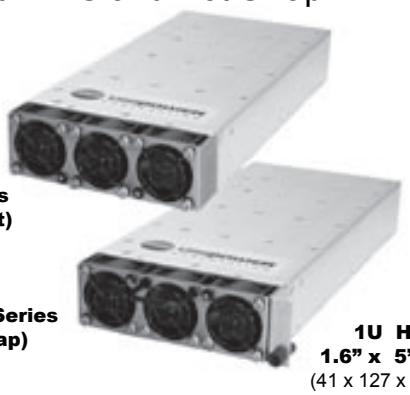
PowerCassette® PoE SWITCHING POWER SUPPLY

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

CE
LVD73/23/EEC

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 CON-NECTION	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	I²C 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

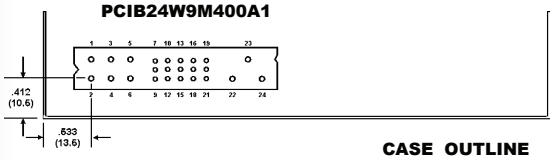
Operating Temperature	0°C to 70°C Ambient
Derating	2.5% / °C, 50°C to 70°C
Storage Temperature	-40°C to +85°C
Cooling	Integral Ball Bearing Fans

PHYSICAL SPECIFICATIONS

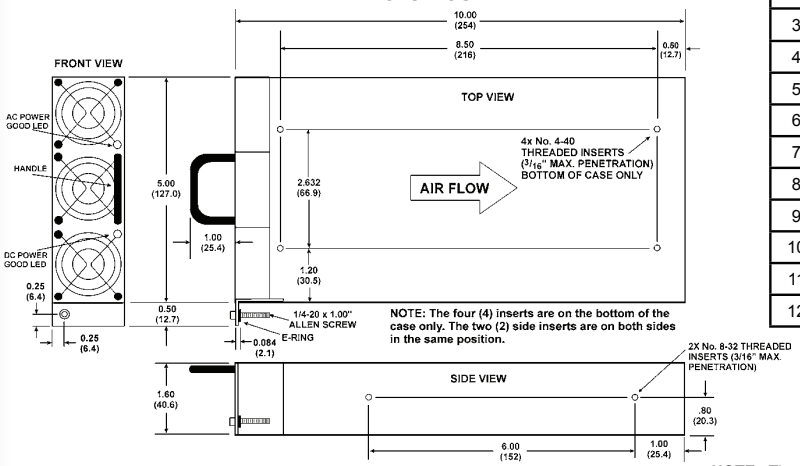
Case Material	Aluminum
Dimensions, Inches(mm)	1.6 H x 5.0 W x 10.0 D (40.6 x 127 x 254)
Weight	3.15 lbs. (1.43 kg.)

NOTES:
1. No load to full load, including line regulation and load regulation.
2. 20MHz bandwidth. Measure with 0.1µF ceramic and 10µF tantalum capacitors in parallel across the output.
3. <4% deviation recovering to within 1% for 25% load change.
4. Typical efficiency is at low end of range for 12V output and at high end of range for 48V output.
5. Input-output isolation figure is for isolation components only. 100% production Hipot tested.

CONNECTOR: POSITRONICS PCIB24W9M400A1



CASE OUTLINE



NOTE: The four (4) inserts are on the bottom of the case only. The two (2) side inserts are on both sides in the same position.

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

MATING INTERFACE BOARD

Order Kit Number
009-3850-0000

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.

NOTE: The TPCP Model is shown. The PCP version does not have handle or mounting bracket with bolt.