



Plasma &

Reactive Gas Solutions

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SM 1280

POWER SUPPLY FOR 6 kW MAGNETRON @ 2.45 GHz SWITCHING TECHNOLOGY WITH NETWORK CONNECTIVITY

The SM 1280 is an air-cooled power supply for a 6 kW magnetron. The SM 1280 is able to power and control most nominal 6 kW @ 2.45 GHz magnetron models on the market today.

Depending on the model, the output power can be adjusted continuously, from 10% up to 100%, using an external analog signal from 1 to 10 VDC, or by remote control, through fieldbus interface or by front panel commands.

It is available for 208, 400 or 480 VAC line voltage and is designed to power the MKS, Alter® TM060 or TM066 microwave magnetron heads, however, it may be used to power microwave magnetron heads from other manufacturers if electrically compatible.

The SM 1280 autonomously manages the working status of the magnetron, providing signals to drive the correct pre-heating of the filament, to adjust filament voltage according to the specific backdown curve, and to shut off the output in any alarm event condition, such as over current or over voltage of the magnetron.

The electrical wiring utilizes industrial connectors, with the exception of the high voltage anodic cable which is connected directly to the magnetron. Any electrical function has a separate connector, leading to a simple and easy set up.

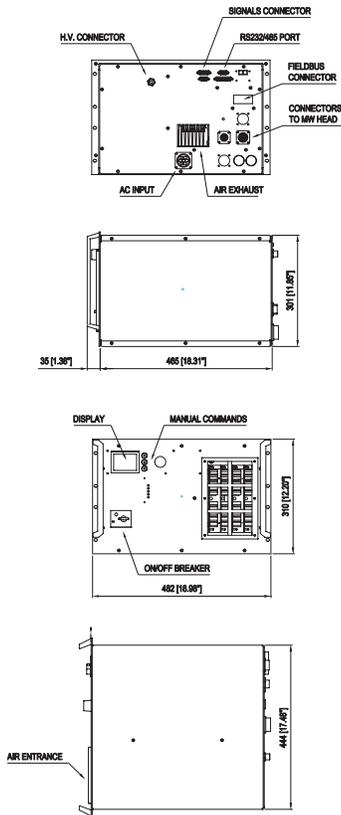
The SM 1280 front panel is 19" wide and 7U high, is built with a rugged steel base with easily removable aluminum panels. The air cooling flow runs from front to rear.

Features & Benefits

- Proven performance with more than a thousand units sold worldwide
- High efficiency design of power supply requires only air cooling
- Low output ripple makes it suitable for most applications, and stable filament control results in long magnetron life
- Very low harmonics and inrush current from efficient power stage design
- System designed with "Plug & Play" concept. When installed with our cable set, the user has to supply only two signals.
- Available input voltage 208, 400 and 480 VAC covers worldwide power requirements
- Seven different control options to suit most application requirements, e.g. PLC control only or manual commands or just networking control capabilities (see Version Overview Table on back)



Specifications



Dimensional Drawing —

Note: Unless otherwise specified, dimensions are nominal values in millimeters.

Output Power	8500 W max
Line Input & Frequency	3 x 208V x 400V x 480V
Line Frequency	50/60 Hz
Efficiency	92%
Output Current	1150 mA max
Alarm Management	Opening alarm contact, emission of a 4 bit alarm code, the alarm is latched and requires a reset procedure
Width, Rack	444 mm (17.5")
Width, Front Panel	480 mm (19")
Height, Total	310 mm (7 U, 12.25")
Length, Total	482 mm (19")
Weight	35kg/ 77 lbs
Cooling Type	Forced air, approx 200 m ³ /h
Working Ambient Temp. (max)	40° C/ 104° F
Compliance	CE
Preferred Microwave Magnetron Head	TM060 or TM066 (others if electrically compatible)

SM 1280 Version Overview							
Version Abbreviation	BASIC	BUS	DISPLAY	AUX-IN		ex-1180/300	RS485
Version Number	0	1	2	50	51	20	32
External Control (PLC)	✓	possible	✓	✓	✓	✓	✓
LED Panel Indicators	✓	✓	NA	✓	NA	✓	✓
Local Commands (Manual)	NA	NA	✓	NA	NA	NA	✓
Graphic Interface	NA	NA	✓	NA	NA	NA	✓
Network Control	NA	✓	NA	NA	✓	NA	RS485
RS 232 Control	✓	NA	✓	✓	NA	NA	NA
Separate Input for Aux Voltages	NA	NA	NA	✓	✓	NA	NA
Firmware Upgrade	✓	✓	✓	✓	✓	NA	✓



MKS Instruments, Inc. Global Headquarters

2 Tech Drive, Suite 201
Andover, MA 01810
Tel: 978.645.5500
Tel: 800.227.8766 (in USA)
Web: www.mksinst.com

MKS Instruments Italy S.r.l. Plasma & Reactive Gas Solutions

Via P. e M. Curie, 8
42122 Reggio Emilia, Italy
Tel: +39 0522 553 820