

C4ISR VEHICLE POWER

The C4ISR Power Distribution Unit (PDU) is a combat proven rugged vehicle mounted assembly providing filtered, circuit breaker protected, DC power to vehicle communications, intercom, jamming and other sensitive electronic equipment.

The PDU includes isolated EMI filtering and fast-transient protection. Toggle switch circuit breakers provide selective power shutdown and embedded low-level LED indicators provide immediate system status indication. A reverse-battery protection diode prevents accidental damage to connected equipment.



An innovative legend design allows rapid re-labeling of the system circuit interconnects. Three optional mounting brackets simplify installation.

GENERAL SPECIFICATIONS

Part Number: 0589A01

Dimensions: 16" x 9" x 3.75"

Weight: 22 Lbs.

Enclosure:

- 0.125" Welded Aluminum Chemical Conversion Coated per Mil-C-5541, Class 3 Urethane Powder Coat EMI Gasketed Cover

Electrical:

- DC Input: 0-36 VDC—100A @ -40C to 55C Derated to 80A @ 65C, Isolated Ground (Up to 80 Vdc Maximum Input Voltage with adjustment to Fast Transient Protection Level)
- DC Input Connection: 3/8" Isolated Power Studs
- DC Output Connection: Two—8 Position, Covered, Terminal Blocks, #10 Studs
- DC Breakers: 1 x Master Power—80 A (Customized as required)
- Toggle Switch I/O: 8 x Filtered Output Power—2@ 5A, @ 10A, 2@ 20A, 2 @ 30A
- DC EMI Filter: Isolated EMI/RFI Filter, UL1283, CSA 22.2 #8 & EN 60950
- Fast Transient Protection: 25 Joules Clamp ~45Vdc (Mil Std-1275 Vehicle Power)

Electrical Cont'd:

- Reverse Battery Protection: 600A Reverse Battery Diode— Trip 4 Main Circuit Breaker
- Front & Rear Polycarbonate Overlays. (1) Embedded LED Power Indicators (2) Re-Legendable Front Overlay with Blank Panels for Hand Written Legend
- Rugged Switch Guard

Circuit Breaker Mechanical Specifications

- Endurance: 10,000 ON-OFF Operations @ Rated
- Current and Voltage Trip Free: Circuit breaker will trip on overload, even when the actuator is forcibly held in the ON position
- Trip Indication: The actuator moves positively to the MID- OFF position when an overload causes the circuit breaker to trip. (Power Indication LED on Front Overlay provides secondary trip indication).

Environmental:

- Designed and tested in accordance with requirements of specification MIL-C-55629 and MIL-STD-202 as follows:
 - Shock: Mil-STD-292 Method 213
 - Vibration: Mil-STD-202 Method 204
 - Moisture Resistance: Mil-C-55629 per MIL-STD-202 Method 106 Operating
 - Temperature -40C to +85C