

L-301-MKII

RF GENERATOR

CE MARKED, NRTL LISTED

AIR COOLED, HALF RACK DESIGN

ANALOG / SERIAL: RS232/485,

INTERNAL DC SWITCHER

HIGH SPEED PULSING

AGILE FREQUENCY TUNING

OPTIONAL STEP UP/DOWN TRANSFORMERS
AND MATCHING NETWORKS AVAILABLE



SEREN
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PRODUCT DESCRIPTION

The Seren L301 is a Microprocessor controlled, Solid State, 300 Watt, RF generator. The L301 is available at 100-460, 350 - 460 kHz. The L301 can be used as the sole source for plasma generation, as a Bias generator, 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 L301's power amplifier is rated at 50% 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
NRTL: UL61010-1, CAN/CSA C22.2
SEMI: S2, S8, S47

FCC Part 15, Part 18.

CONTROL INTERFACES

The L301 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 L301 can regulate its power output utilizing the following control modes: DC Voltage, RF Voltage, Forward Power Leveling, and Load Power Leveling.

The L301 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 L301 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-301-MKII</u>
Forward Power Output	300 Watts
Frequency	350 - 460, 100 - 460 kHz
Forward Power Accuracy	+/- 2%
Harmonics	-50 dBc
Input Power	95-125 VAC or 190-264 VAC, 47-63 Hz
Output Connector	Type "N or HN" Female
Interface Connectors	Serial: DB-9 Female; Analog: DB-25 Female
Pulsing	Consult Factory
Cooling	Forced Air, 110 CFM (52L/Sec.)
Dimensions	5.25" H x 9.5" W x 19" D (18 X 43.5 X 58.5 cm)
Weight	27 lbs.