

L-3001

RF GENERATOR

CE MARKED

19" RACK MOUNT / 4U

ANALOG / SERIAL: RS232/485,

INTERNAL DC SWITCHER

HIGH SPEED PULSING

AGILE FREQUENCY TUNING

OPTIONAL STEP UP/DOWN TRANSFORMERS
AND MATCHING NETWORKS AVAILABLE



SEREN
Industrial Power Systems

1670 GALLAGHER DRIVE, VINELAND, NJ 08360
PHONE: 856-205-1131- FAX: 856-205-1141

WWW.SERENIPS.COM

PRODUCT DESCRIPTION

The Seren L3001 is a Microprocessor controlled, Solid State, Water Cooled, 3000 Watt, RF generator. The L3001 is available at 100 - 120, 200 - 300, 350 - 460, 100 - 460 kHz. The L3001 can be used as the sole source for plasma generation, or as one of several generators in a multiple generator configuration. The front panel controls and indicators are logically grouped, with operational status shown on the front panel four line fluorescent display.

Seren "L Series" products incorporate a single Microprocessor Control surface mount technology printed circuit board for controls and RF amplifier. Seren "L Series" products utilize Field-Effect Transistors in the exciter and power amplifier stages powered by a DC Switch Mode power supply, operating in class AB mode providing power accuracy and stability across the entire power range.

RATING

. The L3001's power amplifier is rated at 70% of its actual design capability.

PROTECTION

Seren generators are protected against excessive Voltage Standing Wave Ratio (VSWR) conditions by limiting reflected power, power amplifier current, and power amplifier transistor dissipation.

AGENCY COMPLIANCE

CE:EN61326-1, EN61000-6-4, EN61010-1
SEMI: S2, S8

FCC Part 15, Part 18.

CONTROL INTERFACES

The L3001 is a microprocessor controlled, solid-state RF generator. This product can be controlled by: (1) a selectable serial RS-232/ 422/ 485 interface, (2) a 25 pin D-sub analog interface connector, (3) the front panel or (4) Optional Interfaces' such as Device Net, Profibus, Ether Net.

POWER CONTROLS

The Seren L3001 can regulate its power output utilizing the following control modes: DC Voltage, RF Voltage, Forward Power Leveling, and Load Power Leveling.

The L3001 is capable of 2 modes of high speed pulsing: programmable pulsing via the front panel (rate and duty cycle); and analog pulsing, where the generator tracks an incoming pulse train.

The L3001 agile frequency-tuning feature can be controlled either internally or by an external control signal.

WARRANTY

Seren products are warranted against defect for a period of (15) months from date of shipment.

SERVICE

Seren IPS products are supported by a World-Wide Network of qualified service engineers. Consult our web page for locations in your area.

<u>MODEL</u>	<u>L-3001</u>
Forward Power Output	2000 Watts
Frequency	100 - 120, 200 - 300, 350 - 460, 100 - 460 kHz
Forward Power Accuracy	+/- 2%
Harmonics	-50 dBc
Input Power	190-264 VAC, 47-63 Hz
Output Connector	Type "HN" or "DIN" Female
Interface Connectors	Serial: DB-9 Female; Analog: DB-25 Female
Pulsing	Consult Factory
Cooling	Water Cooled, 3 G.P.M. @ 40 deg. C, 150 CFM 3/8" NPT (Water in/out Conn.)
Dimensions	7" H x 17" W x 23" D
Weight	75 lbs.

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