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# 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  $\Phi$   
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

**We offer various electronic products and engineering services: RF Linear Amplifiers, RF Power Drivers, AC to DC Power Supplies, Microprocessor Based Controllers, Analog Instruments . . .**

**IF YOU CAN'T FIND IT, WE WILL DESIGN IT!**