer VOR/ Glide Slope
Electrical		
Frequency	108 to 118 & 329 to 335 MHz	
VSWR	1.5:1 maximum	
Insertion Loss	0.5 dB maximum	
Isolation	20 dB minimum	
Impedance RF	50 OHMS	
Mechanical		
Weight	0.20 lbs. maximum	
Height	0.88" maximum	
Material	Die cast aluminum	
Finish	Aluminum	
Connector	BNC (female)	
Environmental		
	Internal mount	
Federal Specifications		
FAA TSO	C34c, C36c, C40a	
Order Options		
Connector		
BNC	Standard	



Single VOR/single glide slope diplexer allows the operation of one VOR and one glide slope receiver from one VOR/glide slope antenna. Compact design makes installation easy.

P/N CI 507



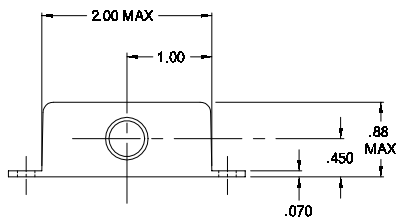
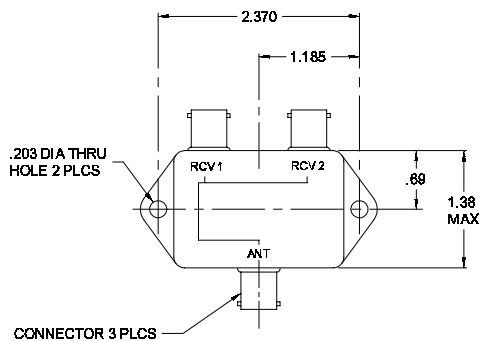
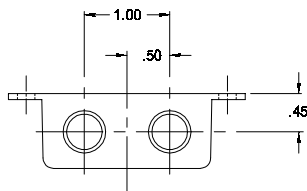
Coupler Marker Beacon

Frequency 75 MHz



Dual marker beacon coupler permits the use of two marker beacon receivers from one marker beacon antenna. Compact design makes installation easy.

P/N CI 509



Model CI 509 Coupler/Marker Beacon

Electrical	
Frequency	75 MHz
VSWR	1.5:1 maximum
Insertion Loss	0.5 dB maximum
Isolation	20 dB minimum
Impedance RF	50 OHMS
Mechanical	
Weight	0.20 lbs. maximum
Height	0.88" maximum
Material	Die cast aluminum
Finish	Aluminum
Connector	BNC (female)
Environmental	
	Internal mount
Federal Specifications	
FAA TSO	C35d
Order Options	
Connector	
BNC	Standard

