

# **MICROWAVE GENERATORS & SYSTEMS**

RELIABLE, STATE-OF-THE-ART TECHOLOGY





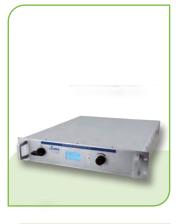


# **MICROWAVE GENERATORS & SYSTEMS**

### RELIABLE PERFORMANCE FOR WIDE RANGE OF APPLICATIONS

MKS offers compact industrial microwave generators and systems in 915 MHz and 2450 MHz that are adaptable to a wide range of applications including Food and Beverage Packaging, Environmental and Advanced Industrial processes like coating, material growth, and automotive. With a robust, modular power system chassis design and advanced filament and electromagnetic management, MKS microwave generators are engineered to last. The microwave generators are equipped with switch mode topology for all power ranges and support a variety of fieldbus communication protocols.

- Field-proven technology for improved performance and lower GOO
- Adaptable to a wide range of applications
- Reliable and accurate for increased process consistency and yield
- Robust and modular system design offers maximum flexibility
- Switch mode power supply systems for continuous power control
- Intelligent diagnostics to ensure maximum uptime









# SG Series Solid State Microwave Generators

- Available in 550 W or 1000 W water-cooled versions
- Smaller form factor with solid state design
- Coax output connector
- Capable of frequency tuning the output between 2400 to 2500 MHz
- 19 inch rack-mountable unit for easy integration
- Remote and manual operation for easy setup, operation and troubleshooting

### GS Series 915 MHz Industrial Microwave Generators

- Provides 15 kW to 100 kW power at 915 MHz
- Proven reliable, modular and cost-effective power system
- Low weight and compact industrial microwave generator system for flexible integration
- Shielded cabinet and safety interlocks for safe operation
- Low cost of maintenance

### GS Series 2450 MHz Industrial Microwave Generators

- Proven switch mode technology
- Reliable and cost-effective
- Extremely compact and light weight
- Large choice of input line voltage
- Configurable remote control
- Offers up to 15 kW in a 19 inch standard rack with a remote head and integrated isolator

#### AX2530

# SmartPower® Intelligent Microwave Generator

- Available in 3 kW power levels for 200 and 300 mm applications
- Microprocessor-controlled filament cutback extends magnetron tube lifetime
- Accurate power measurement and feedback ensures high repeatability
- Compact, modular design enhances cross-platform compatibility
- For use in semiconductor fabrication and industrial applications

#### **Microwave Generators**

#### **Solid State Microwave Generators**

The SG 624 is a water-cooled, solid state, rack-mountable, microwave generator with adjustable power up to 550 Watts with a frequency range of 2400 to 2500 MHz and uses the latest power amplifier technology resulting in excellent operational efficiency. The SG 1024 has an adjustable power up to 1000 Watts, with a frequency range of 2400 to 2500 MHz and is SEMI S2 certified.

#### 915 MHz Industrial Microwave Generators

GS Series industrial microwave generators provide 15 kW to 100 kW power at 915 MHz in a shielded cabinet with continuous powerline control, safety interlocks, a variety of interface options and optional remote control. The GS series design include the Alter® proven switch mode power supply systems with continuous power control for rugged, light weight and modular microwave generator systems.



# Accessories Microwave Generator

- Autotuner/matching units
- 3-stubs tuners
- Directional couplers
- Linear power sensors

This solution allows for power upgrades for industrial installation needs, offering maximum flexibility in system design.

#### 2450 MHz Industrial Microwave Generators

Alter® 2450 MHz Industrial Microwave Generators are built on MKS Alter product experience and designed with rugged and reliable switch mode power supplies for demanding industrial applications. They offer compact generators up to 15 kW in a 19 inch standard rack with a remote head and integrated isolator.

#### **SmartPower® Intelligent Microwave Generator**

SmartPower® AX2530 intelligent microwave power generator is built on proven experience in designing a rugged, reliable microwave power generator for demanding semiconductor fabrication and industrial applications. The compact AX2530 design architecture incorporates field-proven technology, and combines new design features aimed at improved performance and lower cost of ownership.

#### **Accessories**

MKS offers accessories for microwave generators including autotuner/matching units, 3 stubs tuners, directional couplers, and linear power sensors.



SmartMatch® Intelligent Microwave Matching Unit/Autotuner



AG 340 LC Liquid-cooled Manual 3 Stub Tuner



DC 2340 Directional Coupler



RD 8400 Linear Power Sensor

#### WHY MKS?

#### CRITICAL TECHNOLOGIES

World-class technology and development capabilities for leading-edge processes

### PROVEN

Recognized leader delivering innovative, reliable solutions for our customers' most complex problems





## OPERATIONAL EXCELLENCE

Consistent execution across all aspects of our business

# COMPREHENSIVE PORTFOLIO

Extensive offering of products and services for the markets we serve





#### **MKS Microwave Generators**

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#### MKS Corporate Headquarters

2 Tech Drive Andover, MA 01810 +1 978-645-5500 **MKS INC.** enables technologies that transform our world. We deliver foundational technology solutions to leading edge semiconductor manufacturing, electronics and packaging, and specialty industrial applications.

We apply our broad science and engineering capabilities to create instruments, subsystems, systems, process control solutions and specialty chemicals technology that improve process performance, optimize productivity and enable unique innovations for many of the world's leading technology and industrial companies.

Our solutions are critical to addressing the challenges of miniaturization and complexity in advanced device manufacturing by enabling increased power, speed, feature enhancement, and optimized connectivity. Our solutions are also critical to addressing ever-increasing performance requirements across a wide array of specialty industrial applications.

Additional information can be found at www.MKS.com.

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