



Plasma &

Reactive Gas
Solutions

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SM 1690

POWER SUPPLY FOR 10 kW MAGNETRON @ 2.45 GHz

The SM 1690 magnetron power supply is an air-cooled power supply designed to drive the compact H915 magnetron with permanent magnet, with power of 10 kW @ 2.45 GHz.

For power control versatility, the output power of the SM 1690 can be variably adjusted from 10 to 100% using an external 1 to 10 VDC analog signal, or by remote control through a fieldbus interface.

Available in either 400 or 480 VAC line voltage configurations, the SM 1690 is designed to power and control MKS, Alter® TM100 microwave magnetron head; however it will also power other manufacturer's electrically compatible heads.

The SM 1690 autonomously manages the working status of the magnetron, providing signals to drive the correct pre-heating of the filament and to adjust the filament voltage according to the specific back down curve. In addition, the power supply automatically shuts off the output power in the event of an alarm condition, such as over current or over voltage of the magnetron.

The SM 1690 power supply is packaged in a 19-inch wide, 7U high rack mount enclosure and is built with a rugged steel base and easily removable aluminum panels. Industry standard electrical connectors, dedicated to specific functions, provide simple and easy set up. The power supply high voltage (HV) output, carrying the anodic current, is delivered through an HV connector.

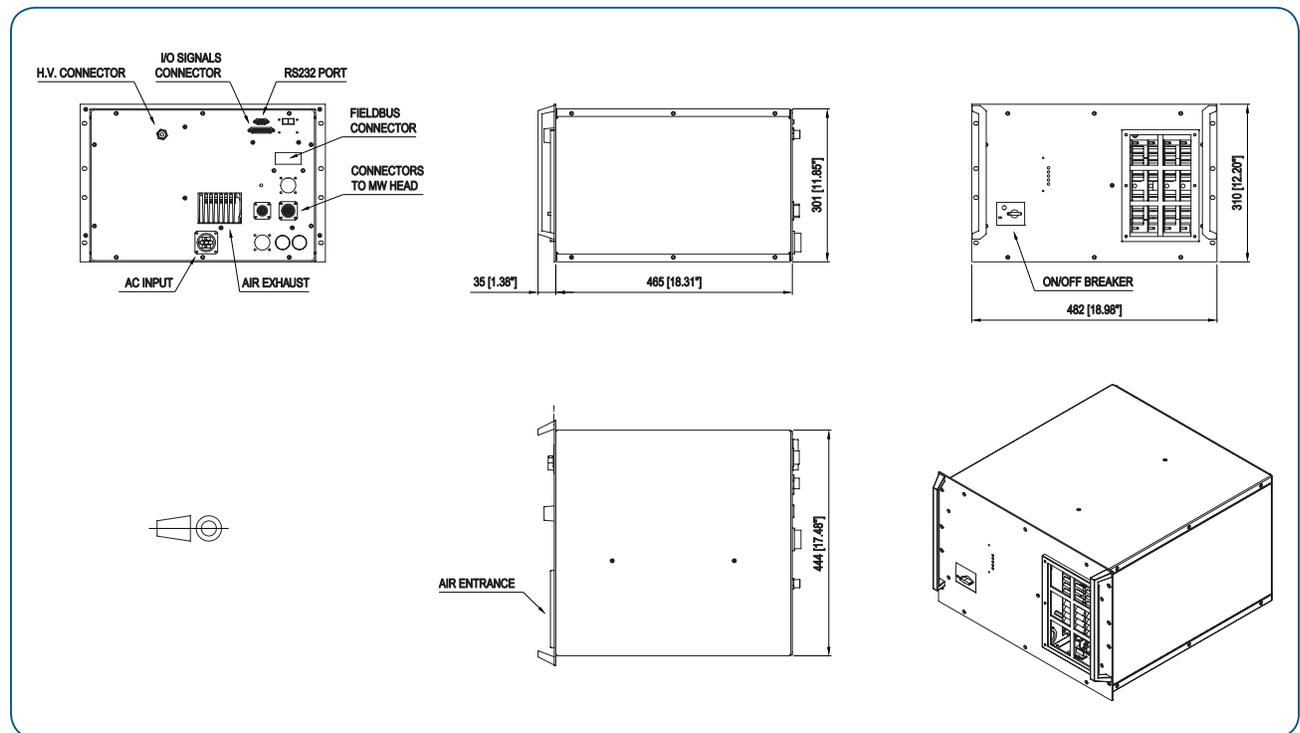
Features & Benefits

- High efficiency power supply design requiring only air cooling simplifies installation and reduces cost
- Low output ripple makes it suitable for most applications
- Advanced filament control results in low maintenance and long magnetron life
- Efficient power stage design results in very low harmonics and inrush current
- "Plug & Play" design for fast and easy installation



Specifications and Ordering Information

Output Power	14 kW max
Line Input	3 x 400V or 3 x 480V
Line Frequency	50/60 Hz
Efficiency	92%
Output Current	1600 mA max
Alarm Management	Opening alarm contact, emission of a 4 bit alarm code, the alarm is latched and requires a reset procedure
Dimensions	
Width, Rack	444 mm (17.48")
Width, Front Panel	482 mm (18.98")
Height, Rack	301 mm (11.85")
Length, Rack	465 mm (18.31")
Weight	40 kg/88 lbs
Cooling Type	Forced air, 200 m ³ /h
Working Ambient Temp. (max)	40°C/104°F
Compliance	CE
Preferred Microwave Magnetron Head	TM100 (others if electrically compatible)



Dimensional Drawing —

Note: Unless otherwise specified, dimensions are nominal values in millimeters (inches referenced).



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