

CCV4PX310.11R



12-port sector antenna, 4x 790–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET with manual override. Bands cascaded SRET.

- Integrated Internal Remote Electrical Tilt (RET), with independent control of electrical tilt with manual override on all arrays
- All Internal RET actuators are connected in “Cascaded SRET” configuration

OBSOLETE

This product was discontinued on: **March 27, 2020**

Replaced By:

12P-4L8M-D6	12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET. Antenna rear wind loading 880N @ 150km/h
RRV4-65D-R6	12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET. Antenna rear wind loading 880N @ 150km/h

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

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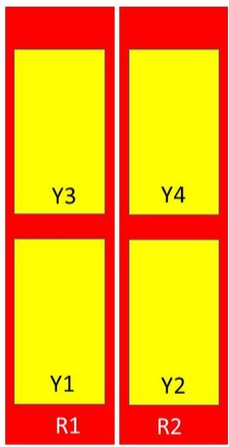
Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (4) Low band (2)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2720 mm 107.087 in
Net Weight, without mounting kit	54 kg 119.049 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	790-960	1-2	1	ARxxxxxxxxxxxxxxxxx1
R2	790-960	3-4	2	ARxxxxxxxxxxxxxxxxx2
Y1	1695-2690	5-6	3	ARxxxxxxxxxxxxxxxxx3
Y2	1695-2690	7-8	4	ARxxxxxxxxxxxxxxxxx4
Y3	1695-2690	9-10	5	ARxxxxxxxxxxxxxxxxx5
Y4	1695-2690	11-12	6	ARxxxxxxxxxxxxxxxxx6

Left Bottom Right

(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 790 – 960 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	790–862	880–960	1695–1880	1850–1990	1920–2180	2300–2500	2500–2690
Gain, dBi	15.8	16.4	16.7	16.8	17.4	18.1	18.1
Beamwidth, Horizontal, degrees	73	62	63	66.3	67	62	64.1
Beamwidth, Vertical, degrees	8.9	8.1	7.6	7	6.6	5.5	5.2
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10	0–10

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USLS (First Lobe), dB	18	18	18	18	18	18	18
Null Fill, dB	-22	-22	-22	-22	-22	-22	-22
Front-to-Back Ratio at 180°, dB	35	34	33	38	39	39	41
Isolation, Cross Polarization, dB	28	28	28	28	28	28	28
Isolation, Inter-band, dB	28	28	28	28	28	28	28
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	300	300	250	250	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	790–862	880–960	1695–1880	1850–1990	1920–2180	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	15.5	16.2	16.4	16.4	16.9	17.8	17.8
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.3	±0.4	±0.5	±0.8	±0.4	±0.4
Gain by Beam Tilt, average, dBi	0° 15.5 5° 15.5 10° 15.6	0° 16.2 5° 16.2 10° 16.1	0° 16.3 5° 16.4 10° 16.4	0° 16.4 5° 16.4 10° 16.4	0° 16.9 5° 16.9 10° 16.9	0° 17.9 5° 17.9 10° 17.6	0° 17.7 5° 17.8 10° 17.7
Beamwidth, Horizontal Tolerance, degrees	±5.7	±4.7	±3.4	±7.3	±4.6	±3.7	±3.7
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.5	±0.3	±0.5	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	18	18	17	18	18	18	18
Front-to-Back Total Power at 180° ± 30°, dB	23	24	26	30	30	32	32
CPR at Boresight, dB	19	18	20	20	19	17	18
CPR at Sector, dB	11	9	9	10	11	11	12

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,085.0 N @ 150 km/h (243.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	380.0 N @ 150 km/h (85.4 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,404.0 N @ 150 km/h (315.6 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	893.0 N @ 150 km/h (200.8 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h 124.274 mph

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Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	312 mm 12.283 in
Length, packed	2906 mm 114.41 in
Weight, gross	78.8 kg 173.724 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant/Exempted



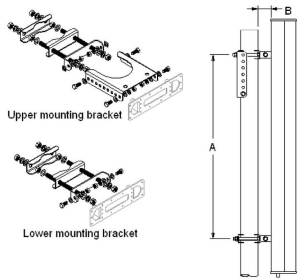
Included Products

- T-029-GL-E – Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

T-029-GL-E



Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

General Specifications

Application	Outdoor
Color	Silver

Dimensions

Compatible Length, maximum	2850 mm 112.205 in
Compatible Length, minimum	1500 mm 59.055 in
Compatible Diameter, maximum	115 mm 4.528 in
Compatible Diameter, minimum	60 mm 2.362 in
Antenna-to-Pipe Distance	85 mm 3.346 in
Bracket-to-Bracket Distance	1400 mm 55.118 in

Material Specifications

Material Type	Galvanized steel
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Mechanical Specifications

Mechanical Tilt	0°-8°
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Packaging and Weights

Included	Brackets Hardware
Packaging quantity	1
Weight, net	6 kg 13.228 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives

T-029-GL-E

CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant

