

MODEL 501

HOT WIRE WELDING POWER SUPPLY



The widest range of orbital welding equipment in the world

The Model 501 Hot Wire Power Supply is designed to increase the deposition rate of the filler wire in the weld joint by resistively preheating it.

The increased deposition rate is achieved by preheating the wire close to its melting point before its introduction into the weld puddle. The higher deposition rate leads to increased productivity in welding and cladding operations. Moreover, by preheating the wire before introducing it in the puddle, all moisture from the wire surface is removed, which leads to an improved weld quality.

The Hot Wire TIG welding process can provide deposition rates that are competitive with the MIG process, and produce superior quality weldments.



FEATURES

- Constant Voltage (CV) True RMS mode-of-operation
- Calibrated Precision Closed-Loop Servo Output Control
- Voltage Feedback Sensing at the wire feed tip or internal to the Power Supply
- True RMS instrumentation Outputs (Amps and Volts)
- Optional Remote Programming Pendant
- Control input for connection to an external controller

► The Model 501 is a high-precision power supply using advanced technology to increase welding productivity. To minimize magnetic interference, the Model 501 uses AC current to preheat the wire. This current is far more precise than competitive machines, being very close to a true sine wave. As an option the Model 501 can be ordered with a DC current output module.

QUICK SPECS

Input Power

200 - 240 VAC
25 A, 1Ø

Output Current

250 A AC @ 100% Duty Cycle
(DC Output Module optional)

Open Circuit Voltage

16 V

Output Voltage

0 - 10 V

Loop Response

1.2 sec

Weight

135 lbs. (61,5 kg)

Dimensions

23" x 19" x 9.5"
(585 mm x 485 mm x 240 mm)



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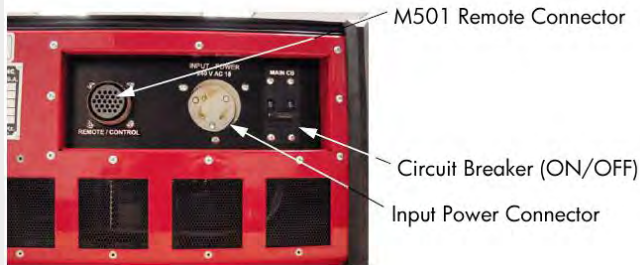
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MODES OF OPERATION

The Model 501 Hot Wire Power Supply can be used:

- as a stand-alone unit with its own Operator Pendant
- with the AMI Model 415 Power Supply/Controller
- by an external weld process controller

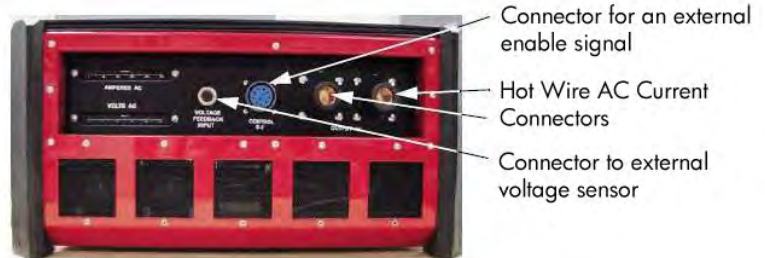
The AMI Model 415, 400 A DC Power Supply/Controller ▶



M501 Remote Connector

Circuit Breaker (ON/OFF)

Input Power Connector



Connector for an external enable signal

Hot Wire AC Current Connectors

Connector to external voltage sensor

A versatile hot wire welding automation system may be created by equipping an AMI Model 2 weld head with a hot wire torch, AVC, Oscillator, optional Active-Filter Vision System, and the AMI Model 415 Power Supply. This combination can be used for high-quality, high-productivity applications, such as narrow groove welding and cladding.

Model 2 weld head with hot wire torch and wire feeder ▶



ACCESSORIES

1. Remote Operator's Pendant
2. Wire feeder
3. Vision system
4. DC output module (optional, not shown)
5. Current monitoring (not shown)



1.



2.



3.

*Leaders & Innovators in
Automated Orbital Welding*

*For further information please visit our website
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