Invertec® V350-PRO

Designed Smart. Built Tough.

The Invertec V350-PRO is a versatile, multi-purpose, multi-process power source that's lightweight and portable. Available in construction, factory, advanced process and factory rack models, the V350-PRO is capable of doing virtually any job, whether in the shop or on the construction site. The V350-PRO is capable of stick, DC TIG, MIG, Pulsed MIG[1], flux-cored and arc gouging, making it the most versatile inverter power source in its class. And it's built tough to handle the rigors of harsh environments.

Processes

Stick   TIG   MIG   Pulsed[1]   Flux-Cored   Gouging

Advantage Lincoln

- Choose the Construction Model for economy and lightweight portability, the Factory Model for full remote capabilities, and the Advanced Process Model for pulsed MIG applications.
- All input voltages and frequencies are both single and three phase rated—no phase derating necessary on single phase.
- 5-425 amp output range for all recommended processes from TIG to arc gouging.
- Input voltage from 208-575—this one machine is capable of running on virtually any input power supply.
- 50 and 60 Hz operation—can be connected anywhere in the world.
- Touch-Start™ TIG for contamination-free starts.
- 87% efficiency—low power consumption for energy savings.
- Advanced Process model includes Pulsed MIG, Pulse-On-Pulse™ and Power Mode™ for best-in-class welding performance.
- Three-year warranty on parts and labor.
- Manufactured under a quality system certified to ISO 9001 requirements.

[1] Advanced Process Panel only.

Description

Output   CC CV   DC   **Input**   1/3 PHASE   50/60 Hz

Recommended General Options

Advanced Process Panel (for Factory Model only), Deluxe Adjustable Gas Regulator & Hose Kit, Work & Wire Feeder 2/0 Power Cable Package, Twist-Mate Cable Plug, Twist-Mate Cable Receptacle, Twist-Mate to Lug Adapter, Inverter and Wire Feeder Cart, Dual Cylinder Kit, Valet Style Undercarriage

Recommended Stick Options

Accessory Kit, Remote Output Control

Recommended TIG Options

Pro-Torch™ TIG Torches, TIG Module, TIG Module Control Cable, Hand Amptrol™, Foot Amptrol™, Arc Start Switch, Invertec TIG Solenoid Kit, Twist-Mate Torch Adapter, TIG-Mate™ 17V Air-Cooled TIG Torch Starter Pack, TIG-Mate™ 17 Air-Cooled TIG Torch Starter Pack, TIG-Mate™ 20 Water-Cooled TIG Torch Starter Pack

Recommended Wire Feeders

LN-7, LN-7 GMA, LN-742, LN-10, DH-10, LN-15, LN-25, Cobramatic® Wire Feeders

Order

K1728-5	Invertec® V350-PRO (Construction Model)
K1728-6	Invertec® V350-PRO (Factory Model)
K1728-7	Invertec® V350-PRO (Advanced Process Model)
K1728-11	Invertec® V350-PRO (Factory Rack Model)
K2198-1	4-Pack Inverter Rack with 4 Invertec® V350-PRO Factory Rack Power Sources
K2198-2	6-Pack Inverter Rack with 6 Invertec® V350-PRO Factory Rack Power Sources

TECHNICAL SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/ Voltage/Duty Cycle	Input Current @ Rated Output	Output Range	Dimensions H x W x D inches (mm)	Net Weight lbs.(kg)
Invertec V350 PRO	K1728-5 K1728-6 K1728-7 K1728-11	200-208/230/380-415/ 460/575/3/50/60 208/230/415/460/575/1/50/60	350A/34V/60%	3ph: 50/42/28-26/23/18 1ph: 94/85/54/42/37	5-425A Max OCV: 80V DC	14.8 x 13.3 x 27.8 (376 x 338 x 709)	81 (36.7)
			300A/32V/100%	3ph: 41-39/36/23-22/19/16 1ph: 76/69/41/36/31			

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PERFORMANCE

Stick
- Selectable Hot Start – Turn it off for thin material or turn it on for thick, rusty or dirty material.

- Variable Arc Force – Dial in the "soft" or "crisp" arc characteristics you want for each application.

DC TIG
- Touch-Start TIG™ design permits the DC TIG welding arc to be established without high frequency starting.

MIG
Advanced process panel features:
- Power Mode maintains a stable, smooth CV arc for short arc welding on thin steel and aluminum, and resists burnthrough.

- Pulsed MIG process is ideal for low heat input, high travel speeds and low spatter.

- Pulse-On-Pulse process minimizes distortion, controls the arc characteristics and delivers a TIG-like bead appearance.