Coupler VOR/ Three Way

Frequency 108-118 MHz

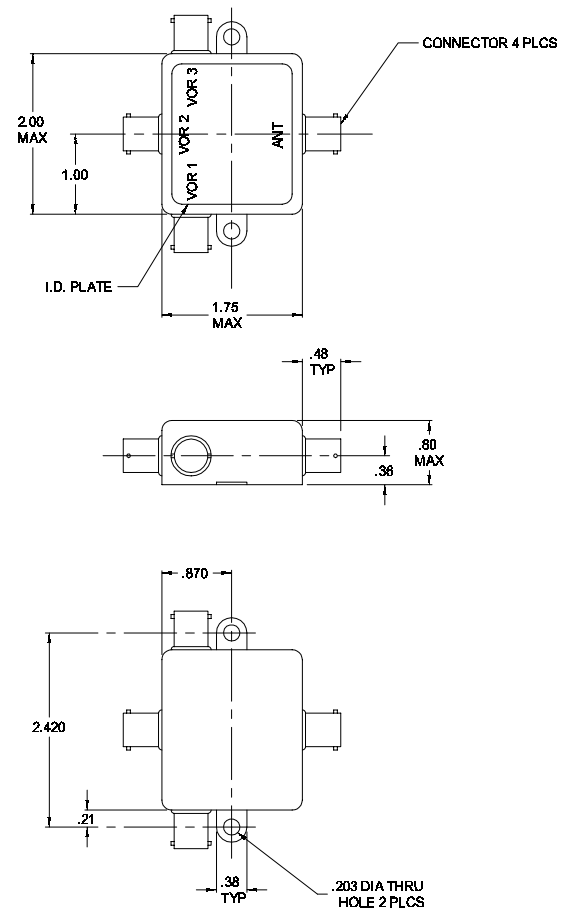
Model CI 1114 Coupler VOR/
Three Way

Electrical	
Frequency	108 to 118 MHz
VSWR	1.5:1 maximum
Insertion Loss	0.5 dB maximum
Isolation	20 dB minimum
Impedance RF	50 OHMS
Mechanical	
Weight	0.25 lbs. maximum
Height	0.80" maximum
Material	Aluminum
Finish	Aluminum
Connector	BNC (female)
Environmental	
	Internal mount
Federal Specifications	
FAA TSO	C36c, C40a
Order Options	
Connector	
BNC	Standard



Coupler provides for use of three VOR receivers from one VOR antenna. Coupler circuitry is housed in stamped enclosure to ensure high reliability.

P/N CI 1114



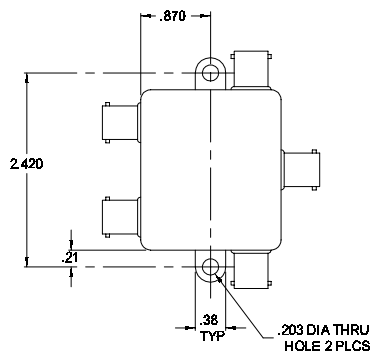
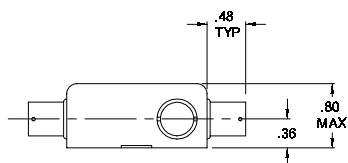
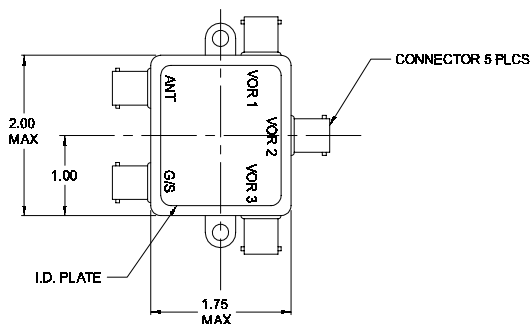
Diplexer VOR/GS/Three Way

Frequency 108-118 MHz & 329-335 MHz



Triple VOR coupler/single glide slope diplexer allows operation between three VOR receivers and one glide slope receiver from the same VOR/glide slope antenna.

P/N CI 1115



Model CI 1115 Diplexer VOR/GS/Three Way

Electrical	
Frequency	108 to 118 & 329 to 335 MHz
VSWR	1.5:1 maximum
Insertion Loss	0.5 dB maximum
Isolation	20 dB minimum
Impedance RF	50 OHMS
Mechanical	
Weight	0.25 lbs. maximum
Height	0.80" maximum
Material	Aluminum
Finish	Aluminum
Connector	BNC (female)
Environmental	
	Internal mount
Federal Specifications	
FAA TSO	C34c, C36c, C40a
Order Options	
Connector	
BNC	Standard

Diplexer Dual VOR/Dual GS

Frequency 108-118 MHz & 329-335 MHz

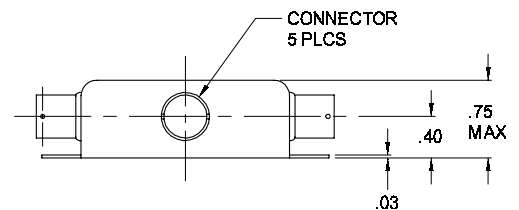
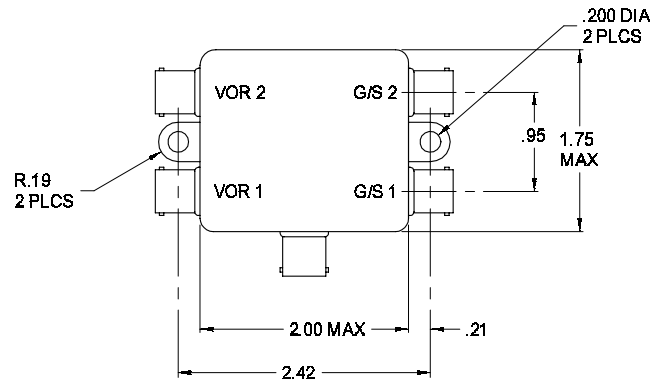
Model CI 1125 Diplexer Dual VOR/
Dual GS

