



# 2.45 GHz 10 kW MICROWAVE GENERATOR FOR CVD LAB GROWN DIAMONDS



SAIREM's latest generation (G4) of microwave generators has been specially designed with the **Lab Grown Diamonds Industry in mind**. The 100 % digital architecture makes it a **modern and highly reliable product**, with smart power control.

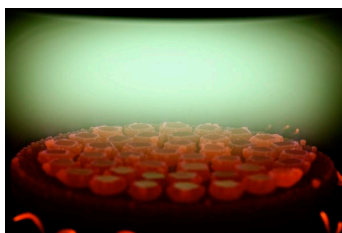
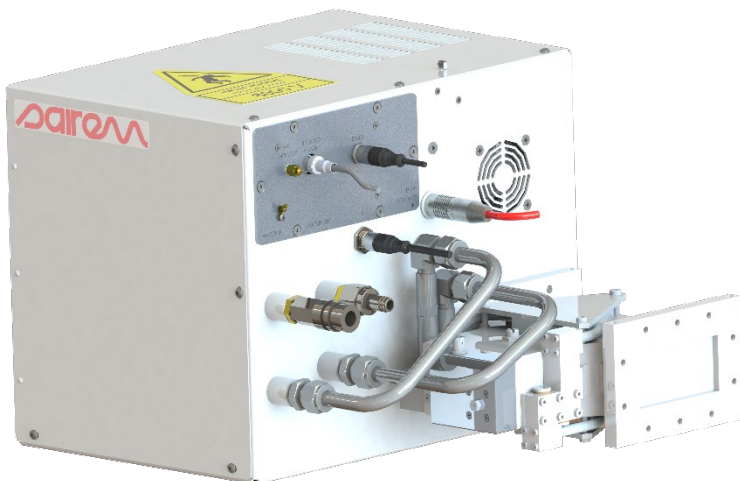
The solution is made of 2 modules for power supply and microwave generation. It can be adapted to most CVD reactors.

This equipment has been specially developed **to support weeks long running cycle** and deliver a narrow spectrum, necessary to offer the purest diamonds.



Multiple features, like the **Automatic Restart Function (ARF)**, and **Preventive Alarm Management (PAM)**, alarms without stopping the production) are implemented to allow you **to go to the end of your process**, even in case of micro power-cuts.

Finally, SAIREM's comprehensive customer service help you to **maximize your production yield**, through support and advices.





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## KEY BENEFITS

### COMPACT 2 MODULES DESIGN

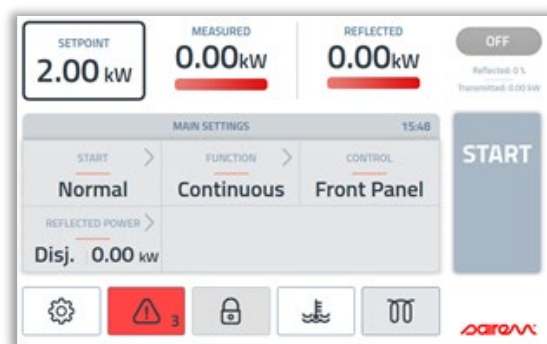
- 10 kW rackable Power Supply (19" 4U)
- 10 kW 2450 MHz Microwave Head

### BEST IN CLASS RELIABILITY

- **Automatic Restart Function (ARF)** in less than 5 ms, to avoid production stop or loss
- **Environment monitoring:** 35 parameters.
- Expected Magnetron **lifespan above 15000 hours**, depending on operating conditions
- **Arc detection** included. One arc input is also available for customer's applicator/process.
- **Preventive Alarm Management (PAM)** that allows the continuation of the production
- **100 % digital design** offers better protection from the electrical network interferences and distortions
- Software compatible with previous generation 3 and 6 kW to ease the scale-up (no need to change control software)
- **Comprehensive customer service**

### CONTROLS

- **7" color TFT touch screen** (option) for easy and efficient control and configuration. Full-screen power display function available to read power easily even far away from the generator.
- Full digital design to allow smart power control.



### COMMUNICATION

- **Ethernet connection** for online diagnostic. USB port available to export alarm messages for easy diagnostic.
- Many fieldbus interfaces available
- **Can be ordered without digital display** to save cost. Remote control only, by fieldbus
- Software upgrade with USB drive



To get the complete data sheet :

- full specifications
- technical drawings

**CONTACT US !**