FEATURES

- Compact, lightweight and tough enough for portable welding applications.

- Twist-Mate™ output connectors for easy tool-less hook-up with welding cables.

- Bright, large digital amp and volt meters are easy to monitor – even in sunlight - and presettable for precise procedure control.

- Automatically recognizes wire feeders or remote controls that regulate output.*

- Remote welding output connector for Stick, TIG or MIG.*

- Auxiliary 42 VAC and 115 VAC power for wire feeders.*

- Select stick, DC TIG or MIG processes with the touch of a button.

- Auto Sense Remote Control Connection. Automatically recognizes when a remote device is connected to the machine.

- Skid and Tube handles for convenience and added protection.

Factory model

Key Controls

1) Large, bright, easy to read meters
2) Local/remote output control*
3) Mode selection switch
4) Remote output control receptacles – 6 & 14 pin*
5) Preset output amps and voltage control
6) Weld terminals on or remotely controlled
7) Arc control knob for MIG and flux-cored welding
8) Hot start control for stick and TIG welding
9) On/off switch
10) Weld Mode selection knob
11) Memory save/recall button
12) Arc Control & Hot Start selection
13) Arc Control/hot start adjustment knob
14) Computer Interface

Factory, Advanced Process and Rack Models only.

Advanced Process Panel

QUALITY AND RELIABILITY

- Fully encapsulated potted and trayed PC boards protect internal systems from heat and humidity.

- Electronic and thermostatic protection from over-current and over-temperature with thermal indicator light.

- F.A.N. (Fan as Needed) cooling for less energy use and less dust drawn into the machine.

- Recessed front panel protects operating controls.

- Three-year warranty on parts and labor.

- Manufactured under a quality system certified to ISO 9001 requirements.

- Line voltage compensation ensures weld consistency, even with input voltage changes of ±10%.

INVERTEC V350-PRO MODELS

Construction Model
• Our lightest, most portable model at a value price for MIG, flux-cored, stick, arc gouging and non-remote TIG applications.

• Ideal for construction, maintenance or shop welding.

• 6 and 14-pin MS connector not included.

• Compatible with LN-25 or LN-15 Across-The-Arc model wire feeders.

Factory Model
• Add an optional Advanced Process Panel for pulsed MIG capabilities, including Lincoln's Power Mode™ and Pulse-On-Pulse™ process for welding on thin sheetmetal, steel, stainless steel and aluminum.

• Versatile multi-process machine for MIG, flux-cored, stick, TIG and arc gouging applications.

• Designed for construction or high production factory applications.

• Full remote capabilities.

• Auto-detect local/remote override control.

• 6 and 14-pin MS–type connectors.

• Compatible with LN-7, LN-7 GMA, LN-742, LN-10, DH-10, LN-15, LN-25 and Cobramatic® wire feeders.

Advanced Process Model
• All the benefits of the Factory model, plus advanced pulsed MIG capability and Lincoln's proprietary Power Mode and Pulse-On-Pulse process for welding on thin sheetmetal, steel, stainless steel and aluminum.

• Specifically for high-end pulse MIG applications.

• 6 and 14-pin MS-type connectors with full remote capabilities.

• Compatible with LN-7, LN-7 GMA, LN-742, LN-10, DH-10, LN-15, LN-25 and Cobramatic wire feeders.

• Displays gas, mode and wire size for easy setting and monitoring.

• Eight memories to quickly switch between weld modes.

Construction Model (K1728-5)

Factory Model (K1728-6)

Advanced Process Model (K1728-7)

WHAT'S INCLUDED

K1728-5, -6, -7, -11 V350-PRO Includes:
• V350-PRO
• Twist-Mate Cable Plugs (K852-70, quantity 2)

V350-PRO INVERTER RACKS:

• An ideal system to group several inverter power sources in an industrial portable package. Entire system meets National Electric Code (NEC) Standards.

• Includes Invertec® V350-PRO Factory Rack Model (K1728-11). This special rack version has all the same features as the factory model with added IP23S rating for outdoor use.

Order:
K2198-1   4-Pack Inverter Rack with 4 Invertec® V350-PRO Factory Rack Power Sources

K2198-2   6-Pack Inverter Rack with 6 Invertec® V350-PRO Factory Rack Power Sources

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SYSTEM SELECTION

Ready-Pak™ Packages
Fully assembled and ready to weld – just add wire and gas. Select a Ready-Pak and use one order number on your order form.

