

Compact 10/20/30 kW RF Power Supplies

Model 10HM150 Model 20HM150 Model 30HM100

- Wide Frequency Range
- Tune Function
- External Heating Station
- Local and Remote Operation
- Up to 16 Heating Programs



Our new HM Series RF power supplies present an exciting new alternative for precision industrial heating applications.

With 10 or 20 kW of output power over a wide 50 to 150 kHz operating frequency range, and 30 kW from 50 to 100 kHz, these models are ideal for applications such as brazing, shrink fitting, annealing, curing and tempering.

With a fully digital, compact design, these new power supplies deliver maximum reliability and repeatability in a small, 17"W (432 mm) x 26.2"D (665 mm) footprint. Each unit weighs approximately 94.8 lbs. (43.7 kg).

For process control, these models offer a choice of local or remote control operation. The large front panel MPC-I liquid crystal display offers up to 16 different heating programs for local operation and 4 in remote control mode.

Remote operations are handled through external signals. The tune function enables an automatic search for the resonant frequency.

The heat station is externally located. NPT connections for water cooling are conveniently located on the rear panel. The output circuit is based on a parallel tank with an impedance matching system.

Parameter controls include power and voltage regulation; the LCD also provides alarms and threshold visualization. The MPC-I can be programmed for English, Spanish, French, German, Italian, and Portuguese. The output circuit is based on parallel tank with an internal load matching system.

The main benefits of these new power supplies include increased productivity and parts quality; energy savings and reduced production costs; ease of operation; full process control; environmentally-friendly process with low noise level and no toxic gases.

10/150, 20/150 and 30/100 RF Power Supplies

Specifications

Output Power	10 kW, 20 kW or 30 kW
Output Frequency	50-150 kHz at 10 or 20 kW; 50-100 kHz at 30 kW
Coil Voltage	300-700 V at 10 kW
AC Line Power	13 kVA at 10 kW; 26 kVA at 20 kW; 38 kVA at 30 kW
AC Line Interruption	Circuit Breaker
Voltage Supply	3-phase 380-480 VAC, 50/60 Hz
Ingress Protection	IP54
Dimensions (W x D x H)	17 x 26.2 x 18 in. (432 x 665 x 458 mm.)
Weight	94.8 lbs (43.7 kg.)
Max Ambient Temperature	113° F (45° C)
Power Converter Cooling	Water
Min/Max Inlet Water Temp.	68°/95° F (20°/35° C)
Min. Pressure	45 PSI (3 BAR)
Min. Water Flow @50 PSI	10-20 kW: 2.6 GPM (10 liters/min) 30 kW: 3.7 GPM (14 liters/min)
Cooling Protection	Internal flow switch, thermal switch
Digital Outputs	Ready/Fault, Heating, Energy Error, Limit



20 kW rear panel layout - 1/2" NPT water connectors; bushing type for main input and HF output

Analog Inputs (0-10 VDC)

- Power Control Nominal Value
- Temperature Sensor

Digital Inputs (+24V Optocoupled)

- Start/Stop
- Flow Switches
- Heat Program Selection
- Reset
- Emergency Stop

Options & Accessories

- Compact water cooling system or chiller
- Pyrometer or thermocouple (closed-loop T^a control)
- Footswitch

Basic Configuration

- Fully Digital Power Converter Controller
- Local operations through display MPC-1: monochrome LCD, alphanumeric, 12.6 in. height x 9.4 in. width (320 mm. x 240 mm.)
- Parameter control: power and voltage regulation; alarm and threshold visualization
- Remote operations through external signals
- PC-USB connection. Configuration can be loaded or saved into a file
- 16 heating programs in local operation and 4 in remote operation: 9 steps time/power, time/Energy, time/T^a (with pyrometer or thermocouple)
- Languages: English, Spanish, French, German, Italian, Portuguese
- External Emergency Stop signal
- Hardware interface: digital and analog inputs and outputs