

HIGH VOLTAGE GENERATOR

Rev. E, 01/06

The AG0201HV is a unique source of RF high voltage suitable for a wide variety of applications in industry and research. It combines a number of features that simplify establishment and control of gas plasma. A very accurate broadband power meter senses the power transfer from the power amplifier to the matching network and through to the plasma discharge. **The Analog Signal Processor (ASP)** monitors this transfer and maintains a safe operating condition for the AG0201HV. It displays the levels of Forward Power and Reverse Power in Watts and the amplitude of the HV voltage in volts divided by 10. All of this information is available from the front panel, **the Remote Control and Interface Unit** (optional), and to a PC with the software option. The **ASP** is responsible for the display and control of all critical parameters of the high voltage generation. As a result it maintains an accurate, repeatable plasma process control, while being user friendly as well.



Model # AG0201HV-OS

The AG0201HV may be controlled from the front panel, or from remote device via Sub-D 25 pin analog port or other application specific analog port.

Electrical Specifications

Frequency: 100 kHz to 500 kHz

Frequency stability: < 1% Full Scale

Output Power: 0 to 200 Watts

Ignition Power: > 200 Watts

Output Impedance:

Designed for the best power transfer into high impedance loads.

Power Metering accuracy: $\pm 3\%$ typical

HV Metering accuracy:

Within 10% operating in a matched condition.

High Voltage RF connection:

48" of high voltage cable w/ terminating alligator clips. (Custom Options Available)

Line Regulation: 0.5% @ full power

Forward Power Regulation: $\pm 1\%$ of full scale

Load Mismatch Tolerance: Continuous

Harmonic Distortion:

< - 45 dBc (standard load @ 80 W FWD, 8 kV p-p).

Noise Hum and Ripple:

< - 40 dBc (standard load @ 80 W FWD, 8 kV p-p).

Protection:

Short and open circuit
HV Output - Over voltage

Spurious Radiation: Designed to meet FCC part 18

Operating Temp: 0°C to 45°C

Cooling: Forced Air

Acoustic Level: 45 dBa @ max fan speed & Temp

Humidity: 80 %

Power Required: 90 to 130 VAC, 50-60 Hz, single Φ
190 to 250, change with jumper

Power consumption \gg 400 VA @ full power output

Circuit Protection: Double pole 10A circuit breaker

Output Voltage: 0 to 6 kVp, (12 kV p-p), settings
up to 8 kVp (16 kVp-p) available.

Dimensions: H 5.25" x W 10" x D 15"
134mm x 254mm x 381mm

Weight: 15.5 lbs / 7.5 kg