



## G2 DC POWER CONTROLLER

### G2 POWER CONTROLLER FOR USE WITH IONPURE® CONTINUOUS ELECTRODEIONIZATION MODULES

DC power controllers allow independent control of each Ionpure® CEDI module for optimum system performance. Individual, pre-engineered boards reduce system cost, spare part cost, and simplify power supply maintenance.

The G2 DC Power Controller is a modern and highly reliable solid state rectifier that will succeed the existing single-phase and three-phase Ionpure DC power controllers. A single board takes the place of six previous models, and can be used with MX, LX and VNX Ionpure CEDI modules.

The new G2 Power Controller can be a retrofit for the single-phase 200VDC, 400VDC and 600VDC Ionpure PCBs. While it is compatible with the Ionpure DSP1, DSP1P, DSP8 and DSP8P display boards, advanced control and monitoring features will be available with the release of the G2 display, employing Modbus RTU communication protocol.

### G2 DC Power Controller Features

- Modern, highly reliable high frequency design with filtered output.
- Microprocessor controlled unit.
- On-board diagnostics.
- Universal AC input voltage and frequency.
- Constant current operation.
- 0-5 VDC analog input for DC output current control.
- Analog output signals for remote monitoring (PLC or DCS).
- Automatic power stage shutdown protections:
  - Input over-voltage and under-voltage
  - Unit over-temperature
  - Fail-safe DC power shutdown at open "Remote on/off" interlock
- Additional protections:
  - Input transient
  - Output over-voltage
  - Output over-current and short-circuit
- Several units can be fed from a single transformer secondary.
- Multiple transformer secondary voltage taps not required.
- Every board subjected to extended factory burn-in.

For additional information on our G2 power components or CEDI modules call +1 866.876.3340 or visit our website at [www.ionpure.com](http://www.ionpure.com).

## COMPLETE ELECTRICAL SPECIFICATIONS:

### AC Input:

- Universal voltage: 220 - 660 VAC
- Phase: single
- Frequency range: 50/60 Hz  $\pm$ 3%

### DC Output:

- Output voltage range: 30 - 600 VDC  
(maximum DC output voltage is approximately 90% of RMS AC input voltage at light load)
- Output current range: 0 - 13.2 ADC
- Constant current mode of operation with selectable DC output voltage limit

### Input and Output Connectors:

- AC Input terminals
- Analog input: 0 - 5VDC (for DC output current control)
- Remote on/off interlock input (dry contact)
- DC output terminals (+, - and ground)
- Analog outputs: 0 - 5VDC (for voltage and current monitoring)
- N.O. relay output ("Output ON" indicator)

### Protections:

- Soft-start
- Selectable current range: 0 - 2.5, 0 - 4, 0 - 6.5, 0 - 10 and 0 - 13.2 Amps
- Transient voltage, over-voltage (+10% of Max), over-temperature and short-circuit protections
- Shutdown at open interlock

### Mechanical:

- Touch-safe connectors
- On-board cooling fans. Ambient temperature lower than 50° C (122° F) is required.

### LED Indicators:

- Output ON
- Fault (e.g. high voltage, low voltage, communications loss, etc.)

### Standards:

- UL recognized component (US and Canada)
- CE
- RoHS compliance

### Environmental Requirements:

- Operating temperature: 0 - 50° C (32 - 122° F)
- Storage temperature: -10 - 70° C (14 - 158° F)
- Humidity: 0 - 95% (non-condensing)

### Physical Specifications:

- Length: 6.12 in (155.58 mm)
- Width: 6.00 in (152.4 mm)
- Depth: 6.56 in (166.64 mm)
- Weight: 6.3 lb (2.9 Kg)

### Ordering Information

G2 Power Controller Model Number	IP-POWER600-G2
G2 Power Controller Order Number	W2T388687

All current Ionpure® system display boards are compatible.

- IP-DSP1
- IP-DSP8
- IP-DSP1P
- IP-DSP8P

Note: Use ONLY LX patch cables IP-LXCABLE06, IPLXCABLE10 or IP-LXCABLE16 for installation with the above display units.



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