Electrical	
Frequency	108 to 118 & 329 to 335 MHz
VSWR	1.5:1 maximum
Insertion Loss	0.6 dB maximum
Isolation	20 dB minimum between VOR & GS 18 dB minimum between VOR ports 18 dB minimum between GS ports
Impedance RF	50 OHMS
Mechanical	
Weight	0.25 lbs. maximum
Height	0.75" maximum
Material	Aluminum
Finish	Aluminum
Connector	BNC (female)
Environmental	
	Internal mount
Federal Specifications	
FAA TSO	C34c, C36c, C40a
Order Options	
Connector	
BNC	CI 1125
TNC	CI 1125-TNC



Dual VOR/dual glide slope diplexer features diplexer circuitry in a small die-stamped housing for high reliability. Provides operation between two VOR receivers and two glide slope receivers from the same VOR/glide slope antenna.

P/N CI 1125



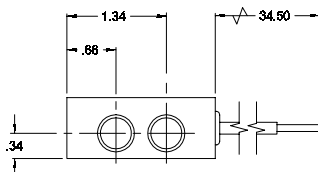
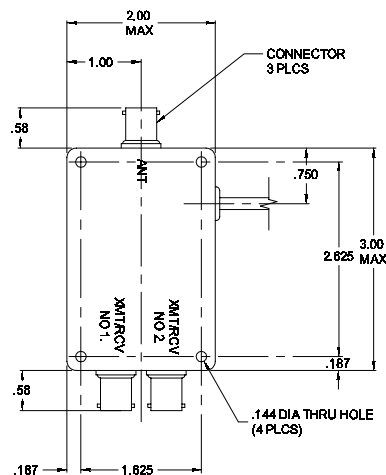
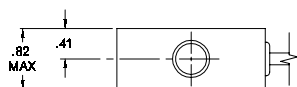
Duplexer Switching

Frequency 118-136 MHz



Dual communication/ single antenna duplexer designed to provide operation between two transceivers and one antenna. In the de-energized mode, the duplexer acts as a 3 dB coupler with the output ports isolated by 20 dB. Control voltage actuated by the microphone circuit switches the antenna to transmitter No. 1 or transmitter No. 2.

P/N CI 601



Model		CI 601 Duplexer/Switching
Electrical		
Frequency	118 to 136 MHz	
VSWR	1.5:1 maximum/ transmit & receive	
Insertion Loss	0.5 dB maximum	
Isolation	20 dB minimum to receive (between XMT/RCV No. 1 & No. 2) 30 dB minimum to transmit/receive	
Impedance RF	50 OHMS	
Mechanical		
Weight	0.40 lbs. maximum	
Height	0.82" maximum	
Material	Die cast aluminum	
Finish	Flat grey epoxy	
Connector	BNC (female)	
Environmental		
	Internal mount	
Federal Specifications		
FAA TSO	C37b, C38b	
Order Options		
Connector		
BNC	Standard	
Color		
Flat Grey	Standard	

