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)	Regulation	
		Min.	Max.	P-P (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.

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 cause 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

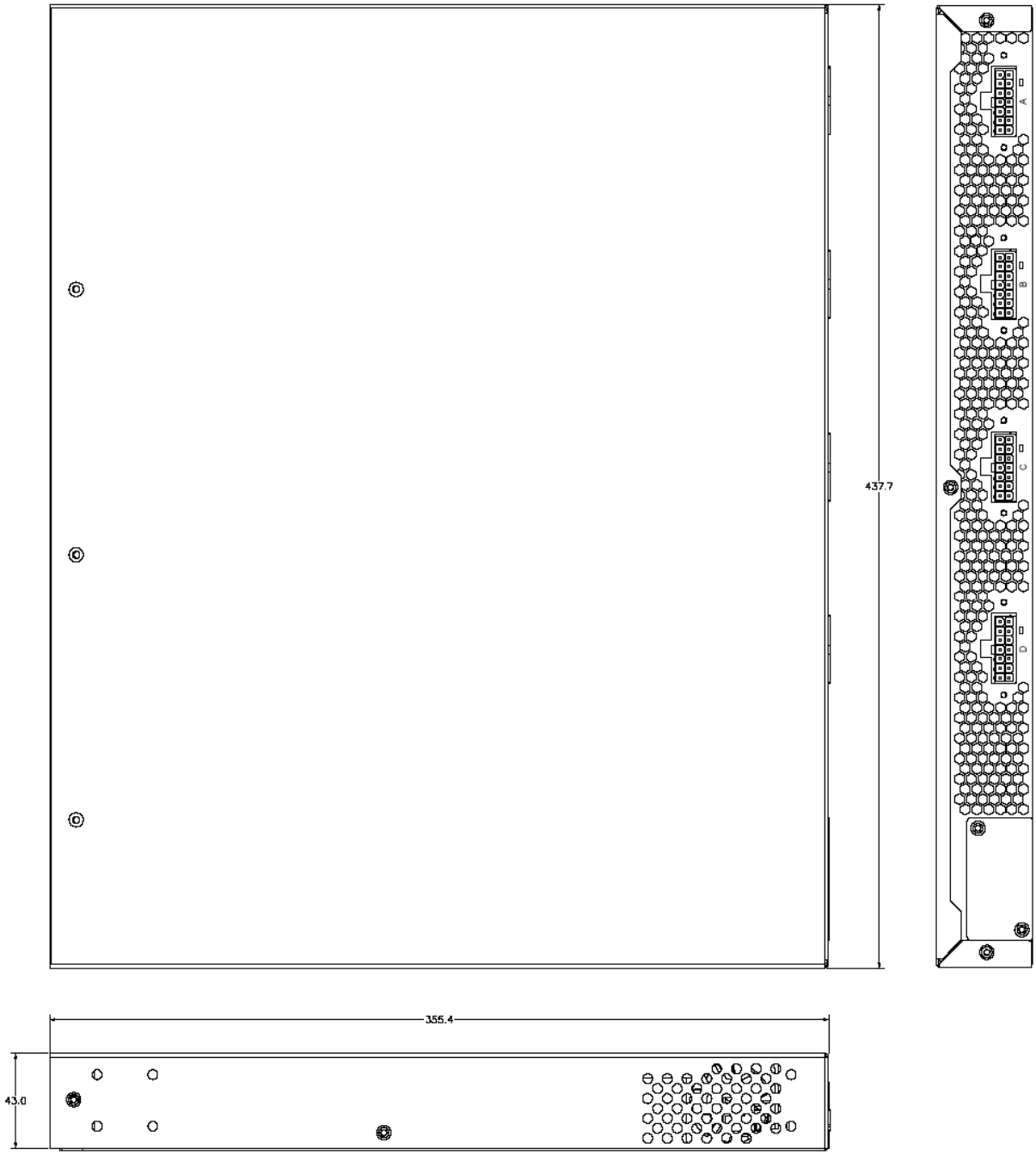
Isolated Diode
Internal O-ring Diode Located on main (-) output section

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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