PSM500 500W 1U RPS and Bulk n+1 With Active PFC

Features

- SELV Output with 1500 VAC Isolation
- 500 Watts X 3 in 1U 19” Rack
- Hot Plug N+1
- Diagnostics
- Full Protection OCP, OVP, OTP
- 85-256V AC with Active PFC

Applications

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

Safety Approvals

- cUL/UL
- CE
- TUV

Mechanical Characteristics

- Length: 300mm (11.81in)
- Width: 107mm (4.21in)
- Height: 41mm (1.61in)
- Weight: 1.8Kg (4lb.)

Output Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>DC Output Voltage</th>
<th>Load</th>
<th>Ripple (1) P-P (max)</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSM500-210</td>
<td>50V (Main)</td>
<td>0A</td>
<td>10A</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>12V (Standby)</td>
<td>0A</td>
<td>1.5A</td>
<td>±0.5V</td>
</tr>
<tr>
<td>PSM500-216</td>
<td>56V (Main)</td>
<td>0A</td>
<td>9A</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>12V (Standby)</td>
<td>0A</td>
<td>1.5A</td>
<td>±0.5V</td>
</tr>
</tbody>
</table>

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
85 to 264VAC

AC Input Current
6A (RMS) maximum for 115VAC
3A (RMS) maximum for 230VAC

AC Input Line Fuse
10A/250V

Leakage Current
3.5mA maximum @ 254VAC 60Hz

AC Input Frequency
47-63Hz

AC Inrush Current
30A (RMS) maximum for 115VAC
60A (RMS) maximum for 230VAC

OUTPUT:

Efficiency
83% (typical) at maximum load, and
115VAC/230VAC

Hold-up Time
10mS min. 120VAC and maximum load

Over Voltage Protection
OV set at 57~60V – non-latching

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

ENVIRONMENTAL:

Temperature
Operation 0 to +50°C
Non-operation -30 to +70°C
Humidity 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 ± 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: 4242V DC
Primary to Field Ground: 2121V DC
Output to Field Ground: 2121 V DC

Immunity
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

50V Enable/Disable
Non latching – remote on/off pin

Thermal Shutdown
Non-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)