Diplexer Single VOR/Single GS

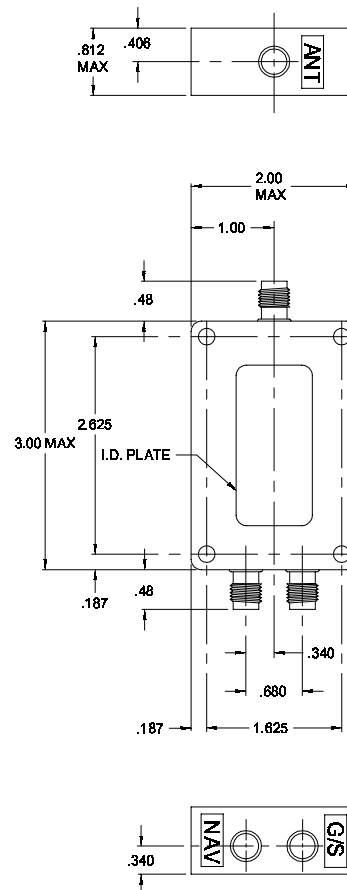
Frequency 108-120 MHz & 325-340 MHz

Model CI 1120 Diplexer/ Single VOR/Single GS

Electrical	
Frequency	108 to 120 & 325 to 340 MHz
VSWR	1.5:1 maximum
Insertion Loss	0.5 dB maximum
Isolation	40 dB minimum
Impedance RF	50 OHMS
Mechanical	
Weight	0.44 lbs. maximum
Height	0.812" maximum
Material	Die cast aluminum
Finish	Flat grey epoxy paint
Connector	TNC (female)
Environmental	
	Internal mount
Federal Specifications	
FAA TSO	MIL-E-5400 MIL-STD-810B (vibration) MIL-B-5087 MIL-C-39012 (connector)
Order Options	
Connector	
TNC	Standard
Color	
Flat Grey	Standard



Provides operation between a single VOR receiver and a single glide slope receiver from the same VOR/glide slope antenna. Offers polarized VOR and GS output connectors. For military applications.
P/N CI 1120



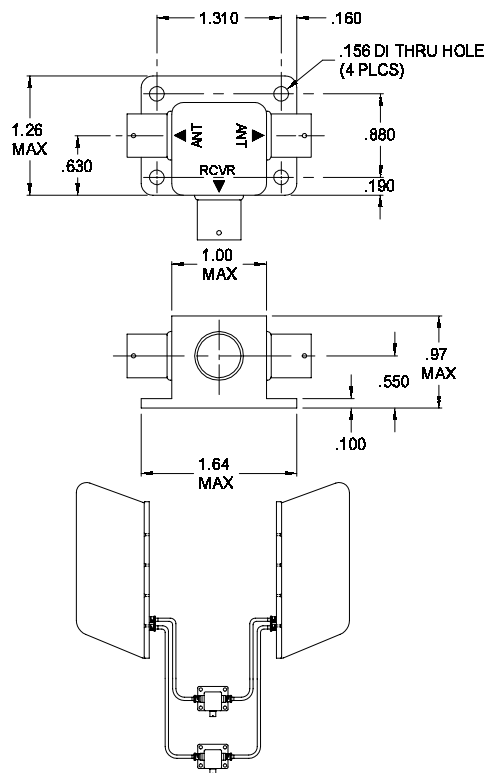
Power Combiner VOR/GS

Frequency 08-118 MHz & 329-335 MHz



Two input—one output Power Combiner is standard equipment with Comant's CI 120G/S and CI 135-300. As the CI 135-300 typical configuration requires two CI 120-3 Power Combiners, the CI 120G/S only requires one.

P/N CI 120-3



Model CI 120-3 Power Combiner VOR/GS

Electrical	
Frequency	108 to 118 & 329 to 335 MHz
Power Split	3 dB
VSWR	1.5:1 maximum
Insertion Loss	1.5 dB maximum
Isolation	20 dB minimum
Amplitude Balance	± 0.5 dB
Impedance RF	50 OHMS (nominal)
Phase	180° ± 5° between antenna ports
Mechanical	
Weight	0.1 lbs. maximum
Height	0.97" maximum
Material	Die cast aluminum
Finish	Aluminum
Connector	BNC (female)
Environmental	
	Internal mount
Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[A2F2]-AC[CLMY] XRXXXSXXXXXXXXC
FAA TSO	C34c, C36c, C40a
RTCA MOPS	DO-192, DO-195, DO-196
Order Options	
Connector	
BNC	Standard

