



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. I<sub>sc</sub> 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

