



RF / DC POWER SUPPLIES

AJAINT.COM/RFDC.HTM

AJA INTERNATIONAL, INC.

GENERAL INFORMATION



International, Inc. offers DC and RF power supplies from 100W to 40kW. DC power supplies feature efficient switching technology, power / current / voltage regulation, arc suppression, remote connector and interlocks. RF power supplies are fully programmable with process storage and power ramping to reduce thermal stress on targets. Manual and automatic matching networks are available. Automatic matching networks include one vacuum and one air capacitor for optimum reliability. Air cooled matching is the standard configuration with water cooled versions available. CE versions of most power supplies can be provided.

AJA 100/300 WATT MANUAL MATCH RF GENERATORS



The AJA International A100RF/A100MM and A300RF/A300MM are manually matched 100 and 300 Watt, 13.56 MHz generators with an integrated 3 way output switch on the matchbox allowing connection to up to 3 loads. These lightweight, air-cooled units are designed to exceed the most stringent vacuum processing demands. They can be used to operate small magnetron sputter sources or for RF plasma biasing of substrate carriers for pre-clean etching or ion assisted deposition. The front panel controls and indicators are logically grouped, with operational status shown on the front panel four line fluorescent display. AJA RF generators incorporate a single surface mount technology printed circuit board for controls and for the RF amplifier. The RF amplifier is powered by a switch-mode power supply.

AJA RF generators utilize Field-Effect Transistors in the exciter and power amplifier stages. The unit operates in a class AB mode providing power accuracy and stability across the entire power range.

AJA 300/600 WATT AUTO MATCH RF GENERATORS



The AJA International A300RF/A300MU and A600RF/A600MU are 300 Watt and 600 Watt RF packages, including a 13.56 MHz generator and automatic matching network. These lightweight, half-rack units are designed to exceed the most stringent vacuum processing demands. They can be used to operate small magnetron sputter sources or for RF plasma biasing of substrate carriers for pre-clean etching or ion assisted deposition. The front panel controls and indicators are logically grouped, with operational status shown on the front panel four line fluorescent display.

AJA RF generators incorporate a single surface mount technology printed circuit board for controls and for the RF amplifier. The RF amplifier is powered by a switching power supply.

AJA RF generators utilize Field-Effect Transistors in the exciter and power amplifier stages. The unit operates in a class AB mode providing power accuracy and stability across the entire power range. For maximum reliability in a wide variety of applications, these RF generators are rated at 50% of their actual design capability, and are protected against excessive Voltage Standing Wave Ratio (VSWR) conditions by limiting reflected power, power amplifier current, and power amplifier transistor dissipation.

The A300RF/A300MU and A600RF/A600MU carry CE Marking (EMC and Safety) and meet FCC regulations for spurious radiated emissions.