Power Combiner VOR/GS

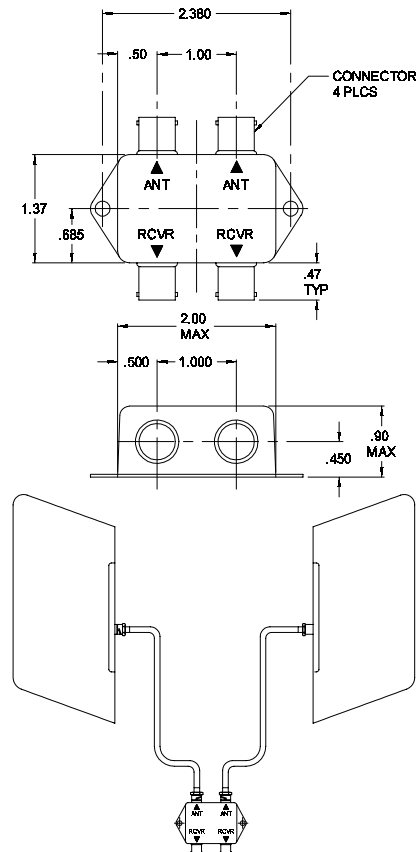
Frequency 108-118 MHz & 329-335 MHz

Model CI 120-4 Power Combiner VOR/GS

Electrical	
Frequency	108 to 118 & 329 to 335 MHz
Power Split	6 dB
VSWR	1.5:1 maximum
Insertion Loss	0.5 dB maximum
Isolation	20 dB minimum
Amplitude Balance	± 0.5 dB
Impedance RF	50 OHMS (nominal)
Phase	180° ± 1° between antenna ports 0° ± 5° between receiver ports
Mechanical	
Weight	0.1 lbs. maximum
Height	0.90" maximum
Material	Die cast aluminum
Finish	Aluminum
Connector	BNC (female)
Environmental	
	Internal mount
Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[A2F2]-AC[CLMY] XRXXSXXXXXXC
FAA TSO	C34c, C36c, C40a
Order Options	
Connector	
BNC	Standard



Two input—two output Power Combiner is standard for either antenna system. The CI 120-4 provides for two separate cable runs to the avionics installation for NAV 1 and NAV 2 receivers. **P/N CI 120-4**



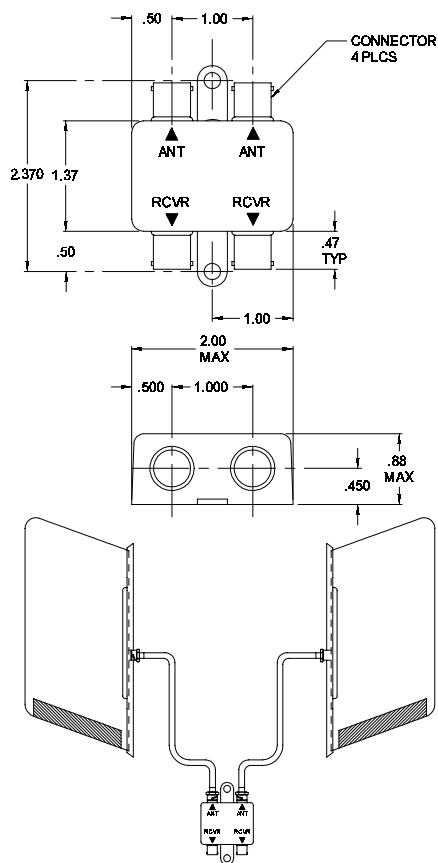
Power Combiner VOR/GS

Frequency 108-118 MHz & 329-335 MHz



Two input—two output Power Combiner is standard equipment with Comant's CI 120-200G/S-L as supplied to Cessna. The CI 120-5 provides for two separate cable runs to the avionics installation for NAV 1 and NAV 2 receivers.

P/N CI 120-5



Model CI 120-5 Power Combiner VOR/GS

Electrical	
Frequency	108 to 118 & 329 to 335 MHz
Power Split	6 dB
VSWR	1.5:1 maximum
Insertion Loss	1.5 dB maximum
Isolation	20 dB minimum
Amplitude Balance	± 0.5 dB
Impedance RF	50 OHMS (nominal)
Phase	180° ± 1° between antenna ports 0° ± 5° between receiver ports

Mechanical	
Weight	0.1 lbs. maximum
Height	0.88" maximum
Material	Die cast aluminum
Finish	Aluminum
Connector	BNC (female)

Environmental	
	Internal mount

Federal Specifications	
RTCA Environmental	DO-160C
Environmental Category	[A2F2]-AC[CLMY] XRXXXSXXXXXXC
FAA TSO	C34c, C36c, C40a
RTCA MOPS	DO-192, DO-195, DO-196

Order Options	
Connector	
BNC	Standard

Comant Antenna Cross Reference

WARNING: Because manufacturer's specifications may change, we cannot be responsible for errors or omissions that may be contained in this Cross-Reference. It is the buyers and/or installers responsibility to confirm the applicability of any model suggestion shown in this chart.

