



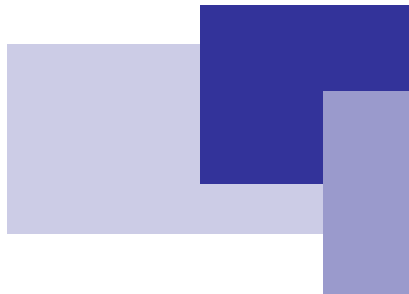
RF POWER SYSTEMS FOR PLASMA PROCESSING

HELIUS HVTTM



- Compact design
- Hybrid RF Amplifier Stages
- Analog & serial bus interface
- VSWR tolerant
- External matching interface
- Internal event reporting
- Fixed frequency design
- Available frequencies 10 > 500 MHz
- Output power levels up to 40kW

The **Helius HVT** RF power system is specifically designed for continuous use in semiconductor plasma processing as well as industrial heating applications. A proven vacuum tube RF power amplifier enables stable output with unparalleled VSWR tolerance into dynamic 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. Multiple RF generator systems are available mounted in a single enclosure.

PRODUCT SPECIFICATIONS			
Helius Model #	HVT1.5K	HVT5K	HVT20K
Operating Frequency	Fixed center frequency +/- 2% for maximum output power rating		
Maximum Output Power (Watts)	1500 CW minimum Up to 3500 in pulse mode	5,000 CW minimum Up to 10,000 in pulse mode	20,000 CW minimum Up to 40,000 in pulse mode
Pulse Operation	Internal pulse capability (adjustable 15Hz to 50KHz).		
RF Output Connection	Type N Female	Type 7/16 Female	Type EIA Female
RF Output Impedance	50 Ohm output		
AC Mains Requirements	187>240 VAC 50 or 60 Hz Single Phase	208, 240 VAC 50 or 60 Hz 3 Phase	480 VAC 50 or 60 Hz 3 Phase
Cooling Method	Forced Air	Forced Air (cabinet) + water cooled power tube	
Product Weight	100 Lbs	150 Lbs	300 Lbs
Product Dimensions	Based on package type		

Please consult the factory for additional information on complementary components such as impedance matching networks, common exciters and phase shifters.

Additional product specifications

- Programmable process presets.
- Typical CW output power levels for Model HVT1.5K
 - 10MHz to 40MHz 2000 watts
 - 40MHz to 250MHz 1500 watts
 - 250MHz to 500MHz 1100 watts

Manufactured in the USA

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

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