AJA DCXS POWER SUPPLY

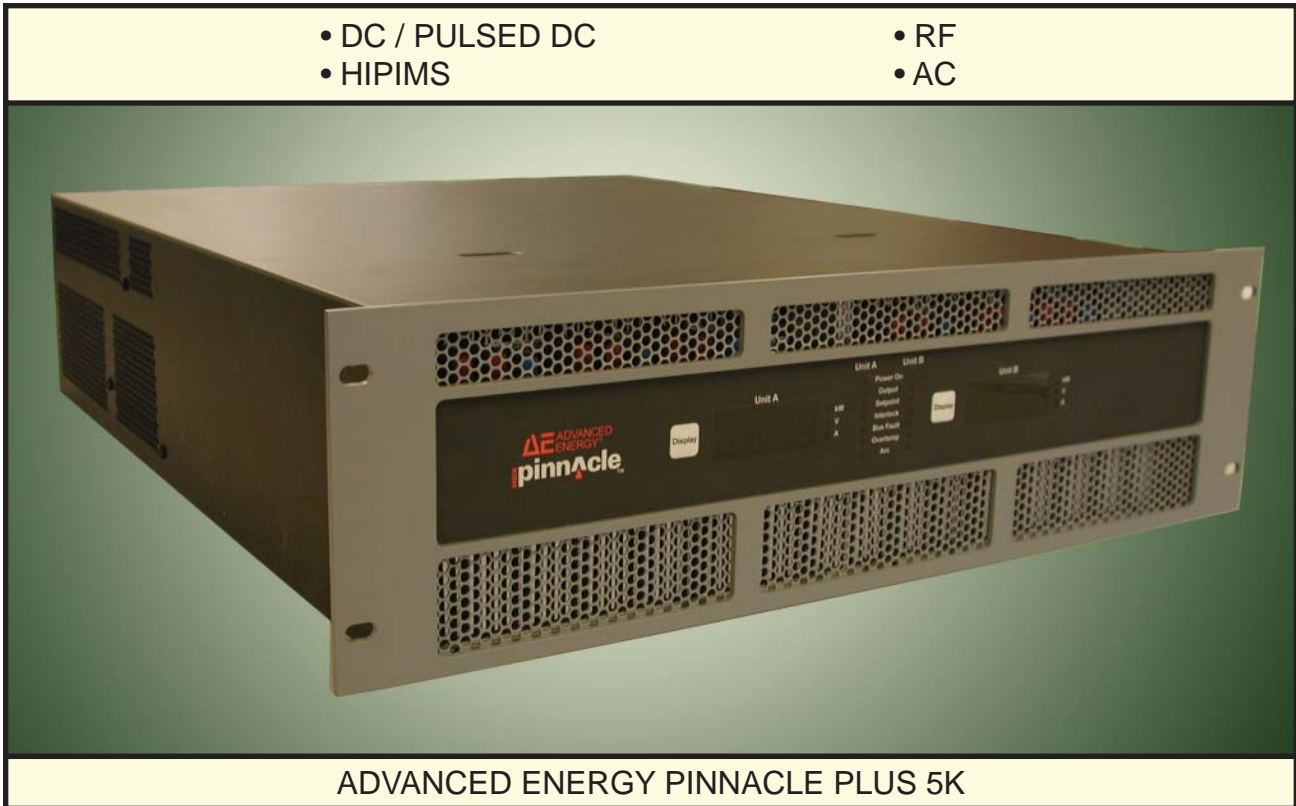


AJA International, Inc. now offers a new generation of switching DC power supplies specifically designed for the R&D magnetron sputtering market. These new units are available in 750 Watt and 1500 Watt sizes and feature integral 3 way or 5 way switch-boxes. Each generator has either 3 or 5 coaxial outputs which are connected to separate magnetron sources. The desired source is selected from either the front panel or via the I/O. The supply also includes 24 V shutter actuation, programmable ramping, deposition timer and shutter delay. These features allow the user to program a complete deposition from strike, to ramp up, to pre-sputter for a selected time, to shutter open for a selected time, to shutter close, to ramp down, to plasma off. This programmed sequence is subsequently initiated with a single command. Finally the supply permits the end user to specify the target material in each source and monitors the consumption of these materials. When the target has been consumed to a user specified point, the supply alerts the user from the front panel by a flashing signal.

ADVANCED ENERGY / PINNACLE PLUS / SPARKLE

AJA International, Inc offers a wide variety of power supplies that are compatible with our production sputtering sources. AJA International Inc. can help you determine what type of power supply best suits your needs based on the type of source you choose, your target size and application. Available options include:

- DC / PULSED DC
- RF
- HIPIMS
- AC



ADVANCED ENERGY PINNACLE PLUS 5K

CHEMFILT HP PULSE DC POWER SUPPLY

Chemfilt IonSputtering is introducing Sinex 2.0-AS14, the latest High Impact Power Impulse Magnetron Sputtering (HIPIMS) power supply. Sinex 2.0-AS14 is a versatile power supply dedicated for use with HIPIMS processes and offers next generation process control with highly ionized sputtered materials.



KEY FEATURES

- 1.4 MW pulsed power
- Simple Operation
- Variable pulse setting
- Arc Suppression
- Firmware upgradeable via PC USB
- Voltage / current monitor outputs
- Standard 19" rack montage