

PowerCassette® PoE SWITCHING POWER SUPPLY

For Power Over Ethernet Applications

1U High, 48VDC at 1200 Watts with PFC and Hot Swap

FEATURES

- 1500VAC Output Isolation
- Meets IEEE 802.3af
- 3600W for 3 Units in Rack
- Includes Isolated 5V, ¼ A Standby Output
- Hot-Swap or Chassis Mount
- 48 VDC at 25A Output
- Integral LED Status Indicators
- I²C Serial Data Bus Option
- 15 Watts/Cubic Inch
- Power Factor Corrected
- Low Profile: 1.6 Inches High
- Single Hot-Swappable Connector
- Staged Pin Engagement
- ORing Diode on Output
- 1U, 19" Rack Holds 3 Units*
- Active Current Sharing
- Universal 85 to 264VAC Input
- Class B EMI Input Filter

*TPCP Model

**PCP PoE Series
(Chassis Mount)**

**TPCP PoE Series
(Hot-Swap)**

**1U High
1.6" x 5" x 10"
(41 x 127 x 254 mm)**

Three-Unit Rack



TWO-YEAR WARRANTY

Patents Issued & Pending

MODULE ORDERING GUIDE

MAX. OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT VOLTAGE	PFC	TYPE	MODEL NUMBER
1200W	48VDC	25A	85-264VAC	YES	HOT-SWAP	TPCP7000-POE
1200W	48VDC	25A	85-264VAC	YES	CHASSIS MOUNT	PCP7000-POE

NOTE: The table does not show the independent 5V, ¼A standby output which is standard on both models.

RACK ORDERING GUIDE

MODEL NUMBER	MAX. NO. MODULES	MAX. POWER	MAX. OUTPUT CURRENT	AC CONNECTION	RACK DEPTH
TPCR1U3A	3	3600W	150A DC	Term. Block	12.66" (322mm)
TPCR1U3B	3	3600W	150A DC	IEC C20	13.15" (334mm)
TPCR1U3C	3	3600W	150A DC	IEC C20*	14.88" (378mm)

NOTE: Modules and rack must be ordered separately.

*AC line filter included with each AC inlet.

CODE	OPTION
Z	I ² C Serial Data Bus

NOTE: Add Option Code as suffix to model no.
Contact factory on availability of Option Z.

SAFETY CERTIFICATIONS

AGENCY	STANDARD
UL	UL6091950
CUL	CSA22.2, No. 609950
DEMKO	EN60950

SPECIFICATIONS, PowerCassette® PCP & TPCP PoE SWITCHERS

Typical at Nominal 115/230VAC Line, Full Load and 25°C Unless Otherwise Noted.

OUTPUT SPECIFICATIONS

Total Output Power, Continuous, Max	1200 Watts
Voltage Adjustment Range, Min.	±5%
Total Regulation ¹	2.0%
Total Regulation, Standby Supply	5.0%
Ripple & Noise, Pk-Pk ²	1%
Holdup Time	20mS
Dynamic Response ³	300µS
Temperature Coefficient	±0.02%/°C
Minimum Load	0A
Overload Protection	Auto Recovery
Overvoltage Protection	Latched Shutdown
Remote Sense	Up to 0.25V Per Wire
Current Share	±10% Full Load Rating
Standby Output	+5V, 250mA
DC Power Good Signal	Logic Low
AC Power Fail Signal	Logic High
Global Inhibit	Logic Low
Enable	Logic Low
Thermal Warning	Logic High

INPUT SPECIFICATIONS

Input Voltage Range	85-264VAC
Power Factor	0.99
Input Frequency	47-63Hz
Inrush Current Limiting	50A Peak
Input EMI Filter	EN55022 Curve B FCC20780 pt. 15J Curve B
Harmonic Distortion	EN61000-3-2
Input Immunity, Conducted	
Fast Transients, Line-Line	±2kV (EN61000-4-4 Level 3)
Surges, Line-Line	±2kV (EN61000-4-5 Level 3)
Surges, Line-Ground	±4kV (EN61000-4-5 Level 4)
Input Protection	Internal Fuse, 20A

