



LEANGEN-2450M-500-M

500W Solid-State Microwave Generator

LEANGEN-2450M-500-M is a compact, light-weight and highly reliable OEM microwave generator module for ISM applications at 2450MHz, fully based on steady solid-state technology with high power efficiency. The module is powered by a single 32Vdc power supply and it features a 0-500W CW output with exceptional spectral purity at all power levels and absolute reliability thanks to built-in circulator with integrated dummy load. Its output power can be precisely regulated from zero to 500W and its output frequency can be selected in the range 2400-2500MHz. The product is equipped with an analogue control interface and a digital serial interface, allowing smart industrial applications in solid-state dynamic modular systems counting multiple modules controlled by a central digital brain. The module has been conceived to drive probes or to radiate resonant cavities, with plenty of applications as solid-state cooking, microwave chemistry, plasma generation, organic tissue ablation and automotive ignition.

LEANGEN-2450M-500-M is fully tested with pulsed power applications and is designed to operate with liquid cooling. In order to guarantee straightforward and successful integration, it is equipped with accurate real-time measurement of forward and reflected power and with a user-friendly control interface for comprehensive setting and control.

This exclusive module on the market is a building block for LEANFA's award-winning **KOPERNICOOK®** system, a revolution in Microwave and RF processing of food and agricultural commodities introduced by an intelligent use of innovative solid-state generators.



QUICK OVERVIEW

Compact, light-weight and top-reliable

Single 32Vdc power supply

CW 0-500W with top spectrum purity in full power range

2400-2500MHz frequency range

Can drive probes or radiate resonant cavities

Real-time measurement of reflected power

Analogue and digital control interface

Designed for pulsed power applications

High-efficiency

Liquid cooling

Built-in circulator with integrated dummy load

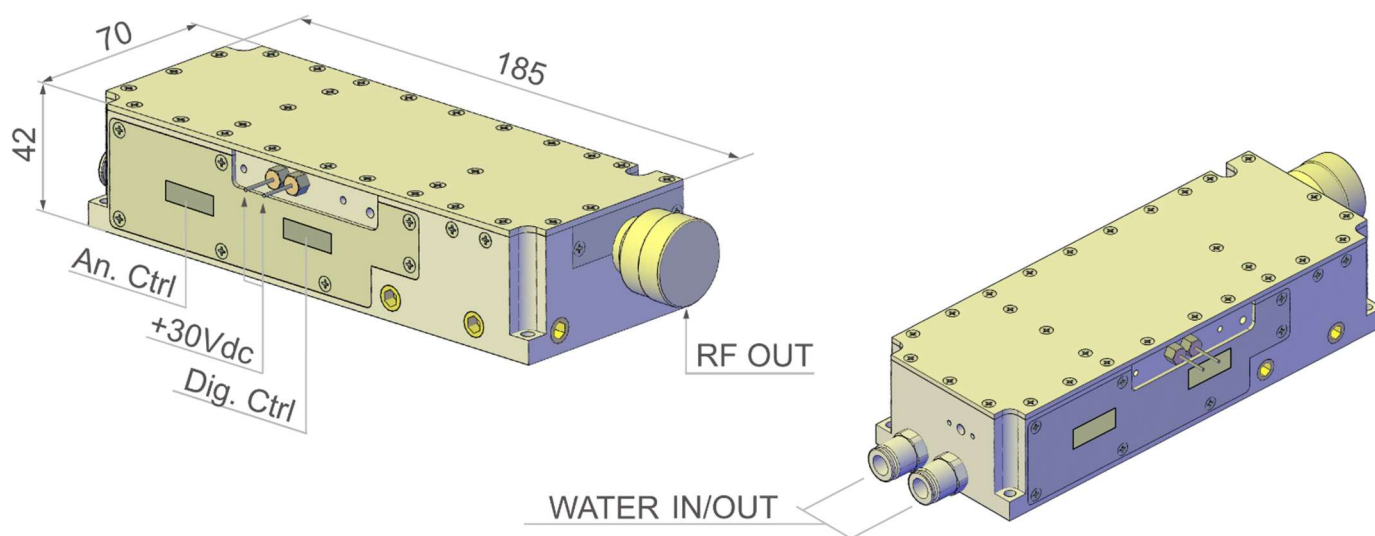
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Technical Specifications

Output Power	0-500W CW @2400-2500MHz
Power Step	1W
Power Modes	Tested with CW and Pulsed modes, compliant with industrial applications
Output Connector	7/16" 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 100kHz
Power Supply	32Vdc
Power Efficiency	50%
Forward and Reflected Power Meas.	Real-time
Output Protection	Hardware Protection against 100% load mismatch ^(*)
Control&Monitoring	Analogue interface and RS485 Serial interface
GUI for PC Control	Available on request
Cooling Option	Liquid cooling
Size	185x70x42mm
Weight	1.3kg

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



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 Due to our continuous improvement effort, specifications are subject to change without prior notice
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