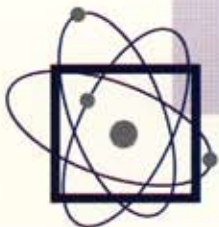




LF10

VARIABLE FREQUENCY RF GENERATOR

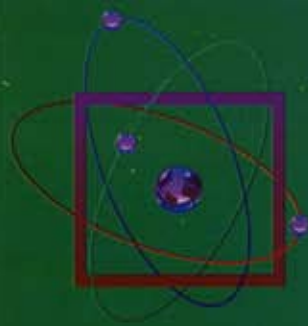
- 1000 watts output power.
- 50 kHz to 460 kHz.
- Microprocessor control.
- RS-232/422/485 or Analog interface allows precise control and monitoring of all functions and modes.
- Internal diagnostics.
- Internal low pass filtering.



RFPP

RF Power Products Inc.

THE WORLD'S LEADING AUTHORITY ON RF POWER



RF POWER GENERATORS



PRODUCT DESCRIPTION

The RF Power Products LF10 is a 1kW variable frequency RF Generator, incorporating the advanced microprocessor control available on all of our solid state products.

The output frequency is synthesized in 100 Hz steps. When compared with free-running variable frequency power supplies, the user will note a significant improvement in performance and repeatability. Frequency synthesis provides greater stability and will not drift.

Another advance over existing supplies is the incorporation of an internal low pass filter, eliminating the need for external hardware. The unit features output power leveling control via Load Power or Forward Power.

Load Power leveling can be selected from front panel or via computer interface. When Load Power leveling is selected, a software calculation regulates Forward Power minus Reflected Power to deliver Set-Point Power to the load.

The LF10 consists of a series of functional modules in an aluminum chassis. Each sub-assembly is easily accessed for servicing, and diagnostics may be performed via the front panel or through the RS-232/422/485 interface. Repair is accomplished by replacing the faulty modules. RF power is developed by a single, compact power amplifier of MOSFET design mounted on an air cooled heatsink.

As with all RF Power Products RF generators, the LF10 complies with FCC regulations for spurious radiation and will not interfere with associated plasma system electronics.

SYSTEM INTERFACE

The LF10 is designed for a seamless interface with the system controller. The standard RS-232 interface, the optional RS-422, and RS-485 are all available to suit system requirements.

The widely used analog control interface utilizes TTL or CMOS compatible logic, and $\pm 5V$ or $\pm 10V$ analog control signals.

CONSERVATIVE RATING

The use of conservatively rated solid-state components, along with microprocessor control, ensures reliable operation with an absolute minimum of maintenance. All key parameters are continuously monitored and required diagnostic information is available via RS-232/422/485 interface or at the front panel.

SAFETY AND PROTECTION

A number of hardware and software protection features protect the unit from damage due to line or load anomalies. The design philosophy uses a layered protection scheme comprised of current sensing/limiting, dissipation limiting, over/under voltage sensing, reflected power limiting and temperature sensing. Sophisticated hardware and software provides a high degree of operator safety and equipment protection.

PRODUCT SUPPORT

RF Power Products, Inc. provides the most complete service in the RF industry. Currently there are service depots in New Jersey, California, Texas, Europe, Japan, Korea and Taiwan. Qualified field service engineers are available at all locations.

MODEL LF10

Power Output	1000W
Power Control Regulation	1% into 50 ohms
Frequency With Stability.	50 kHz to 460 kHz \pm .05%
Repeatability.	\pm 0.5%
Harmonic Distortion	-50dBc
Noise, Hum, and Ripple	-40 dBc at 1000W
Line Voltage (Input Power)	198-250 1 \emptyset 50/60 Hz
Interface Connectors	Analog/RS-232C/422/485
Output Connectors	Type N
Cable Requirements	RG213
Dimensions	19"W x 20"D x 7"H
Net Weight (Approximate).	80 Lbs.
Cooling	Forced Air



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