

DC SMARTStart® Power Distribution Series

DC Solid State Switched Power Distribution with Remote Cycling Capability:
Available in -48 or +24/+28 VDC











The API Technologies DC SMARTStart® solid state switched power distribution unit (PDU) reliably cycles -48 VDC or +24/+28 VDC input power to devices with DC power supplies. The DC Switched PDU uses specialized electronic switchable solid state breakers to provide a true remote power cycling capability. To minimize downtime, the breaker auto reset function can be activated. Then the on-board SMARTStart® computer will pole the tripped channel position to determine whether there is a fault, such as a short circuit. If this condition is determined to be non catastrophic, the breaker is reset. The unit also features integral circuitry to provide LVD and OVD protection automatically.

Using a visual basic interface, an operator can power cycle all 12 solid state breakers as well as the 2 Remote Operated Circuit Breakers (ROCB) mains breakers. (Refer to the Solid State Breaker Ratings table for respective trip currents.) Operators can program the power up/down sequence and power up/down delays for each channel, along with the low voltage disconnect (LVD) and over voltage disconnect (OVD) thresholds. The PDU monitors line voltage, circuit breaker status and internal temperature to provide the required power and circuit protection to connected equipment. Operational control is performed either manually by front panel push buttons or remotely through either an RS-232 serial console port 10/100 BASE-T or LAN TCP/IP socket or telnet session.

There are numerous ROCB values available that provide primary current protection to the PDU and down stream equipment powered by the PDU. The ROCBs are UL listed primary circuit protection for the six outputs on side A and B. The high current, direct feed version provides easy power cycling to -48 VDC powered routers/switches, DSLAMS and other enterprise-related equipment via remote activated circuit breakers rated up to 100 Amps.

The DC SMARTStart® and power monitoring set have been employed together or individually in various applications in many industries.

Features

	-48 VDC or +24/+28 VDC input power; voltage configurable for International use
	User defined power up sequence order and delay & current limiting. Fully programmable sequence & delay on a per channel basis
	Solid state electronic circuit breaker technology; Auto reset to nuisance trip breakers - user configurable
	Monitors line voltage, circuit breaker status, and internal temperature of the PDU, LVD & OVD On board 6 month event log
	LAN TCP/IP socket, Telnet connection or RS-232 serial console port remote control capability SNMP agent on board Flash upgradable in the field
	Front Panel push buttons for local output control. Output status is displayed through individual tri-colored LEDs for each output.
	EMI filtering to protect against noise and interference
	Independent programmable power on and off sequencing delays to reduce/manage the level of inrush current transients

Technical Specifications

Specifications	Distributed Output P/N				Direct A and B P/N		
	7832S30	7832S3024	7832S60	7832S6024	7832RB050	7832RB080	7832RB100
Input Voltage VDC	-48	+24	-48	+24	-48	-48	-48
Input Current	30 Amps	30 Amps	60 Amps	60 Amps	50 Amps	80 Amps	100Amps
Individual Output Steady State Load Max	5 Amps	5 Amps	10 Amps	10 Amps	50 Amps	80 Amps	100Amps
Factory Set Trip Current Nominal	4.8 Amps	5.9 Amps	11.2 Amps	11.2 Amps	60 Amps	100 Amps	120Amps
Input Connection	Non-rotational terminal block 5/8" centers, 1/4-20 threads				Non-rotational terminal block 5/8" centers, 1/4-20 threads		
Output Config.	6 A, 6B	6 A, 6B	6 A, 6B	6 A, 6B	1 A, 1B	1 A, 1B	1 A, 1B

Electrical and Mechanical Specifications	
Input Voltage	-48, or +24 VDC
Size (Overall)	17.25"W x 1.75"H x 8.00"D (43.8cm W x 4.44cm H x 20.4cm D)
Weight	13.3 lbs. (6.1 kg)
Operating Temp.	0 - 45°C (32 - 113°F)
Operating Humidity	0 - 95% (non-condensing)
Operating Elevation	0 - 10,000 ft. (0 - 3000 m)

Solid State Breaker Rating				
		Trip Curve		
Steady State Amps	Factory Set Trip Current	Slow (51-110 msec)	Medium (11-50 msec)	Fast (<10 msec)
3	3.45	✓	✓	✓
5	5.75	✓	✓	✓
7.5	8.625	✓	✓	✓
10	11.5	✓	✓	✓
15	17.25	✓	✓	✓
20	23	N/A	N/A	✓

Military Applications

- Unmanned Vehicles
- Command Post Platforms
- Simulators
- Competitive Local Exchange Carriers (CLECs)
- Incumbent Local Exchange Carriers (ILECs)

Commercial Applications

- XDSL applications, CATV enterprises
- blade servers
- Power several devices including blades, servers, switches, communications equipment

UL listed and NEBS Level 3 certified. Complies to FCC and CE requirements.



Rev: 11/12/14