

SOLID STATE GENERATOR SUB-SYSTEM

450 W AT 2450 MHz

SAIREM's KMS450 is a **high-power solid-state generator sub-system**, to be integrated into your own system. Its power is adjustable from **0 to 450 W** at frequencies ranging between **2400 and 2500 MHz**.

Pinpoint Power and Frequency control:

- Flexibility for your process
- Possibility to use a compact plasma source

This generator is designed **for scientific and industrial applications**, to be used with one or multiple MW applicators, to ensure high reliability and small footprint. A built-in isolator measures reflected power and protect against high reflected power.



You can use the Modbus RS232 interface to control the generator using LabVIEW® or use the CANopen interface to control the generator with an industrial PLC.

MAIN APPLICATIONS

PLASMA APPLICATIONS

Plasma generation with compact plasma sources:

- **S-Wave** for atmospheric and low-pressure plasmas for radical creation, debacterization, ALD, medicine (treatment of chronic wounds), decapsulation (semi-conductor process), elementary analysis, etc...
- **Aura-Wave** and **Hi-Wave** for low pressure plasmas for large surface treatment

MEDICAL APPLICATIONS

- Tumor ablation by microwave heating

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KEY BENEFITS

DESIGN

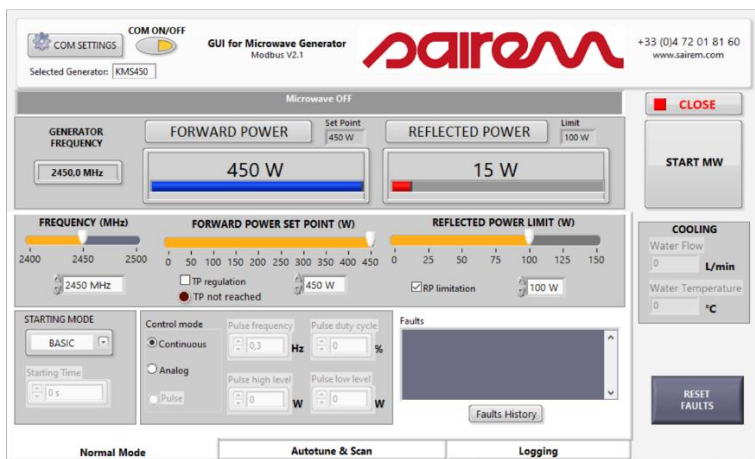
- Compact, ready to integrate design
- Microwave energy transmitted by coaxial cable
- Power adjustable by 1 W steps (or increments)
- Frequency adjustable by 100 kHz step to optimize power transfer



TECHNOLOGY

- **Semiconductor technology:** no magnetron and therefore longer lifetime and no high voltage
- **Excellent frequency spectrum** even at low power
- **Built-in internal protection** against mismatching and reflected power in any phase
- **Built-in isolator** with automatic power reduction or switch off in case of high reflected power
- **True RMS detector** with linear measurement of reflected and forward power
- Very low ripple < 0,4 % RMS
- Manual or **automatic microwave frequency adjustment**
- **SAIREM Auto-tune algorithm¹** (automatic load-tuning): controls the frequency automatically in order to minimize reflected power

CONTROLS



- **LabVIEW™** software provided (no license required) for all operating parameters and control status
- Alarm information, forward power and reflected power readings

¹ Patent WO/2012/146870

To get the complete data sheet :

- full specifications
- technical drawings

CONTACT US !

