



DC3 POWER SUPPLY FOR IONPURE® CEDI AND NEXED® EDR MODULES

3-PHASE DC POWER CONTROLLER

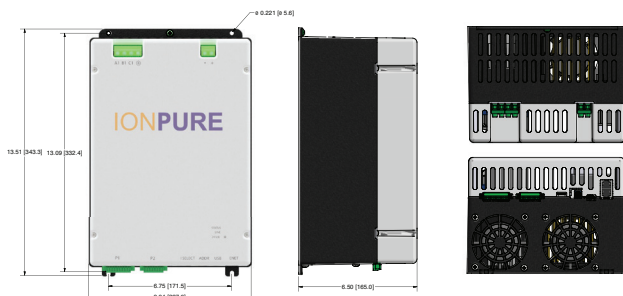
Our most Advanced Power Controller to-date, Digital Communication 3-Phase switch-mode power supply (DC3) combines microprocessor-controlled DC power processing with built-in electrical isolation and MODBUS® TCP communication.

DC3 provides the best solution for providing constant control of current, voltage or power to IONPURE® Continuous Electrodeionization (CEDI) and NEXED® Electrodialysis Reversal (EDR) modules for optimized system performance and allows for a more cost effective and simplified solution for electrical system design.

DC3 is a fully enclosed, touch-safe (IP20) power supply capable of providing 0-600 Volts DC and 0-15 amps output. Its heat-sink chassis and dual fans allow for maximum heat dissipation with low noise level while maintaining a compact design.

HIGH-AMPERAGE PARALLELING ACCESSORY UNIT

For High TDS NEXED EDR application, requiring higher amperage to achieve maximum salt removal, the paralleling board accessory allows the ability to combine up to 3 DC3 units to provide up to 45-amp DC at 600VDC maximum.



DC3 Power Supply shown above.

DC3 Features and Benefits

- DC output designed to optimize IONPURE CEDI and NEXED EDR module performance
- Direct connect from line power, no isolation transformer required
- 380-480 VAC, 50/60Hz
- High efficiency, 3-phase switch mode power supply, for reduced power consumption vs traditional SCR power products
- MODBUS TCP- Ethernet connection
- Adjustable DC voltage and current via external HMI* or PLC
- On-board diagnostics and alarms
- LED Power and Status indicators
- Daisy chain thru Ethernet for monitoring of an unlimited number of power supplies from a central location
- Programmable constant control of current, voltage or power
- Combine up to 3 units for high amperage applications*
- Manufactured in the USA
- Meets applicable international standards
- Short circuit and transient protection

For additional information of IONPURE Products visit our web site at www.ionpure.com. Follow us on twitter @IONPURE_CEDI.

*Sold Separately
*Paralleling accessory required

Input Specifications

Line Voltage (Auto Ranging)	380 - 480VAC (3-Phase)
Operating Range	323 - 528VAC
Phase	Three (3) - L1, L2, L3, Ground
Frequency (Auto Ranging)	45-65Hz
Power Factor ¹	0.92

¹Power factor calculated at full load capacity

Output Specifications

Amperage DC	0.1-15
Current Regulation	+/- 150mA
Max Compliance Voltage DC	600
Isolation (input to output) V RMS	3750 VAC
Current and Voltage Retransmit	4-20mA Analog
Power and Status Indicators	3x LED
Current Limiting	Dip Switch 0-2.5 0-4 0-6.6 0-10 0-13.2 0-15

Communications

Programming Port	USB
Programming source	PC or Thumb Drive ²
Fieldbus Protocol	Modbus TCP - Cat5+ Ethernet
TCP IP Address setting	Rotary Dial ³

² Thumb drive only for programming of IONPURE touch panel display

³ Also settable via IONPURE power panel software

ORDERING INFORMATION

Order Number	Model Number	Description
W2T827150	IP-DC3PH600V-M1	DC3 Power Supply, 3-phase 0-600V, 0-15A DC
W2T829935	IP-POWERDSP-TP	4.3" Touch Panel Display
W2T847507	IP-PB600V45A-1	Paralleling accessory, combine upto 3 DC3 Power supply for up to 45A output

Physical Specifications

	DC3 Power Supply	Paralleling Accessory
Weight	8.61 Kg (19 lbs)	1.27 Kg (2.8 lbs)
Width	22.71 cm (8.94")	8.25 cm (3.25")
Height	34.32 cm (13.51")	19.20 cm (7.56")
Depth	16.51 cm (6.5")	12.93 cm (5.09")
Power Terminal Strip	14 - 10 AWG	N/A
I/O Terminal Strip	16 - 26 AWG	3 - 14 AWG

Environmental Specifications

Ambient Operation Temperature	0 - 50 °C (32 - 122 °F)
Storage Temperature	-15 - 70 °C (5 - 158 °F)
Humidity	Relative Humidity up to 95% non-condensing
Altitude	< 6000 ft
Air Flow / Cooling	Heat-sink / Forced air

Protections

Automatic Power Stage
Over-voltage
Under-voltage
Shorted Output
Input transient
Over temperature
Chassis and Output ground
Conformal Coated

