




RF POWER SYSTEMS FOR PLASMA PROCESSING

HELIUS™



- Compact rack mount design
- Analog & serial bus interface
- Stable RF power amplifier design
- High efficiency AC mains power conversion with power factor correction
- Internal data logging & event reporting

The **Helius** RF power system is specifically designed for continuous use in semiconductor and industrial plasma processing applications. Proven push-pull RF amplifier topology enables stable output into dynamic plasma load conditions. A microprocessor and memory module provides accurate process control and active hardware management. Many internal operating parameters and all soft (or hard) faults may be monitored and used for process control. Connectivity to the user's system is made possible via analog and RS232 interfaces. The **Helius** product platform is compliant with typical industry accepted regulations.



All subsystems are designed to withstand the rigors of 100% duty cycle industrial environments; heat sinks are constructed from bonded copper plate, enclosures are manufactured from chemically treated metals and electrical components selected to operate well within their typical ratings. Active thermal management coupled with tight control leads to an unparalleled MTBF rating.

WWW.MANITOUSYS.COM

PRODUCT SPECIFICATIONS			
Helius Model #	H30013	H60013	H1K13
Operating Frequency	13.56 MHz Typical Other frequencies are available - Visit the web site for additional information		
Maximum Output Power (Watts)	300	600	1,000
Pulse Operation	Internal pulse capability (adjustable 15Hz to 50KHz).		
RF Output Connection	Type N Female		
RF Output Impedance	50 Ohm output		
AC Mains Requirements	187-240 VAC 50/60 Hz Single Phase		
Cooling Method	Forced Air		
Product Weight	40 Lbs	42 Lbs	44 Lbs
Product Dimensions	19" Wide X 22" Deep X 2RU High		

Manitou Systems also offers OEM and custom products with non standard operating frequencies, special packaging and application specific options. Please consult the factory for additional information.

All models (unless otherwise specified) offer the following features as standard:

- Common Exciter operation (with auto detection).
- Reflected power tolerance of 25 to 40% (of forward power) based on model.
- Programmable process presets.
- Manufactured in the USA

Please contact us for information regarding complementary products such as the **Accu-Match™** and **MTK** impedance matching networks, interconnection cables & output switch modules. These products are designed to operate with all types of plasma source loads.

MANITOU SYSTEMS, INC.

12 South Street Danbury, CT 06810 United States
 Tel.203.792.8797 Fax.203.792.7097
 Email: info@manitousys.com Web: www.manitousys.com

*Technical specifications are subject to change without prior notice.
 See our web site or contact us directly for the latest specifications and pricing.*

July 2005