GENERAL SPECIFICATIONS

Efficiency ⁴	87% at Full Load
Switching Frequency, PFC Converter	48-110kHz
Output Converter	275kHz Nominal
Isolation, Class I, min. ⁵	
Input-Output	3000VAC
Input-Frame Ground	1500VAC
Output-Frame Ground	1500VAC
MTBF (Bellcore)	200,000 Hours
Safety Standards	EN60950, UL6091950, CSA22.2 No.609950

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°C to 70°C Ambient
Derating	2.5% / °C, 50°C to 70°C
Storage Temperature	-40°C to +85°C
Cooling	Integral Ball Bearing Fans

PHYSICAL SPECIFICATIONS

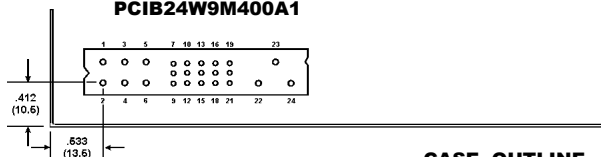
Case Material	Aluminum
Dimensions, Inches(mm)	1.6 H x 5.0 W x 10.0 D (40.6 x 127 x 254)
Weight	3.15 lbs. (1.43 kg.)

- NOTES:**
- No load to full load, including line regulation and load regulation.
 - 20MHz bandwidth. Measure with 0.1µF ceramic and 10µF tantalum capacitors in parallel across the output.
 - <4% deviation recovering to within 1% for 25% load change.
 - Typical efficiency is at low end of range for 12V output and at high end of range for 48V output.
 - Input-output isolation figure is for isolation components only. 100% production Hipot tested.

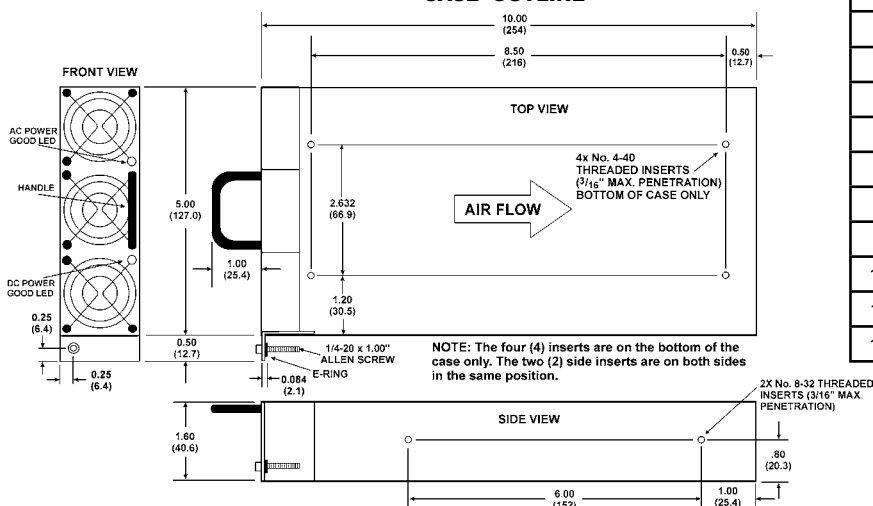
MATING INTERFACE BOARD

Order Kit Number
009-3850-0000

CONNECTOR: POSITRONICS PCIB24W9M400A1



CASE OUTLINE



ALL DIMENSIONS IN INCHES (mm).
All specifications subject to change without notice.

PIN CONNECTIONS			
PIN	FUNCTION	PIN	FUNCTION
1	+V Out*	13	Module Present
2	+V Out*	14	DC Power Good/ADD GA1*
3	+V Out*	15	AC Power Fail
4	V Return*	16	V Trim
5	V Return*	17	Overtemp. Warning/ADD GA0*
6	V Return*	18	Current Share
7	Enable*	19	Current Monitor/ADD GA2*
8	+ Sense	20	+5V Standby
9	- Sense	21	Standby Return
10	Inhibit	22	Chassis Ground
11	Spare/SDA*	23	AC Line
12	Spare/SCL*	24	AC Neutral

***NOTES:** For unit to operate, pin 7 must be at logic LO or shorted to pin 9. For proper operation the following pins must be connected together: All V Out pins (1-3); all V Return pins (4-6). Pins 11, 12, 14, 17 & 19 function as I²C outputs when that option is present.

www.unipowercorp.com or www.powercassette.com

pcp-tpcp-poE
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