

Vacuum & Thin Film Technology



Model RF-3 RF Power Supply

- **300** 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-3 300 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 sytem 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-3 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	IEC-320C-14 EMI filtered
Connector	
RF Output Power	0-300 watts into a 50 ohm load
Output Frequency	13.56 MHz ± .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	0-5 VDC
Signal	
Analog Interface	15 pin female D type EMI/RFI filtered
Connector	
RS-232 Serial Control	9 pin D type
Connector (Optional)	
Common Exciter	Allows multiple generators to be run simultaneously
(Optional)	
Common Exciter	BNC
Input/Output Connector	
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	9.5" wide (with supplied rack mounting ears) x 5.5" high 1/2 Rack Mount Panel x
Power Supply	16" Deep (14.0 cm x 19.1 cm x 39.4 cm)
Weight	Nominal 14 pounds (6.4 kg)





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