

LEANAMP & LEANGEN

OEM Solid-State Amplifiers and Generators

LEANAMP OEM Amplifiers and **LEANGEN** OEM Generators are cutting-edge tools for microwave applications, born after the perfect matching between LEANFA's unique know-how and the call for innovation soundly raised by worldwide industrial, scientific, medical and telecommunications operators.

All **LEANAMP** and **LEANGEN** devices are compact, light-weight and highly reliable OEM modules, perfect to be quickly integrated in equipment for applications in microwave frequency ranges, fully based on steady solid-state technology with high power efficiency and total parametric control. All the modules are powered by low-voltage DC supply, tested for CW and pulsed power modes and enclosed in shielded metal cases, ready for forced-air or liquid cooling with minimum assembling effort.

All our OEM modules feature exceptional spectral purity at all power levels and absolute reliability thanks to built-in circulator with integrated dummy load in order to protect the internal hardware from temporary high-VSWR operating conditions.

The output power of **LEANGEN** modules can be precisely regulated from zero to the nominal maximum level and their output frequency can be selected in the specified range with accurate steps. On request, OEM Generators are optionally equipped with a digital serial bus interface, allowing smart industrial applications in solid-state dynamic modular systems counting multiple modules controlled by a central digital brain. LEANFA's robust hardware-software architecture has been conceived to drive probes (single/multiple) or to radiate resonant cavities, with plenty of applications as solid-state cooking, microwave chemistry, plasma generation, organic tissue ablation, automotive ignition and many others.

LEANAMP modules are class-AB OEM Power Amplifiers, all fully tested with pulsed power applications and designed to perfectly operate with forced air cooling, featuring real-time measurement of Temperature, Forward Power and Reflected Power.

Our Company policy is strongly oriented towards long-term reliability, ensured by accurate components selection, careful thermal balance considerations from the beginning of the design phase and automated testing systems governed by rigorous benchmarking patterns.

QUICK OVERVIEW

Compact, light-weight and top-reliable

Fully solid-state devices with extremely high MTBF

Low voltage DC power supply

Top spectrum purity in full power range

Real-time measurement of reflected power

User-friendly control interface

Designed for CW and pulsed power applications

High-efficiency

Designed for forced-air or liquid cooling with easy assembling

Built-in circulator with integrated dummy load

Easy integration with available software platforms and customized embedded applications

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Technical Specifications

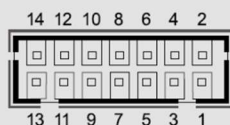
OEM GENERATORS

Model	Freq. Range	Output Power	Output Connector	Nominal Supply Voltages [Vdc]	Efficiency	Size [mm]	Weight [kg]
LEANGEN-433M-200-M	423-443MHz	200W	N female	5 / 28	70%	180x65x27	1
LEANGEN-915M-250-M	903-927MHz	250W	N female	5 / 30 / 40	50%	172x65x27	1
LEANGEN-2450M-250-M	2400-2500MHz	250W	N female	5 / 30	50%	172x65x27	1
LEANGEN-2450M-450-M	2400-2500MHz	450W	T.B.D.	5 / 32	50%	172x65x27	1

OEM AMPLIFIERS

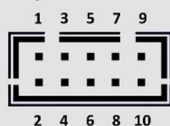
Model	Freq. Range	Output Power	Gain [dB]	Input/Output Connector	Nominal Supply Voltages [Vdc]	Efficiency	Size [mm]	Weight [kg]
LEANAMP-1600M-10M	1570-1620MHz	10W	40	SMA female	5 / 28	>50%	110x60x17	0,3
LEANAMP-2450M-10-M	2400-2500MHz	10W	40	SMA female	5 / 28	>40%	110x60x17	0,3
LEANAMP-2450M-25-M	2400-2500MHz	25W	43	SMA female	5 / 28	>35%	110x60x17	0,3
LEANAMP-5800M-10-M	5700-5850MHz	10W	40	SMA female	5 / 28	>25%	110x60x17	0,3

OEM Generators Control Port



- | | |
|-------------|-----------------|
| 1 FWD POWER | 2 GND |
| 3 REF POWER | 4 TEMPERATURE |
| 5 ON/OFF | 6 POWER SUPPLY |
| 7 Vdrive | 8 Vdrive |
| 9 Not Used | 10 GAIN CONTROL |
| 11 Not Used | 12 PLL LOCK |
| 13 Not Used | 14 Not Used |

OEM Amplifiers Control Port



- | | |
|---------------|-------------|
| 1 GND | 6 FWD POWER |
| 2 GND | 7 ON/OFF |
| 3 TEMPERATURE | 8 +5Vdc |
| 4 CURRENT | 9 +28Vdc |
| 5 REF POWER | 10 +28Vdc |

