



2450MHz

2000W

LEANGEN-HEAT-2450-2000 2000W Solid-State Microwave Generator

LEANGEN-HEAT-2450-2000 is a highly compact microwave generator designed for operation in industrial processing, born to offer all the advantages of solid-state technology to industry professionals aiming at an unprecedented combination of performance and reliability. The generator is fully based on steady **solid-state technology**, assuring unaltered performance and minimum maintenance burden throughout its extensive life cycle.

LEANGEN-HEAT-2450-2000 is powered by 400Vac 3-phase mains and it features a 0-2000W CW output over WR340 waveguide output with exceptional spectral purity at all power levels, operating at 2450MHz. An external isolator stage is recommended for use with potentially mismatched loads, to safeguard the internal hardware integrity. The product comes equipped with a standard industrial bus control interface, allowing easy integration in existing production plants, and water-cooled for long-term reliability in highly intensive workloads.

The generator features accurate real-time measurement of RF operating parameters and automatic safety functions that minimize hardware failures in case of unexpected anomalous operating conditions. Its high parametric flexibility paves the way for future process optimizations and easy operational planning by means of straightforward software upgrade.

Being based on solid-state technology, the generator does not require periodical parts replacement, **avoiding downtime issues and high operating costs**. Moreover, high production repeatability allows future plant extension or potential parts replacement with plug-and-play installation and no need for in-field re-tuning.

The digital heart of **LEANGEN-HEAT-2450-2000** also allows easy remote monitoring by plant managers and remote support by the manufacturer, simplifying and economising testing and commissioning activities.

QUICK OVERVIEW

Highly compact and top-reliable

400Vac 3P+N power supply

Integrated Synthesizer

2000W CW output power

Robust solid-state technology

Digital fine tuning of all operating parameters

Industrial bus control

Integrated graphic user interface

2400-2500MHz operating frequency

WR340 Output

High efficiency

Water cooled

Modular solid-state design

No downtime issues

No performance degradation over time

LEANGEN-HEAT-2450-2000

2000W Solid-State Microwave Generator

Technical Specifications

CW Output Power	0-2000W
Power Modes	Tested with CW and Pulsed modes
Output Connector	WR340 waveguide
Technology	Fully Solid-State: GaN driver and power stage
Output RF Isolation	External output isolator required
Operating Frequency	2400-2500MHz
Power Supply	400Vac 3P+N, 50-60Hz
Power Efficiency	>55%
Forward and Reflected Power Meas.	Real-time
Spurious Emissions	<50dB
Control&Monitoring	Standard Modbus RTU + TCP interface (others on request) + Analog I/O
User Interface	Integrated touch-panel GUI
Cooling	Water cooling
Cooling Water Temperature	18°C – 28°C
Cooling water Flow	≥ 6 liters/min – max 4 bar
Size	483x133x540mm
Weight	21.5kg