	ARTEX	BEECH	DAYTON GRANGER	DORNE & MARGOLIN	GARMIN	HONEYWELL	MOONEY	NORTHSTAR	PIPER	RA MILLER	SENSOR SYSTEMS	TRIVEC
VHF Communication												
CI 108				DM C60-1								
CI 109			DG VF10-210/16066	DM C70-1/A						AV-10		
CI 121			DG VF10-210/16055	DM C70-1/A					596-664	AV-10		12-50-01
CI 122				DM C70-4					683-725	AV-17		
CI 138				DM C70-6					552-539			
CI 139			VF10-224									
CI 196							310120					
CI 211		35-5039	DG VFS10-90-1									17-50-01
CI 223			DG VF10-221									
CI 238			DG VF10-10-1	DM C70-6								
CI 270			DG VF10-210	DM C70-1/A								
CI 291			16060	DM C63-1/A						AV-529		
CI 292-1				DM C63-1/A						AV-530		
CI 292-2				DM C63-2								
VHF Extended Frequency												
CI 108-1			DG VF10-222									
CI 211-1		72-384-100-003	DG VFS10-90-2									18-40-01
CI 211-1-L		72-384-110-003										
CI 211-16			DG VF10-185									
FM/2 Meter												
CI 177			16350									
CI 177-3												
FM Extended Frequency												
CI 177-1										AVB-529		
CI 292-3				DM C63-3/A								
CI 292-4				DM C63-4/A						AV-14		
AM/FM & FM Receive												
CI 222									683-719			
UHF/L Band Radiotelephone												
CI 106-5										AV-15		
CI 275-5				DM C57-1								
CI 310-25		1006965										
DME/Transponder												
CI 100-2												21-37-01
CI 100-3				DMNI 50-3								
CI 100-4				DMNI 50-4						AV-741		
CI 100-5			DG L10-16	DMNI 50-6								
CI 101										AV-22		
CI 105-6				DMNI 70-2								
CI 105-7				DMNI 70-1								
CI 105-16						KA 60						
CI 110-40-3				DMNI 70-1								
CI 110-41-3				DMNI 50-2							S65-5366-7L	
CI 110-41-5											S65-5366-11L	

Comant Antenna Cross Reference

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	ARTEX	BEECH	DAYTON GRANGER	DORNE & MARGOLIN	GARMIN	HONEYWELL	MOONEY	NORTHSTAR	PIPER	RA MILLER	SENSOR SYSTEMS	TRIVEC
DME/Transponder												
CI 110-61-3				DM C50-3							S65-5366-10LC	
CI 110-61-5				DMNI 50-6						AV-10	S65-5366-10L	
CI 305			DG 15980									
CI 305-3			DG 15982									
Marker Beacon												
CI 102							310071		597-893			
CI 118			DG EMB10-14									
CI 118-5		101-384179										
CI 118-9						KA 26						
Glide Slope												
CI 193			DG RGS10-48									
VOR/GS												
CI 120G/S			VT10-56-6/15960	DM N4-17					551-993			
CI 157P												
CI 158C-2		71-411-081-00										
CI 158C-3		71-411-082-00							598-539			
CI 159C												
VOR												
CI 135-100				DMN4-33								
CI 135-300				DMN4-15/DMN4-45								22-30-01
CI 205-1			16525	DMN48-1								
GPS												
CI 401-5-A						KA 91					S67-1575-21	
CI 401-21-A											S67-1575-16	
CI 401-32-A												
CI 405-7						KA 92		ANI20				
CI 405-26					GA 56						S67-1575-39	
CI 405-33												
ELT												
CI 318-1B	870-2025		DG ELT 10-214-2									
CI 317	870-0317											
CI 317-1	870-1317											
CI 319	870-1319											
CI 319-1	870-3137											
Couplers												
CI 502			DG 14830/DG DRC20-4	DM H21-1						AV-547		
CI 503			DGSC20-02/DG16009	DM H24-1								
CI 509			DG DMB20-20									
Diplexers												
CI 505			DG 14850	DM H23-1								
CI 505 TNC												
CI 507			DG GSNC20-05	DM H22-1			312602		556-795	AV 571		
CI 1125		4845-39086	DG 16010	DM H69-1					556-753	AV 570		