

EB Power Supply [HPS Series]

The HPS series power supplies for electron beam evaporation provides 5/10 and 16kW of power and is designed for stable evaporation.

Due to use of solid-state components the unit is small, lightweight and very reliable.



HPS-1000F



EGC-10S

Features

- ▶ Compact and Lightweight due to Solid-state Design
- ▶ Forced Air Cooling Eliminates the Need for Water Cooling
- ▶ To Minimize Deposition Rate Fluctuations the Unit Utilizes a Constant Current Design Feature
- ▶ Constant Feedback Control Provides a Stable Power Source
- ▶ Noise is Eliminated by Constant Monitoring of the Power Circuits
- ▶ Power Supplies are Designed for the Most Efficient Use of Power

Applications

- ▶ Vacuum evaporation
- ▶ Ion plating

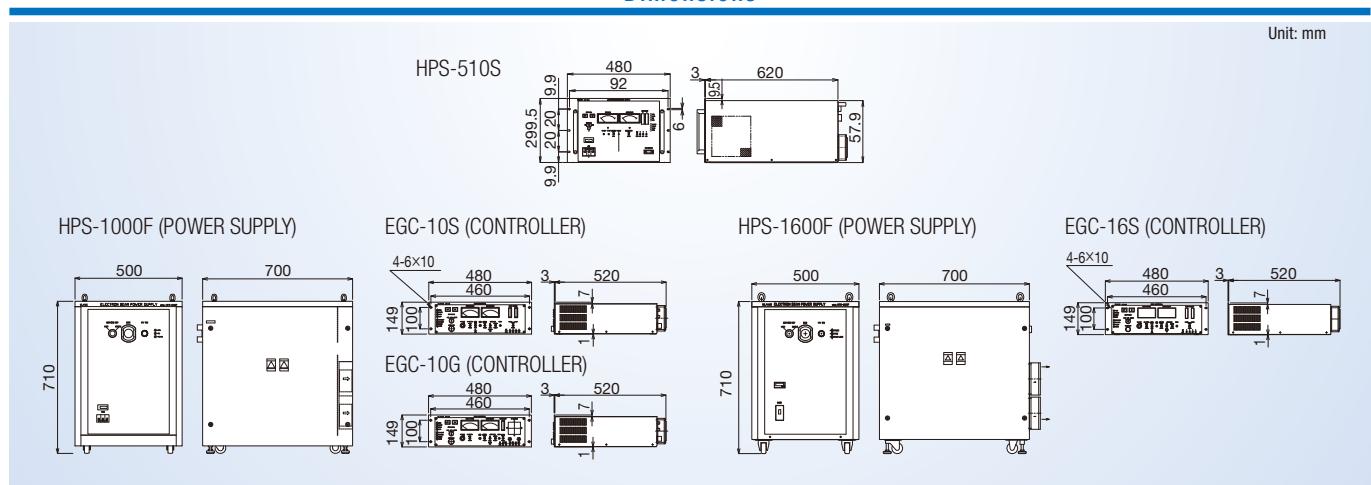
EB Power Supply [HPS Series]

Specifications

Model		HPS-510S	HPS-1000F	HPS-1600F
High voltage output	Voltage		-4 to -10kV	
	Ripple rate		2%p-p or less (at rated power)	
	Stability		1%p-p or less (at rated power)	
	Current	0 to 500mA	0 to 1000mA	0 to 1600mA
High voltage short protection	High voltage shut off time		1 ms or less	
	Reset time	20ms		10ms
	High voltage startup time		2ms (rated 10 to 90%)	
Insulation resistance input	Input		5MΩ or more (at 500V)	
	Input side		AC1500V / 1 minuts	
Insulation voltage tolerance	Output side		DC1250V / 1 minuts	
	Temperature		10 to 40°C (50 to 104°F)	
Use environment	Humidity		30 to 70% (not condensing)	
	Cooling method		Forced air cooling	
Input	Voltage		AC190 to 231V 3φ	
	Frequency		50 / 60Hz	
	Power	7kVA or less	14kVA or less	21kVA or less
	Leak current	10mA or less	5mA or less	
X-Axis magnet output	Current	-0.8 to -3.5ADC	-0.4 to -3.5ADC (S type) ±1.5ADC (G type)	-0.4 to -3.5ADC (Normal type) -1.8 to -16ADC (High power type)
	Sweep frequency	5Hz	5Hz (S type) 60Hz (G type)	5Hz
	Sweep waveform	Triangular wave	DeformationTriangular wave	
Y-Axis magnet output	Current	±1.2A *	±1.2A (S type) ±1.5A (G type)	±1.2A (Normal type) ±2A (High power type)
	Sweep frequency	22Hz *	22Hz (S type) 500Hz (G type)	22Hz
	Sweep waveform	Triangular wave *	Triangular wave	
Deflection magnet output	Current	—	0.2 to 2A (G type)	—
Externally controllable functions		High voltage ON/OFF, Emission control	High voltage ON/OFF, High voltage, Magnet current, Emission control	
Dimensions W×D×H		480mm×620mm×300mm	500mm×700mm×710mm (Power supply) 480mm×480mm×149mm (Controller)	
Weight		50kg	115kg (Power supply) 20kg (Controller)	115kg (Power supply) 20kg (Normal controller) 17kg (High power controller)
Option		• Y-Axis magnet power supply (YPS-005) • Cable length change	• 2 source expansion unit • Beam sweep controller (PSG-004S / PSG-004G)	

* As for HPS-510S, Y-Axis magnet power supply is an option.

Dimensions



ULVAC, Inc. Components Division

www.ulvac.co.jp/eng

Overseas Sales in Japan TEL +81-467-89-2261

USA : ULVAC Technologies, Inc. TEL +1-978-686-7550
 GERMANY : ULVAC GmbH TEL +49-89-960909-0
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 MALAYSIA : ULVAC MALAYSIA SDN. BHD. TEL +60-3-5121-4700
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