GPX Series – Electrostatic Chuck Power Supplies

Gripping Power GPX series electrostatic chuck power supplies are high-power, bipolar and fully-programmable. They can support semiconductor wafer and large area display panel processing and are compatible with Coulombic and Johnsen-Rahbek electrostatic chucks in processes such as ALD, ICP, RIE, PECVD, ion implantation and EUV lithography.

Features
- High-power capability (up to 50W) for driving large-area Johnsen-Rahbek electrostatic chucks
- Efficient switch-mode topology runs cool without forced air
- Output center point can be floating, ground referenced or biased
- Over 8kVDC of galvanic isolation when the outputs are floating
- High voltage output follows user defined chuck and dechuck algorithms
- Up to eight different chuck and dechuck programs can be edited and stored
- Declamp waveform frequencies of up to 10 cycles per second
- Constant voltage and constant current regulation modes
- Operation can be controlled by the front panel, analog and digital I/O or USB 2.0 interface
- EtherCAT® and ModBus TCP/IP network interface options available
- Wafer sensor adapts to various chuck sizes and RF delivery systems
- Supports monopole, bipolar and MultiMode ESC operation
- Small size conserves instrument rack space

Electrical
Input: GPX series power supplies can be factory configured to operate from 24VDC (standard) or 100-240 VAC at 50/60Hz.
Output: Electrically interlocked, GES MCS series six-pin connector.

Mechanical
Dimensions: 82.5mm (H) x 210.3mm (W) x 300mm (D), 2U rack enclosure
Panel Width: 241.3 mm (half-rack)

GPX Series Electrostatic Chuck Power Supplies
GPX600 – 0 to ±6.0kV, 50W bipolar, electrostatic chuck power supply
GPX300 – 0 to ±3.0kV, 25W bipolar, electrostatic chuck power supply
GPX150 – 0 to ±1.5kV, 12W bipolar, electrostatic chuck power supply

GPX Series Options
A – 100-240 VAC, 50/60Hz input power option
E – EtherCAT® networking option
M – ModBus TCP/IP networking option

*EtherCAT® is a registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.*