

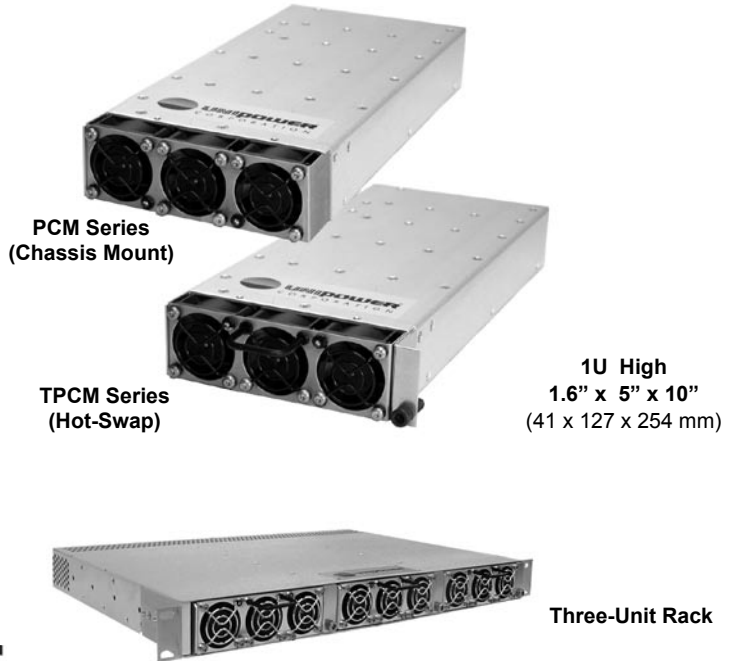
PowerCassette®: NEXT GENERATION FRONT-END SWITCHER

1U High, Up to 800 Watts with PFC and Integral Hot Swap Provision

FEATURES

- Includes Isolated 5V, ¼ A Standby Output
- Hot-Swap or Chassis Mount Versions
- 12, 24 or 48 VDC Outputs
- Integral LED Status Indicators
- I²C Serial Data Bus Option
- Up to 10 Watts/Cubic Inch Power Density
- Power Factor Corrected
- Low Profile: 1.6 Inches High
- Single Hot-Swappable Connector
- AC Front Entry Version
- Reverse Air Flow Option
- Staged Pin Engagement
- ORing Diode on Output
- 1U, 19" Racks Hold 2 or 3 Units*
- Active Current Sharing
- Universal 85 to 264VAC Input
- Class B EMI Input Filter
- Optimized Thermal Management
- No Minimum Load
- Control & Monitoring Features



*TPCM Models



TWO-YEAR WARRANTY
 Patents Issued & Pending

STANDARD & OPTIONAL MODELS

Delete "T" prefix to model no. for chassis mount version.

CONFIGURATION	MAX. OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT VOLTAGE	PFC	MODEL NUMBER
 Standard Rear Input/Output	650W	12VDC	54.2A	85-264VAC	YES	TPCM3000
	700W	24VDC	29.2A	85-264VAC	YES	TPCM5000
	800W	48VDC	16.7A	85-264VAC	YES	TPCM7000
 Optional Front IEC Input	480W	12VDC	40.0A	85-264VAC	YES	TPCM3000E
	525W	24VDC	21.9A	85-264VAC	YES	TPCM5000E
	600W	48VDC	12.5A	85-264VAC	YES	TPCM7000E

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

OPTIONS

CODE	OPTION	OUTPUT DERATING
R	Reverse Air Flow (Back to Front) on Standard Models	20%
R	Reverse Air Flow on "E" Suffix Models	16.6%
Z	I ² C Serial Data Bus	N/A

NOTE: Add Option Code as suffix to model no. See picture of Option E on next page. Contact factory on availability of Option Z.

SAFETY CERTIFICATIONS

AGENCY	STANDARD
UL	UL60950
CUL	CSA22.2, No. 60950
DEMKO	EN60950

RACK MOUNT ORDERING GUIDE:

For 1U, 19-inch rack holding three TPCM models, order TPCMR1U3.

See separate data sheet for racks.

SPECIFICATIONS, PowerCassette® PCM & TPCM SERIES FRONT ENDS

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

OUTPUT SPECIFICATIONS

Total Output Power, Continuous, Max 480-800 Watts
 Voltage Adjustment Range, Min. ±5%
 Total Regulation¹, 2.0%
 Total Regulation, Standby Supply 5.0%
 Ripple & Noise, Pk-Pk² 1%
 Holdup Time 20mS
 Dynamic Response³ 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 30A 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

Efficiency⁴ 80-87% at Full Load
 Switching Frequency, PFC Converter 48-110kHz
 Output Converter 275kHz Nominal
 Isolation, Class I, min.⁵
 Input-Output 3000VAC
 Input-Ground 1500VAC
 Output-Ground 50VDC
 MTBF (Bellcore) 200,000 Hours
 Safety Standards EN60950, UL1950, CSA22.2 No.950

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

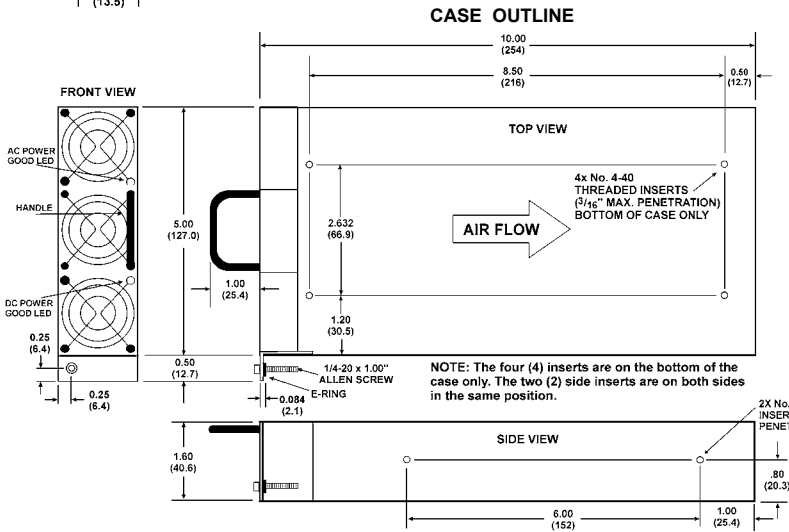
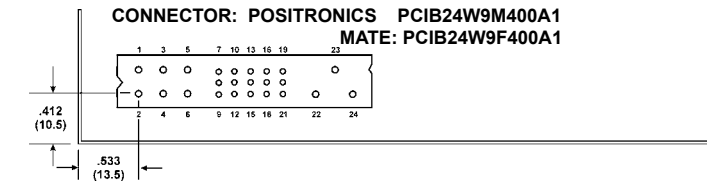
PHYSICAL SPECIFICATIONS

Case Material Aluminum
 Dimensions, Inches(mm) 1.6 H x 5.0 W x 10.0 D
 (40.6 x 127 x 254)
 Weight 2.9 lbs. (1.3 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

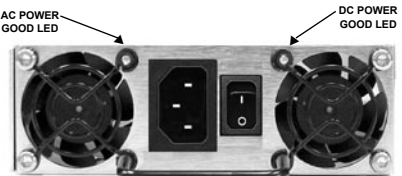
Order Kit Number
009-3850-0000



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. For I²C operation pin 21 must be connected to pin 9.

IEC Input Version (Option E)



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

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