



SC-DD1628S0AF-0



SC-DD2028S0AF-0

Purpose-Built DC PDUs from Spectrum Control

Intelligent power you can trust.

Built for Mission-Critical Applications

Our PDUs are engineered for performance in the toughest conditions—extreme temperatures, shock, vibration, and moisture. Whether in a lab, field, or mobile platform, you can count on Spectrum Control for dependable power delivery.

- Operating range: -40°C to +70°C
- Shock & vibration resistant
- Rapid restart for maximum uptime

Intelligent Control, Anywhere

Stay in control—locally or remotely. Our PDUs offer programmable monitoring of current, voltage, and temperature per port. Configure alerts, set limits, and sequence start-up with precision.

- Per-port monitoring & control
- System logging & fault alerts
- Web Server Interface
- Secure remote access
- OLED Display Standard on 1628, Optional on 2028

Engineered for Long Life Cycles

Spectrum Control PDUs are for longevity using high-performance components with long-term availability in mind. Designed to support extended lifecycles and field upgrades.

Tested. Trusted. Proven.

Our field-proven PDUs are designed and qualified to meet or exceed military and industry standards, including:

- MIL-STD-810H: Environmental & Mechanical
- MIL-STD-461G: Electromagnetic Compatibility

Available Models

SC-DD1628S0AF-0: Two 80A Banks

SC-DD2028S0AF-0: Two 100A Banks (available 1Q2026)

Specifications:

Input Characteristics

Voltage	10-33VDC
Total Current	SC-DD1628S0AF-0 – 160A (80 per Bank) SC-DD2028S0AF-0 – 2028 200A (100A per Bank)
Inputs	2 x 1-Pole/110A Breaker w/ high current input lug connections (1/4in – 20in)
Power Dissipation	SC-DD1628S0AF-0 – 9W internal, 25W nominal at rated current SC-DD2028S0AF-0 – 12W Internal, 35W nominal at rated current
Input Monitoring	Voltage measurement +/- 1% Current measurement +/- 5% Temperature
Transient/Surge Protection	TVS Diode – Bi-directional Voltage Transient / Surge Protection / 30kW peak pulse capability, 1.0 pS fast response
Reverse Polarity Protection (2028 Only)	-70VDC

Output Characteristics

Voltage	10-33VDC 2 Banks, 100A per Bank, Two 50A and Four 20A Ports per Bank
Banks	SC-DD1628S0AF-0 – 2 Banks, 80A per Bank, 5 Ports per Bank, 40A Maximum per Port (50A peak surge) SC-DD2028S0AF-0 – 2 Banks, 100A per Bank, Two 50A and Four 20A Ports per Bank
Output Ports	Anderson PP15/45 Series with Retention Screw 2x2 for 40/50A Ports and 2x1 for 20A Ports
Output Monitoring per Port	Voltage measurement +/- 1% Current measurement +/- 5% Temperature

Mechanical Characteristics

Material	Aluminum
Finish	Powder Coat, Black, Fine Texture
Lettering	Silk Screen, White
Mounting	Brackets accommodate Front or Mid Mount, Integral Front Rack Mount Bracket
Weight	5kg

Specifications Continued:

Communication

USB Type B

10/100/1000 Base-T (RJ-45 Connector)

Supports SNMPv1/2c-3

Operation Environment

Operating Temperature	-40C to +70C
Storage Temperature	-40C to +80C
Relative Humidity	0 – 90% (non-Condensing)
Elevation	0 – 3,050 meters

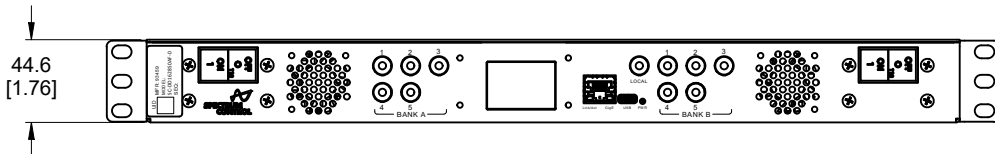
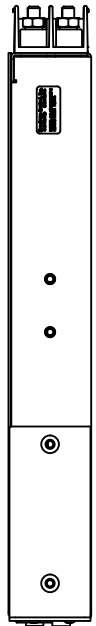
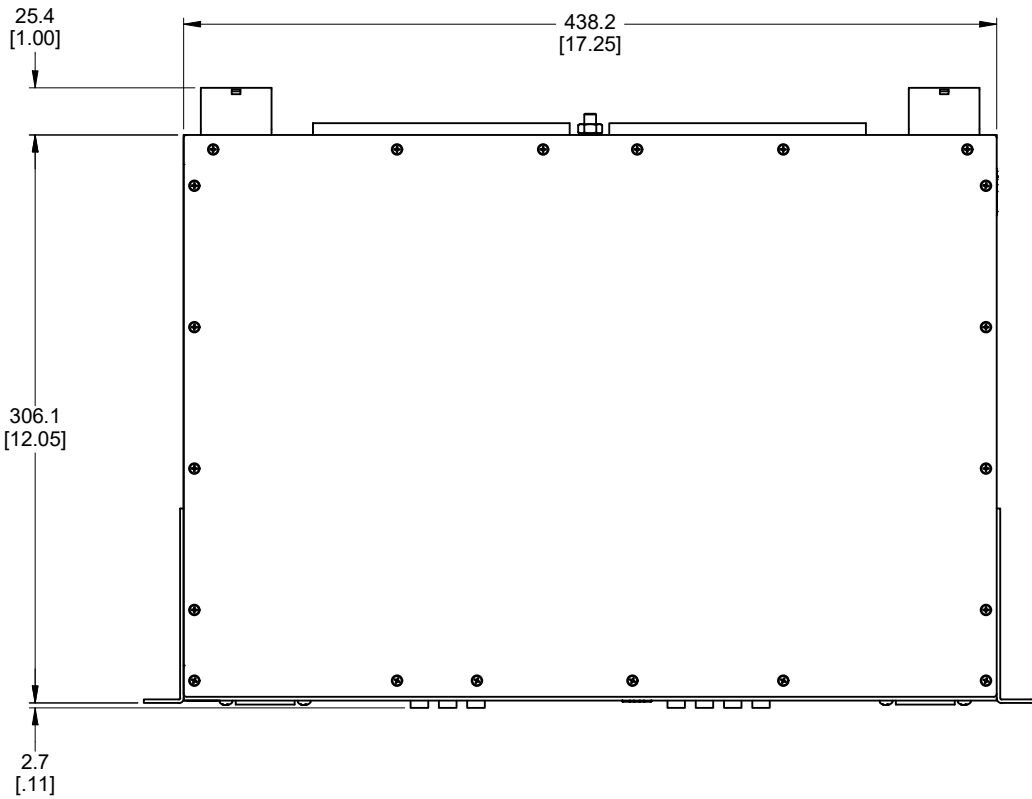
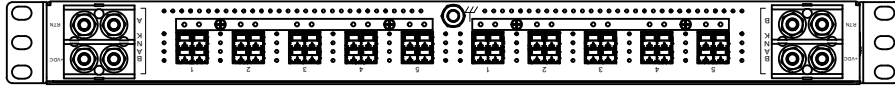
Internal and External Temperature Sensing

Environmental

MIL-STD-461G	501.7 Procedure II
MIL-STD-810H	507.6 Procedure II
	514.8 Procedure I
	516.8 Procedures IV & V



Dimensional Drawing: SC-DD1628S0AF-0



Dimensional Drawing: SC-DD2028S0AF-0

