



LEANGEN-915M-2500-M

Solid-State Microwave Generator

LEANGEN-915M-2500-M is a state-of-the-art 915MHz solid-state generator for ISM microwave applications, born after a continuous technological matching between LEANFA's R&D department and highly demanding product managers from worldwide industrial operators.

LEANGEN-915M-2500-M is a compact, light-weight and super-reliable OEM microwave generator module for ISM applications at 915MHz, fully based on steady solid-state technology with high power efficiency. The module is powered by a 50Vdc power supply and it features a 0-2500W CW output with exceptional spectral purity at all power levels and absolute reliability thanks to a modular balanced architecture, composed by four isolated 750W power stages optimally combined at the output. Its output power can be precisely regulated from zero to 2500W and its output frequency can be selected in the range 902-928MHz. 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 different types of industrial applicators or to act as modular element in higher power industrial systems, with plenty of applications as solid-state cooking, microwave drying or defrosting, plasma generation and semiconductor manufacturing.

LEANGEN-915M-2500-M is fully tested with pulsed power applications and is designed to perfectly operate with liquid cooling. In order to guarantee straightforward and successful integration within industrial plants, 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.

QUICK OVERVIEW

Compact, light-weight and top-reliable

CW 0-2500W with top spectrum purity in full power range

902-928MHz frequency range

Can drive industrial applicators or act as module in higher power systems

Real-time measurement of reflected power

Analogue and digital control interface

Designed for CW and pulsed power applications

High-efficiency

Liquid cooling

Balanced architecture with combination of four power stages

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Technical Specifications

Output Power	0-2500W CW 902-928MHz ⁽¹⁾
Power Step	T.B.D.
Power Modes	Tested with CW and Pulsed modes, compliant with industrial applications
Output Connector	1+5/8" 50Ω
Technology	Fully Solid-State: LDMOS driver and power stage
Output RF Isolation	Internal power stages protected by circulators, output stage not isolated
Operating Frequency	902-928MHz step 100kHz
Power Supply	50Vdc
Power Efficiency	>50%
Forward and Reflected Power Meas.	Real-time
Output Protection	Hardware Protection up to 1000W reflected power ⁽²⁾
Control&Monitoring	Analogue interface and RS485 Serial interface
Spurious Emissions	T.B.D.
GUI for PC Control	Available on request
Cooling	Liquid cooling
Size	430x270x58mm
Weight	13kg

(1) The efficiency shall be maximized by properly modulating the external power supply output voltage
 (2) The integrator shall avoid excessive load mismatch by proper reflected power monitoring

