



## PSM500 500W 1U RPS and Bulk n+1 Power Supply with active PFC



### Features

- SELV Output with 1500VAC Isolation
- 500 Watts X 3 in 1U 19” Rack
- Hot Plug N+1
- Diagnostics
- Full Protection OTP, OCP, OVP
- 85-265VAC with Active PFC

### Applications

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

### Safety Approvals

- cUL/UL
- CE
- TÜV

### Mechanical Characteristics

- Length: 300mm (11.81in)
- Width: 107mm (4.21in)
- Height: 41mm (1.61in)
- Weight: 1.81kg (4lb.)

### Output Specifications

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 (stand by)	0A	1.5A			
PSM500-216	56V (main)	0A	9A	1%	±0.5V	
	12V (stand by)	0A	1.5A			

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

Phihong reserves the right to make changes without further notice. Please consult Phihong USA and visit [www.phihong.com](http://www.phihong.com) for the most up-to-date specifications.

**INPUT:****AC Input Voltage Range**

85 to 264VAC

**AC Input Current**

6A(RMS) max. for 115VAC

3A(RMS) max. for 230VAC

**AC Input Line Fuse**

10A / 250V

**Leakage Current**

3.5mA max. @ 254VAC 60Hz

**AC Input Frequency**

47-63Hz

**AC Inrush Current**

30A(RMS) max. for 115VAC

60A(RMS) max. for 230VAC

**OUTPUT:****Efficiency**

83% typical at max. load (115VAC)

85% typical. at max. load (230VAC)

**Hold-up Time**

10mS min. 120VAC and max. load

**Over Voltage Protection**

OV set at 57~60V – latching.

**Over Current Protection**

Protection against short circuit. Isc max 110%-140% full load current. The 50V, 56V can operate in current mode till shot circuit and can be shorted permanently without damage.

**ENVIRONMENTAL:****Temperature**

Operation 0 to +50°C

Non-operation -30 to +70°C

**Humidity**

Operation 8 to 90%

**EMC**

FCC Class B

EN55022 conducted Class B \*with external filter  
(\*measured with Y capacitors 0.01uf/400Vat main output connector terminal from  $\pm V$  to unit chassis)

EN55022 conducted Class B; radiated Class A

(using 3 x PSM500-210, or -216 in rack “PSA1554-605”)

**Isolation Test**

Primary to Secondary: 4242VDC

Primary to Ground: 2121VDC

Secondary to Ground: 2121VDC

**Immunity EN50082-1**

ESD: EN61000-4-2. 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

RS: EN61000-4-3. Level 3

Harmonic: EN61000-3-2

**FEATURE:****Front Panel LED**

DC Good, Fault condition

**50V Enable/Disable**

Non latching – remote on/off pin

**Thermal Shutdown**

Latching

**Fan Fail**

Latching

**Load Sharing**

10% at full load

**Isolated Diode**

Internal Oring Diode located on main (-) output section.

**Output Connector**

Molex p/n 15060141 or equivalent

Molex p/n 15249144 or equivalent (mating)

**Dimension Diagram Unit: mm (inch)**

