

Model RF-6 RF Power Supply



- ▶ 600 watt 13.56 MHz – Economically Priced
- ▶ High Efficiency Switch Mode – Solid State
- ▶ Analog and RS-232 Communication Capability
- ▶ 19" 1/2" Rack Mount
- ▶ Easy to Read Digital Displays
- ▶ LED Status Indicators
- ▶ Air Cooled
- ▶ Common Exciter Operation
- ▶ CE, CSA and UL Compliant

Description

The RF-6 600 watt 13.56 MHz power generator is packaged in a 19" 1/2 rack configuration. It allows precise control from the front panel or via a rear panel analog or optional RS-232 interface. Power and tuning (capacitor) adjustment are accomplished either through knobs on the manual tuning network (forward and reflected power are read on the power generator front panel) or adjusted and read on the automatic matching network controller front panel or on the users system controls through the analog or optional RS-232 interface.

A set-point potentiometer allows the operator to set and vary Forward/Incident RF Power. Digital meters display Forward and Reflected/Reflectant Power developed on the source. The external control interface on the back of the unit allows the power generator to be controlled by the user's programmable controller or computer. LED indicators provide visual indications of the status of safety and functional interlocks. The RF-6 power supply incorporates high efficiency switch mode power supplies and solid-state technology. They are very robust and can accept 30% reflected power before they operate in fold-back mode.

Typical remote operation signals are: External Interlock, RF On and OK, Selection of input/output regulation, Fault, RF forward and reflected power metering, Common exciter Enable, Output level set, RF On/Off and Remote/Local select.



Specifications

AC Mains Input	110-240 VAC, Single Phase, 50/60 Hz, 5.5A (550 watts) maximum
AC Mains Input Connector	IEC-320C-14 EMI filtered
RF Output Power	0-600 watts into a 50 ohm load
Output Frequency	13.56 MHz \pm .005%
Output Impedance	50 Ω resistive
Reflected Power Limit	30 watts maximum
Output Connector	Female N to Matching Network (8 foot long RG-213 cable supplied when complete power generation system is purchased)
Output Power Stability	\pm .5% of set point
Remote Analog Control Signal	0-5 VDC
Analog Interface Connector	15 pin female D type EMI/RFI filtered
RS-232 Serial Control Connector (Optional)	9 pin D type
Common Exciter (Optional)	Allows multiple generators to be run simultaneously
Common Exciter Input/Output Connector	BNC
Cooling	Forced air via a 145 cfm fan
Operating Environment	Maximum 90% relative humidity. 15-40° C (59-104° F) ambient temperature
Size – Rack Mount Power Supply	8" wide (9.5" wide with supplied rack mounting ears) x 7.0" high 1/2 Rack Mount Panel x 19" Deep (20.3 cm x 17.8 cm x 48.8 cm)
Weight	Nominal 22 pounds (10 kg)

MATERIALS SCIENCE, INC.

Vacuum & Thin Film Technology

Materials Science, Inc.
1662 Los Altos Road
San Diego, CA 92109
Tel: (858) 483-3223
E-mail: sales@msi-pse.com

PS 620 01/12