



2450MHz

500W

LEANGEN-2450M-500-E

2450MHz 500W Solid-State Generator

LEANGEN-2450M-500-E is a compact and lightweight 2450MHz 500W Solid-State Generator conceived to provide a flexible and portable tool for laboratory tests, as required by worldwide research groups that are progressively concentrating energies towards **Solid-State Microwave** technology.

LEANGEN-2450M-500-E is equipped with a 4.3" capacitive touch panel driven by an embedded system allowing user-friendly real-time control and monitoring of all the advanced features of the 500W microwave generator. The equipment embeds our OEM 2450MHz 500W solid-state generator module, completed by a highly reliable AC-DC power supply, an efficient water cooling system and a powerful real-time control engine that hosts the real-time user interface.

The unit allows the operator to easily configure **Continuous** and **Pulsed** operating modes by setting predefined radiation intervals and accurate power levels (1W step) at the desired operating frequency in the 2400-2500MHz range.

An advanced **self-regulating feature** is available to *automatically* and *dynamically* adapt the output power level to the amount that the load is capable to absorb during the radiation time.

A very useful database contains the history of all the events and alarm conditions occurred during the generator operation and an optional serial control port on the rear panel can be connected to a PC for a comfortable remote access from your laptop or desktop PC for easy integration within a comprehensive laboratory management station.

LEANGEN-2450M-500-E is very useful for those who want to appreciate the flexibility of solid-state technology in a simple and immediate way and to easily experiment with plenty of applications as solid-state cooking, microwave chemistry, plasma generation, nanostructures manufacturing and many others.

QUICK OVERVIEW

Very compact and portable

Direct AC power supply

Water cooled

Friendly touch-panel user interface

Fully-programmable CW and Pulsed operating modes

2400-2500MHz frequency range

7/16 DIN 50Ω coaxial output

Real-time measurement of reflected power

Highly tolerant to strong load mismatch conditions

Self-regulating function for variable loads automatic management

Optional serial connection to external PC for control & monitoring

Optional amplifier configuration with N female front-panel input



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Technical Specifications

Output Power	0-500W CW @2400-2500MHz
Power Modes	CW and Pulsed modes with user-enabled self-regulating function
Output Connector	7/16 DIN 50Ω
Technology	Fully Solid-State: LDMOS driver and power stage
Output RF Isolation	Built-in circulator with integrated dummy load ^(*)
Operating Frequency	2400-2500MHz step 1MHz
Advanced Mode	User-enabled self-regulating function
Power Supply	80-275Vac
Power Efficiency	50%
Forward and Reflected Power Meas.	Real-time
Output Protection	Hardware Protection against 100% load mismatch
Control&Monitoring	Interactive Graphic Interface on 4.3" Capacitive Touch Panel
GUI for PC Control	Available on request
Cooling Water Temperature	18°C – 28°C non-condensing
Cooling Water Flow	≥ 4 liters/min
Size	240x273x89mm
Weight	4kg

() The integrator shall avoid excessive load mismatch by proper reflected power monitoring*

