DC SMARTStart® Gen II

300 Amp Ultimate Turn Key Ready-to-Integrate DC Power Distribution Device

Rugged Intelligent 24/28 DC Power Management with Solid State Technology

The **DC SMARTStart Gen II** is a turn-key out of the box remote manageable -48, +12, or 24/28 VDC Solid State power distribution unit. This device distributes, monitors, and controls up to 300 Amps of +24/28 VDC at power densities of 40 w/in and provides fault protection to a range of high current loads. Three output channels provide up to 100 Amps each in the current carrying capacity. The **DC SMARTStart Gen II** applies years of Solid State design & packaging experience into a totally integrated package. It is also capable of withstanding the extreme terrain and climate conditions that today's combat vehicles face.

The Master **DC SMARTStart Gen II** offers the designer a hardware solution that is user scalable on a per channel basis during integration or in the field, individual channel load (current) draw, input source voltage monitoring during critical silent watch operations to initiate load shedding non critical mission hardware. The **DC SMARTStart Gen II** on its own or with a series of utility multichannel **DC SMARTStart Gen II** units become an integrated

Features & Capabilities

- Operating Voltage: -48, +12, or 24/+28 VDC
- Six Output Power Connectors
- Channel Rating up to 40 Amps
- Isolated Channels Prevent Adjacent Channels from Tripping
- Remote operation via J1939 Compatible CANbus,TCP-IP/ Telnet, or SNMP
- Remote breaker channel output On/Off/Trip
- Remote monitoring of current and feedback
- Ruggedized LAN Connector
- RJFC2G Protective Cap
- Independent Battery Distribution per Channel
- Over Current Protection & Current Limiting with Start-Up Circuit
- Fully Programmable Sequence & Delay on a per Channel Basis
- Auto-Reset for Each Individual Channel
- Compact yet Durable Chassis
- Environmentally Rugged Design
- Operating Temp Range of: -46°C to +65°C
- Water Tight Design
- Dissipates Heat via Convection (No fans are used)
- ESD Protection
- Load Shedding

suite in the effective distribution and management of the 24/28VDC non primary power systems of many vehicles or vessel platforms.

Spectrum Power has developed an assortment of technologies that greatly enhance the quality of life and mission reliability and success in the military environment. In addition, clients who have challenged us to deliver these advanced capabilities have been equally surprised by the space and weight savings that have been achieved over legacy products.

Superior Reliability for Mission Critical Applications

- Tactical Wheeled Vehicles
- Unmanned Vehicles
- Unmanned Vessels
- Tactical Operations Centers
- Mobile Command Posts
- Modular Equipment Packages
- Test & Simulation Equipment
- Communications Base Stations
- Defense ATE Equipment
- C4ISR
- Towed Generator Platforms

Designed to Meet MIL-STD 810F Environment Standards

- Thermal Shock
- Salt Fog
- Blowing Sand
- Blowing Dust
- Fungus
- Shock
- Vibration
- Water Tightness to IP67
- Ground Bond
- Mechanical Shock
- MIL -STD-1275D for Vehicle System Power Supplies
- MIL-STD-1686C ESD Control
- MIL-STD-461E EMC Compliance

Specifications	74ST3003H	74ST10012H
Input Connector	J1 (MIL-C-5015) MS3102R32-1P	J1 (MIL-C-5015) AIB2-24-9SC-RDS
Input Voltage	24/28 VDC	
Efficiency (Typ.)	99%	
Channel Count	3 Channels	12 Channels
Output Connectors	J2-J4 MS3102R20-2S	J2-J7 (MIL-C-5015) AIB2-18-10S 2 PAIR + 28VDC & RETURN EACH 25 AMP MAX
Channel Options	• 3 Channels @ 100 Amps Max • 2 Channels @ 50 Amps Max, 1 Channel @ 100 Amps Max • 12 Channels @ 25 Amps Max • 16 Channels @ 25 Amps Max • 14 Channels @ 25 Amps Max, 2 Channels @ 100 Amps Max	Scalable to 25 AMPS MAX*
Total Output Current Rating	Up to 400 Amps Max.	*100 AMPS MAX TOTAL TVP
Circuit Protection	Solid State	
Output User Configurable Trip Current	Channel trip setting configurations of 10A Min to 100A Max per channel	Channel trip setting configurations of 1A Min to 25A Max per channel
Communications Interface (Optical-Isolation)	TCP/IP, TELNET, RS232 Serial Interface, or J1939 Compatible CANbus (optional)	
Operating Temperature	-46°C to +65°C	
Dimensions	12"L X 6"W X 2.5"H	10" L X 8"W X 2"H
Power Density @ 30VDC	40 w/in	18.8 w/in

*** There are numerous configurations and power ratings available beyond those noted on this data sheet**