270V, 48 CH SOLID-STATE POWER DISTRIBUTION UNIT

RTips Technologies

Product Brief





270-volt Solid State Power Distribution Unit (PDU). The unit provides 32-15A and 16-7.5A channels with a total capacity of 600 amps. The channel rating for each channel is user-programmable over a 10 to 1 range. To support larger current loads, the outputs of multiple channels with the same maximum capacity may be paralleled. In addition to ON/OFF switching, the PDU provide control of their output rise and fall times. This minimizes EMI emissions, and reduces inrush currents for switching into reactive and lamp loads.

Features of 270V 48-Channel PDU

- 270 Volt SSPC Boards
- Total PDU Current Capacity of 600 amps
- 48 Independent Load Channels
- 7.5A, 15A Channels with 10:1 Current Programmability
- Channel Paralleling for High Current Loads
- Instant Trip and I²t Protection / Thermal Memory
- Controlled Rise/Fall Times
- Low Power Dissipation Across Channels
- Continuous Built-In Test (BIT)
- Trip Override (Battle) Mode
- Communication Bus Interface Options
 - Ethernet
 - SAE J1939 CAN Interface (250K, 500K, 1MBaud)
 - o Serial RS485 Interface, Programmable
- D38999 Connectors on facia for reliable & robust connectivity
- Operating Temperature: -40 °C to +55 °C
- Storage Temperature: -40 °C to +85 °C

Mechanical Specifications

- Dimensions (inclusive of connectors)
 - o 482mm X 176mm X 400mm
- Finish: Machined Aluminum, Powder Coated Black
- Conduction Cooled
- IP rating: IP65

Interfaces

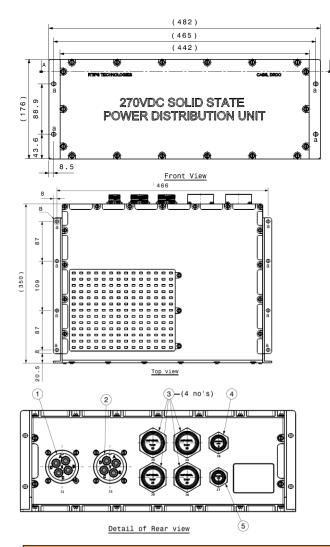
- Ports/Connectors:
 - o 100BaseT Ethernet x 1
 - o CANbus x 1
 - o RS485 x 1
- 28V I/O for Trip Status, Discrete Control, External Reset, Battle Override

Accessories Supplied

- Mounting brackets for 19-inch Rack
- Mounting brackets for table top installation

For ordering assistance and technical support

Mechanical Outline



Benefits

- High Reliability
- Very Rapid Short Circuit Deactivation Protects Wires, Loads, and SSPCs
- I²T Overload Protection Avoids Nuisance Trips
- Reduced Weight and Volume
- Controlled Rise/Fall Time for EMI Reduction, Reduced Inrush Currents
- Reduced Inductive Transients during Turn-Off
- Low Power Dissipation
- Provides Prognostics / Diagnostics Data
- Enables Preventive and Automated Maintenance
- Power Profiling and Analysis
- Crew Offloading

Applications

- Vehicle Primary Power Switching
- Military Land Vehicles
- Unmanned Systems (UGVs, UAVs)
- Weapon Systems
- Military and Commercial Ships

Ordering Information

Part Number	Channels
RT-SSPDU-270V-48	48

* For 28V DC and 110V A/C options contact RTips Technologies

Included Software

- Power Management Application
- Libraries for communication and custom application development
 - NET and C++ for Windows
 - o C++ for Linux

For ordering assistance and technical support

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