V350-PRO Advanced Process Model / LN-7 GMA Ready-Pak™ Package (for MIG and Pulsed MIG Welding)
Order K2146-1
• V350-PRO, Advanced Process Model
• LN-7 GMA-2 Roll Wire Feeder with Wire Reel
  Stand, Control Cable, and .035-.052 Drive Rolls
• Magnum™ 300 Welding Gun, 15 ft., .035-.045 wire
• Work and Wire Feeder 2/0 Welding Cable Package
• Twist-Mate™ Connectors and Work Clamp
• Harris Flowmeter Regulator and Hose
• Inverter and Wire Feeder Cart

V350-PRO Advanced Process Model / Cobramatic Ready-Pak™ Package (for MIG, Pulse MIG and Pulse-On-Pulse Aluminum Welding)
Order K2145-2
• V350-PRO, Advanced Process Model
• Cobramatic® Cabinet
• Python Gun, 25 ft., Air Cooled Gun w/contact tips
• Work and Wire Feeder 2/0 Welding Cable Package
• Harris Flowmeter Regulator and Hose
• 3/64" SuperGlaze™ 5356, 16 lb. spool
• Inverter and Wire Feeder Cart

V350-PRO Factory Model / LN-7 GMA Ready-Pak™ Package (for non-pulsed MIG Welding)
Order K1843-2
• V350-PRO Power Source
• LN-7 GMA-2 Roll Wire Feeder with Wire Reel
  Stand, Control Cable, and .035"-.052" Drive Rolls
• Magnum 300 Welding Gun, 15 ft., .035"-.045" wire
• Work and Wire Feeder 2/0 Welding Cable Package
• Harris Flowmeter Regulator and Hose
• Inverter and Wire Feeder Cart

Typical Factory Model Systems

V350-PRO Factory Model / LN-15 Wire Feeder (for MIG Welding)
• V350-PRO Factory Model	K1728-6
(or Advanced Process Model)	(or -7)
• Magnum 400 Welding Gun, 15 ft., .035"-.045" wire	K470-2
• LN-15 Control Cable Wire Feeder	K1871-1
• 10 ft Control Cable	K1819-10
• .035" (0.9mm) Drive Roll Kit	KP1696-035S
• Adjustable Gas Regulator	K586-1

V350-PRO Factory Model / LN-10 Wire Feeder (for MIG Welding)
• V350-PRO Factory Model	K1728-6
(or Advanced Process Model)	(or -7)
• LN-10 Wire Feeder	K1559-3
• .035" (0.9mm) Drive Roll Kit	KP1505-035S
• Work and Wire Feeder 2/0 Welding Cable Package	K1803-1
• Magnum 300 Welding Gun, 15 ft., .035"-.045" wire	K470-2
• Gun Connector Kit	K466-2
• Adjustable Gas Regulator	K586-1

SYSTEM SELECTION, CON'T.

Typical Construction Model Systems

**V350-PRO Construction Model / LN-15 Wire Feeder
(for Outershield® Welding)**
- V350-PRO Construction Model   K1728-5
- LN-15 Across-The-Arc Wire Feeder   K1870-1
- .040"-.045" (1.0-1.2mm) Drive Roll   K1697-045C
- Work and Wire Feeder 2/0 Welding Cable Package   K1803-1
- Magnum 400 Welding Gun, 15 ft., .035"-.045" wire   K471-21
- Adjustable Gas Regulator   K586-1

**V350-PRO Construction Model / LN-25 Wire Feeder
(for Innershield® Welding)**
- V350-PRO Construction Model   K1728-5
- LN-25 with Contactor and Gas Solenoid   K449
- .068"-3/32" (1.8-2.4mm) Drive Roll   KP653-3/32
- Work and Wire Feeder 2/0 Welding Cable Package   K1803-1
- Magnum Flux-Cored Gun, 15 ft., 350 A   K126-2

PROCESS CAPABILITIES

INVERTEC® V350-PRO	
Process	**Electrode**
Mild Steel MIG CV and Pulse*	.025" – .052" SuperArc™ L-50 and L-56 .035" – .052" SuperGlide S-3 and S-6
Stainless MIG CV and Pulse*	.030" – .045" Blue Max® Wire
Aluminum MIG CV and Pulse*	.035" – 1/16" SuperGlaze™ 4043 and 5356 with Cobramatic wire feeder
Mild Steel - Flux-Cored Gas-Shielded Wire	.035" – 5/64" Outershield®, Metalshield™ and Blue Max cored wires
Mild Steel - Flux-Cored Self-Shielded Wire	.035" – 3/32" Innershield® Wire
Mild Steel Stick	3/32" – 1/4", E6010 - E7018 Fleetweld®, Jetweld® and Excalibur™ Electrodes
Stainless Steel Stick	3/32" – 3/16" Blue Max®, Red Baron™ and Stainweld Electrodes
Touch-Start TIG™	All sizes and types of steel and stainless
Arc Gouging, CC or CV	5/32" – 5/16" Carbon Electrode (V350s can be easily paralleled for up to 700 Amps for gouging!)

