## 28V, 80 CH SOLID-STATE POWER DISTRIBUTION UNIT

## RTips Technologies

**Product Brief** 





28-volt Solid State Power Distribution Unit (PDU) uses the Solid State Power Controller (SSPC) boards of **Power Device Corporation**, **USA**, and provides 10A & 25A channels with a total capacity of 960 amps. The trip limit of each channel is user-programmable over a 10 to 1 range. The outputs of multiple same-rated channels can be paralleled to support larger current loads. In addition to ON/OFF switching, the PDU provides controlled rise and fall times which minimizes EMI emissions and reduces inrush currents for switching into reactive and lamp loads.

### Features of 28V 80-Channel PDU

- 28 Volt SSPC Boards
- Total PDU Current Capacity of 960- amps
- 64 x 10A, 16 x 25A Channels with 10:1 Current Programmability
- Channel Paralleling for High Current Loads
- Instant Trip and I<sup>2</sup>t 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
  - o 2 x Gigabit Ethernet
  - o SAE J1939 CAN Interface (250K, 500K)
- Local/Remote override for channel control using toggle switches
- Emergency Switch
- Vacuum Florescent Display
- D38999 Connectors on facia for reliable & robust connectivity
- Off-the-shelf GUI for control & monitoring
- Linux/Windows communication library for custom UI development

### **Mechanical Specifications**

- Dimensions (inclusive of connectors)
  - o 482mm X 176mm X 400mm
- 19-inch rack mount form factor
- Finish: Machined Aluminum, Black Anodised
- Conduction Cooled

#### Interfaces

- Ports/Connectors:
  - Gigabit Ethernet x 2
  - o CANbus x 1
- 28V I/O for
  - Trip Status
  - o Discrete Control
  - External Reset
  - Battle Override

### **Accessories Supplied**

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

### **Environmental**

- Operating Temperature: -40 °C to +55 °C
- Storage Temperature: -40 °C to +85 °C

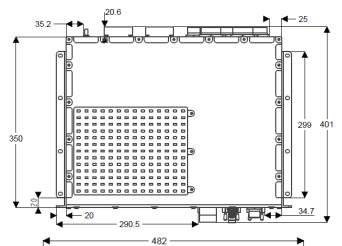
### For ordering assistance and technical support

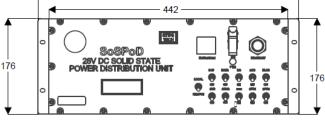
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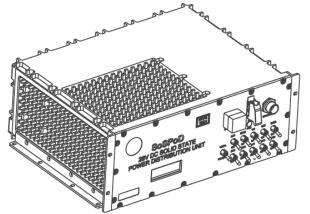
# 270V, 48 CH SOLID-STATE POWER DISTRIBUTION UNIT

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### **Mechanical Outline**





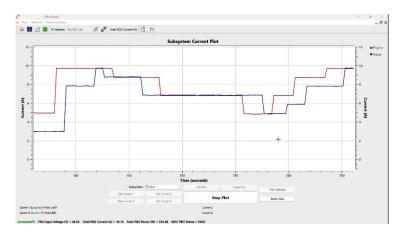


### **Benefits**

- High Reliability
- Very Rapid Short Circuit Deactivation Protects Wires, Loads, and SSPCs
- I<sup>2</sup>T 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
- Local switch bypass for critical channels

### **Applications**

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



### **Ordering Information**

Part Number	Channels
RT-SSPDU-28V-80	80

\* For 110V AC & 270V DC options or different combination of channel ratings contact RTips Technologies

### **Included Software**

- Power Management Application
- Windows and Linux GUI for Channel Monitoring and Control
- Libraries for communication over Ethernet and CANbus for custom application development
  - .NET and C++ for Windows
  - o C++ for Linux

### For ordering assistance and technical support

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