

E-Chuck HV Power Supplies

ECA Series Bi-Polar type 6w 30w

1044-02Ae-1



FEATURES

- Specially designed for Electrostatic Chuck applications
- 2 output channels(1kV to 5kV)
- Bi-polar output
- Built-in RF filter is available(option)
- Fast response with electronically polarity change
- Uses no relay, so high reliability and long life

SUMMARY

This is a high voltage power supply developed especially for electrostatic chuck applications.

The Wafer can be held or released by DC ON/OFF. Smooth release of chuck is also possible by reversing the polarity. This is an useful power supply suitable both for uni-polar systems(2ch) or bi-polar systems.

SPECIFICATIONS

Input voltage/current 115VAC \pm 10% 50/60Hz 1 \emptyset /1Amax(6W) 3Amax(30W)

Chuck ON/OFF

- HV switch on the front panel ON/OFF(for 2ch) ··· Local mode
- Remote switch ON/OFF(for each channel) ··· Remote mode
- Voltage control with potentiometer on the front panel(for each channel)
- Voltage control with external voltage source(for each channel)
- AC input voltage ON/OFF(for 2ch)

Output voltage control

Local : 10-turn potentiometer on the front panel (for each channel)

Remote : external control voltage source(for each channel)
Vcon-in = -10V to +10V
Input Impedance greater than 10k Ω
Front panel toggle switch changes Remote/Local control for both channel
0.1%rms

Ripple

Digital Panel Meter 3-digit digital meter for each channel(voltage \leftrightarrow current select)

Output Monitor

Voltage : -10V to +10V(for each channel)
Current : -10V to +10V(for each channel)
Output impedance 1k Ω

Protection Over current with automatic crossover, over voltage(limited at 110%), output short circuit and arc protection, interlock.

Forced Discharge Function to ground output compulsory for quick discharge by remote control(individual ground terminal for each channel)

Temperature 0°C to 40°C (Operation), -20°C to +60°C (Storage)

Accessories

Input AC cable (with 3pin plug) 2.5meters (1)
Output HV cable with HV-BNC connector on both end 5 meters (2)
(for 10kV model CN-15-MHVP 5meters (1))
Instruction Manual (1)

Power ON Status Power ON(AC115V supply and power switch ON) status by signal at point of contact

Local/Remote Status Local/Remote status by TTL level signal

Over Current Status Over current status (when short circuit) by TTL level signal

LINE UP

MODEL	Output Voltage (each channel)	Output Current (each channel)
ECA-1B6 \times 2	-1kV to + 1kV	6mA
ECA-1B30 \times 2	-1kV to + 1kV	30mA
ECA-3B2 \times 2	-3kV to + 3kV	2mA
ECA-3B10 \times 2	-3kV to + 3kV	10mA
ECA-5B1 \times 2	-5kV to + 5kV	1mA
ECA-5B6 \times 2	-5kV to + 5kV	6mA
ECA-10B0.5	-10kV to +10kV	0.5mA
ECA-10B3	-10kV to +10kV	3mA

OPTION

- LRy** Output relay : Function to separate PS and load electrically by remote control
- LRf(13.56M)** RF filter : 13.56MHz
- LRf(500k)** RF filter : 500kHz
- LVI** Output voltage limiter : 0% to 100% controllable with front panel potentiometer.
- LPo** Polarity change Local : toggle switch
Remote : contact input(for each channel)
- L(220V)** 200VAC to 240VAC 1 \emptyset input
- L(230V)** 210VAC to 250VAC 1 \emptyset input

* Wide range of filter frequency is available optionally Please consult to sales staff.

* Uni-polar type is available.

DIMENSIONS inch(mm)

MODEL	Height(H)	P1	P2	Weight(lb)
ECA-1B6 \times 2	3.5"(89)	3"(76.2)	2"(50)	22
ECA-1B30 \times 2	3.5"(89)	3"(76.2)	2"(50)	
ECA-3B2 \times 2	3.5"(89)	3"(76.2)	2"(50)	
ECA-3B10 \times 2	3.5"(89)	3"(76.2)	2"(50)	
ECA-5B1 \times 2	3.5"(89)	3"(76.2)	2"(50)	
ECA-5B6 \times 2	3.5"(89)	3"(76.2)	2"(50)	
ECA-10B0.5	5.3"(133)	2.25"(57.15)	4"(100)	33
ECA-10B3	5.3"(133)	2.25"(57.15)	4"(100)	