* Pulse with Advanced Process mode only.

GENERAL OPTIONS

Advanced Process Panel
Includes Pulsed MIG, Pulse-On-Pulse™ and Power Mode™ capabilities. Alpha-numeric display for accurate setting. For V350-PRO Factory Model only.
Order K1763-1

Deluxe Adjustable Gas Regulator & Hose Kit
Accommodates CO_2, Argon, or Argon-blend gas cylinders. Includes a cylinder pressure gauge, dual scale flow gauge and 4.3 ft. (1.3m) gas hose.
Order K586-1

Work and Wire Feeder 2/0 Weld Cable Package
Includes Twist-Mate connectors, work clamps, 15 ft. (4.5m) work cable and 10 ft. (3.0m) electrode cable. Rated 350 amps, 60% duty cycle.
Order K1803-1

Twist-Mate Cable Plug
For connecting welding cable to output terminal receptacles. For 1/0 – 2/0 (50 – 70 mm^2) cable.
Order K852-70

Twist-Mate Cable Plug
For connecting welding cable to output terminal receptacles. For 2/0 – 3/0 (70 – 95 mm^2) cable.
Order K852-95

Twist-Mate Cable Receptacle
For connecting welding cable to Twist-Mate Cable Plug.
Order K1759-70 for 1/0 – 2/0 (50-70 mm^2) cable
Order K1759-95 for 2/0-3/0 (70-95mm^2) cable

Twist-Mate to Lug Adapter
For connection of lugged cable to Twist-Mate connectors. 18" (457mm) long.
Order K2176-1

Inverter and Wire Feeder Cart
Rear-wheeled cart includes front casters and no-lift gas bottle platform. Convenient handles allow for easy cable storage while full length side trays store parts and tools. Shipped fully assembled. Small footprint fits through 30" (762mm) door.
Order K1764-1

Dual Cylinder Kit
Permits side-by-side mounting of two full size gas cylinders, with easy loading. For use with K1764-1 cart.
Order K1702-1

Valet Style Undercarriage
Offers a unique pull-out handle. It provides cable storage and the ultimate in portability.
Order K1838-1

STICK OPTIONS

Accessory Kit
For stick welding. Includes 35 ft. (10.7m) 2/0 electrode cable with lug, 30 ft. (9.1m) 2/0 work cable with lugs, headshield, filter plate, cover plate, work clamp and electrode holder. 400 amp capacity.
Order K704

Accessory Kit
For stick welding. Includes 20 ft. (6.1m) #6 electrode cable with lug, 15 ft. (4.6m) #6 work cable with lugs, headshield, work clamp, electrode holder and sample pack of mild steel electrode. 200 amp capacity.
Order K875

Remote Output Control
For remote adjustment of welding output voltage. Consists of control box with 25 or 100 ft. (7.6 or 30m) of four conductor cable and 6 pin MS-type connector.
Order K857 for 25 ft. (7.6m)
Order K857-1 for 100 ft. (30m)

TIG OPTIONS

Pro-Torch™ TIG Torches
A full line of air-cooled and water-cooled torches available.
Request Lincoln publication E12.150

TIG Module
Portable, high frequency unit with gas valve for TIG welding. Rated at 300 amps/60% duty cycle. Requires TIG Module Control Cable.
Order K930-2

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TIG Module Control Cable
(For Factory and Advanced Process Models only)
9-pin connector at the TIG Module to 14-pin MS type connector at the power source. (Contains input power, remote control, contactor control, and ground circuits). For machines having a 14-pin remote control and power receptacle.
Order K936-1

TIG Module Control Cable
(For Construction Model only)
9-pin connector at the TIG Module to a grounded 115V plug. (Contains input power, and ground circuits). For machines having no remote control capability.
Order K936-4

Hand Amptrol™
Provides 25 ft. (7.6m) of remote current control for TIG welding. (6 pin plug connection)
Order K963-1 for PTA-9, PTA-17, PTW-20 TIG Torches.
Order K963-2 for PTA-26, PTW-18 TIG Torches.

