



LEANGEN-2450M-250-E

2450MHz 250W Solid-State Generator

LEANGEN-2450M-250-E is a compact and light-weight 2450MHz 250W Solid-State Generator conceived to provide a flexible and portable tool for laboratory tests, as required by worldwide research groups that are progressively investing strong efforts into **Solid-State Microwave** technology.

LEANGEN-2450M-250-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 250W microwave generator. The equipment embeds our OEM 2450MHz 250W solid-state generator module, completed by a highly reliable AC-DC power supply, a compact and efficient cooling unit and a powerful real-time control system that hosts the graphic 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, thanks to the available IP connection, the software can always be automatically updated to the latest release generated by LEANFA's engineering department. 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-250-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 lighting, organic tissue ablation and automotive ignition.



QUICK OVERVIEW

- Very compact and portable*
- Direct AC power supply*
- Integrated cooling unit*
- Friendly touch-panel user interface*
- Fully-programmable CW and Pulsed operating modes*
- 2400-2500MHz frequency range*
- N female coaxial output*
- Real-time measurement of reflected power*
- Highly tolerant to strong load mismatch conditions*
- Self-regulating function for variable loads automatic management*
- Automatic on-line software update*
- Optional serial connection to external PC for control & monitoring*

LEANGEN-2450M-250-E

2450MHz 250W Solid-State Generator

Technical Specifications

Output Power	0-250W CW @2450MHz
Power Modes	CW and Pulsed modes with user-enabled self-regulating function
Output Connector	N female, 50Ω
Technology	Fully Solid-State: dual-stage LDMOS
Output RF Isolation	In-built circulator with integrated dummy load
Operating Frequency	2400-2500MHz step 2MHz
Advanced Mode	User-enabled self-regulating function
Power Supply	80-275Vac
Power Efficiency	50%
Output Power Measurement	Real-time
Reflected Power Measurement	Real-time, better than 5% full-scale accuracy
Output Protection	Hardware Protection against 100% load mismatch
Control&Monitoring	Interactive Graphic Interface on 4.3" Capacitive Touch Panel
Spurious Emissions	<50dBc
Data Ports	RS232 (optional remote control), Ethernet (software update)
Cooling	Integrated forced-air cooling unit
Size	240x273x89mm
Weight	4kg



LEANFA Srl
Via C. A. Dalla Chiesa, 6
70037 Ruvo di Puglia - Bari – ITALY
www.leanfa.com
leanfa@leanfa.com

LEANFA® is an international registered trademark, property of LEANFA Srl
Due to our continuous improvement effort, specifications are subject to change without prior notice
Rev. 1.2 – 06 June 2022