



PSA1554 Rack accommodating 500-1500W (DC)
Up to 3 PSM500 Power Supplies



Features

- Accommodates up to 3 power supplies
- Hot Plug N+ 1
- 4 individually current limited output to protect wiring

Applications

- Power Over Ethernet
- Telecommunications
- Network Redundant Power Source
- Servers

Safety Approvals (per module)

- CE
- cUL/UL

Mechanical Characteristics

- Length: 437.7mm (17.2in)
- Width: 355.4mm (14.0in)
- Height: 43mm (1.7in)
- Weight: 8.2Kg (18lb.)

Output Specifications (per module)

| Model | DC Output Voltage | Load | | Ripple (1) P-P (max) | Regulation | |
|------------|-------------------|------|------|-------------------------|------------|------|
| | | Min. | Max. | | Line | Load |
| PSM500-210 | 50V (Main) | 0A | 10A | 1% | ±0.5V | |
| | 12V (Standby) | 0A | 1.5A | | | |
| PSM500-216 | 56V (Main) | 0A | 9A | 1% | ±0.5V | |
| | 12V (Standby) | 0A | 1.5A | | | |

Note: (1) Measured with by-pass capacitors 0.1uf/10uf at output connector terminal and oscilloscope set at 20Mhz.

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INPUT:**AC Input Voltage Range**

90 to 264VAC

AC Input Current

3 x 6A (RMS) maximum for 115VAC

3 x 3A (RMS) maximum for 230VAC

AC Input Line Fuse

10A/ 250V

(located internally in module)

Leakage Current (per module)

3.5mA maximum @ 254VAC 60Hz

AC Input Frequency (per module)

47-63Hz

AC Inrush Current (per module)

30A (RMS) maximum for 115VAC

60A (RMS) maximum for 230VAC

OUTPUT:**Power**

500 –15000W continuous

Efficiency per Module

80% (typical) at maximum load, and 115VAC/230VAC

Hold-up Time

10mS min. 120VAC and maximum load

Over Voltage Protection (per module)

OV set at 57~60V – latching

Over Current Protection

Protection against short circuit. Isc max set to 120%-140% full load current per module. Within the rack, each module is load protected by PTC Resettable Fuses. Output may be shorted permanently without damage.

ENVIRONMENTAL:**Temperature**

Operation 0 to +40°C

Non-operation -30 to +70°C

Humidity

Operation 8 to 90%

Isolation Test (per module)

Primary to Secondary: 4242V DC

Primary to Field Ground: 2121V DC

Output to Field Ground: 2121 V DC

EMC

EN55022 conducted Class B; radiated Class A

(Measured using 3 x PSM500-XXX, in PSA1554-611)

Immunity (per module)

ESD: EN61000-4-2. Level 3

RS: EN61000-4-3. Level 3

EFT: EN61000-4-4. Level 2

Surge: EN61000-4-5. Level 3

CS: EN61000-4-6. Level 3

Voltage Dips EN61000-4-11

Harmonic: EN61000-3-2

FEATURE:**Front Panel LED**

DC Good, Fault condition per module

Rear Panel LED

Red LED illuminates when a fault such as SC or Overload has caused the internal PTC to go high impedance.

Enable/Disable (main 50V/56V)

Non latching – remote on/off pin

Thermal Shutdown (per module)

Latching

Fan Fail (per module)

Latching

Load Sharing

10% at full load

Isolated Diode

Internal O-ring Diode Located on main (-) output section

Output Connector

14 pin Molex p/n 39301140

14 pin Molex p/n39012145 (mating x 4 per rack), pin p/n 39000077 or equivalent

| Signal | Reference Pin | Signal | Reference Pin |
|---------------|---------------|--------------|---------------|
| +50V | 1 | +50V | 8 |
| +50V | 2 | +50V Return | 9 |
| +50V Return | 3 | +50V Return | 10 |
| Current Share | 4 | Not Used | 11 |
| Not Used | 5 | Not Use | 12 |
| Not Used | 6 | *Fault | 13 |
| Standby 12V | 7 | **Common GND | 14 |

*Fault: A fault low signal at pin 13 of output connector A,B, or C represents a fault to Module 1,2 or 3. A fault low signal at pin 13 of output connector D represents a global fault to rack.

**Common Ground, standby and Fault

