



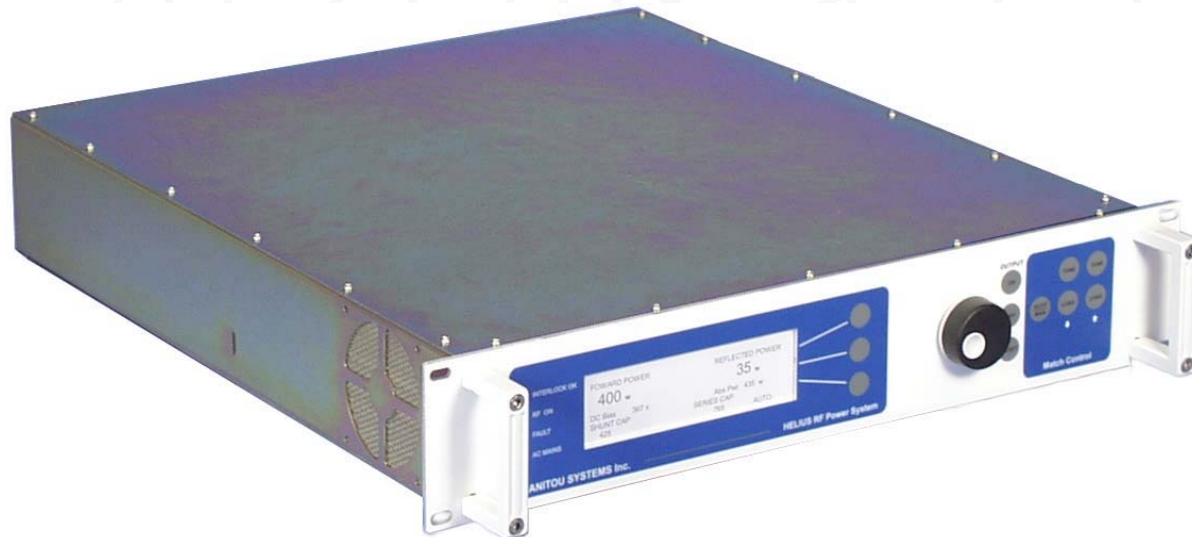
High-powered solutions for RF and microwave applications

Introducing the
HeliusTM RF Power Generator
&
Accu-MatchTM Impedance Matching Network

Society of Vacuum Coaters
San Francisco, CA May 6th, 2003

Helius™ RF Power Generator

- Proven Class “C” RF Operating Parameter
- Full-Featured Microprocessor Control & Data Logging
- Serial Bus Interface



Diagnostic Data Logging & Reporting

- Temperatures measured
 - Supply & Exhaust
 - Heat sinks
- RF section parameters measured
 - Operating voltage
 - Current(s)
 - Amplifier balance
- Serial Bus Interface to output data



Event Reporting

- Hard Faults
 - Temperature maximum
 - Over current condition (RF & DC Sections)
 - Fan rotation (RF & DC Sections)
 - DC Section Boost Voltage
- Soft Faults
 - Reflected power limit
 - Amplifier imbalance
 - Forward RF power limit
 - Internal over-current
- Selectable from *Hard* to *Soft* Faults



Event Reporting

- Operating Events (Helius)
 - Temperature Measurements
 - Supply air
 - DC section exhaust
 - RF section
 - RF heat sink
 - DC heat sink
 - RF outputs
 - Forward power
 - Reflected power
 - Absorbed power



Accu-Match™ Impedance Match

- Precision RF detection
- High quality variable capacitors
- Real time fault and event reporting



Event Reporting

- Operating Events (Accu-Match)
 - Temperature Measurement RF Section
 - Developed DC Bias
 - Capacitor Positions
 - Interlock Status
 - Plasma Light Intensity
 - Servo Motor(s) Current
 - Capacitor End Stops
 - Servo Motor(s) active



Programming Features

- Output Ramp Control (Time)
- CW or Pulse Mode (Pulse Frequency & Duty)
- Output Control Mode (RF_{fwd}, Absorbed, DC Bias)
- Ignition pulse mode (Power Level & Duration)
- Capacitor pre-positions (Optimal Ignition Point)
- Local or Remote Control