Foot Amptrol™
Provides 25 ft. (7.6m) of remote current control for TIG welding. (6 pin plug connection).
Order K870

Arc Start Switch
May be used in place of the Foot or Hand Amptrol. Comes with a 25 ft. (7.6m) cable. Attaches to the TIG torch for convenient finger control to start and stop the weld cycle at the current set on the machine.
Order K814

Invertec TIG Solenoid Kit
Mounts inside the back of the V350-PRO. Switches gas flow in the V350-PRO through the Twist-Mate connector. Includes gas hose and solenoid. (Not compatible with construction model).
Order K1762-2

Twist-Mate Torch Adapter
For connection of Pro-Torch™ TIG torches (1 piece cable) to power sources with gas passing through the Twist-Mate connection. For use with K1762-2.

Order K1622-1 For air-cooled PTA-9 or 17 torches.

Order K1622-3 For air-cooled PTA-26 torches.

Order K1622-2 For water-cooled torches.

Twist-Mate Torch Adapter
For connection of PTA-9 or PTA-17V torches (1 piece cable) to power sources without gas passing through the Twist-Mate connection.
Order K960-1

TIG-Mate™ 17V Air-Cooled TIG Torch Starter Pack
Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTA-17V torch, parts kit, Harris flowmeter/regulator, 10 ft. (3.0m) gas hose, and work clamp and cable. **Order K2265-1**

TIG-Mate™ 17 Air-Cooled TIG Torch Starter Pack
Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTA-17 torch, parts kit, Harris flowmeter/regulator, 10 ft. (3.0m) gas hose, Twist-mate™ adapter, and work clamp and cable.
Order K2266-1

TIG-Mate™ 20 Water-Cooled TIG Torch Starter Pack
Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTW-20 torch, parts kit, Harris flowmeter/regulator, 10 ft. (3.0m) gas hose, Twist-Mate™ adapter, work clamp and cable and 10 ft. (3.0m) water hose.
Order K2267-1

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
V350-PRO – Construction Model	**K1728-5**		
V350 PRO – Factory Model	**K1728-6**		
V350-PRO – Advanced Process Model	**K1728-7**		
V350-PRO – Factory Rack Model	**K1728-11**		
Ready-Pak Packages			
V350-PRO Advanced Process Model / LN-7 GMA wire feeder	K2146-1		
V350-PRO Advanced Process Model / Cobramatic wire feeder	K2145-2		
V350-PRO Factory Model / LN-7 GMA wire feeder	K1843-2		
V350-PRO Inverter Racks			
4-Pack Inverter Rack with 4 Invertec V350-PRO Factory Power Sources	K2198-1		
6-Pack Inverter Rack with 6 Invertec V350-PRO Factory Power Sources	K2198-2		
Recommended General Options			
Advanced Process Panel (Factory Model only)	K1763-1		
Deluxe Adjustable Gas Regulator & Hose Kit	K586-1		
Work and Wire Feeder 2/0 Welding Cable Package	K1803-1		
Twist-Mate Cable Plug, 1/0 - 2/0 (50-70mm^2)	K852-70		
Twist-Mate Cable Plug, 2/0 - 3/0 (70-95mm^2)	K852-95		
Twist-Mate Cable Receptacle, 1/0 - 2/0 (50-70mm^2)	K1759-70		
Twist-Mate Cable Receptacle, 2/0 - 3/0 (70-95mm^2)	K1759-95		
Twist-Mate to Lug Adapter	K2176-1		
Inverter and Wire Feeder Cart	K1764-1		
Dual Cylinder Kit	K1702-1		
Valet Style Undercarriage	K1838-1		
Recommended Stick Options			
Accessory Kit: (400 Amps)	K704		
(200 Amps)	K875		
Remote Output Control: for 25 ft. (7.6m)	K857		
for 100 ft. (30m)	K857-1		
Recommended TIG Options			
Pro-Torch™ TIG Torches	See Publication E12.150		
TIG Module	K930-2		
TIG Module Control Cable (Factory/Advanced Process Models)	K936-1		
TIG Module Control Cable (Construction Model)	K936-4		
Hand Amptrol™:			
for PTA-9, PTA-17, PTW-20, TIG Torches	K963-1		
for PTA-26, PTW-18, TIG Torches	K963-2		
Foot Amptrol™	K870		
Arc Start Switch	K814		
Invertec TIG Solenoid Kit	K1762-2		
Twist-Mate Torch Adapter:			
for air-cooled PTA-9 or -17 Torches	K1622-1		
for air-cooled PTA-26 Torches	K1622-3		
for water-cooled Torches	K1622-2		
Twist-Mate Torch Adapter (without gas pass through)	K960-1		
TIG-Mate 17V Air-Cooled TIG Torch Starter Pack	K2265-1		
TIG-Mate 17 Air-Cooled TIG Torch Starter Pack	K2266-1		
TIG-Mate 20 Water-Cooled TIG Torch Starter Pack	K2267-1		
	TOTAL:		

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