



Handling Energy with Advanced Technology

Microwave

RF

HEAT

Solid-State Microwave and RF Generators

HEAT is the new family of Muegge Group solid-state microwave and radiofrequency generators 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.

All the generators of the **HEAT** family are compact and lightweight, operating at different ISM frequencies with various output power levels, fully based on steady **solid-state technology**, assuring unaltered performance and minimum maintenance burden throughout their extensive life cycle.

All the generators produce a microwave or RF output with exceptional spectral purity at all power levels; their output power can be precisely regulated from zero to the nominal level and the operating frequency can be fine-tuned in each admitted range.

Every product comes equipped with a standard industrial bus control interface, allowing easy integration in existing production plants, and air- or water-cooled for long-term reliability in highly intensive workloads.

All the generators in the **HEAT** family feature accurate real-time measurement of RF operating parameters and automatic safety functions that minimize hardware failures in case of unexpected anomalous operating conditions. Their 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 generators do 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 the **HEAT** generators also allows easy remote monitoring by plant managers and remote support by the manufacturer, simplifying and economising testing and commissioning activities.

QUICK OVERVIEW

Smart alternative to tube generators

Complete with AC-DC power supply

Coaxial or waveguide output

Compact and lightweight

19" rackmount case

Air or water cooled

2450MHz, 915MHz, 433MHz,
13.56MHz, 27.12MHz

Integrated graphic user interface

Real-time measurement of RF
operating parameters

Industrial bus control interface

Perfect for plasma generation

Digital fine tuning of all operating
parameters

No downtime issues

No performance degradation over
time



Technical Specifications

Frequency	Power	Output Connector
2450MHz	500W	7/16 DIN
	1kW	7/16 DIN
	2kW	WR340
915MHz	750W	7/16 DIN
	1.3kW	7/16 DIN
	2.5kW	EIA 7/8
433MHz	250W	N
	500W	N
13.56MHz	500W	7/16 DIN
	1kW	7/16 DIN
	2kW	7/16 DIN
27.12MHz	5kW	7/16 DIN
	10kW	EIA 7/8

Isolator or Matching Box	Cooling	Power Supply	Efficiency
Internal	Liquid	90-260Vac	>55%
Internal	Liquid	180-260Vac	>55%
Not included	Liquid	400Vac 3P+N	>55%
Internal	Liquid	90-260Vac	>50%
Not included	Liquid	90-260Vac	>50%
Not included	Liquid	400Vac 3P+N	>50%
Internal	Forced Air	90-260Vac	>60%
Internal	Forced Air	90-260Vac	>60%
Not included	Forced Air	90-260Vac	>70%
Not included	Forced Air	90-260Vac	>70%
Not included	Forced Air	90-260Vac	>70%
Not included	Liquid	400Vac 3P+N	>70%
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