

PTCD SERIES
400-600 WATT SINGLE OUTPUT
SWITCHING POWER SUPPLIES
2.66" x 4.75" x 11.50"
"COTS" POWER FACTOR CORRECTED

APPLICATIONS

The PTCD Series 400-600W AC-DC power supplies provides highly regulated output power from 400-600 watts. Rugged construction and superior quality make this power supply ideal for harsh environment applications. Available in standard, modified or fully custom configurations, for industrial, commercial, COTS, Ruggedized and Military applications.

STANDARD FEATURES

- .98 Typical Power Factor
- Full Range
- Low Noise and Ripple
- Built In DC Fan For Cooling
- Current Share Function
- DC Good Signal
- Remote ON/OFF & Remote Sense Functions
- Rugged Construction
- High Reliability/Superior Quality

AVAILABLE OPTIONS

- Hot Swap
- Wide Temp. Operation
- Parallel Operation
- ORing Diode for Redundant Operation
- Rack / Panel Mount
- Ruggedized for shock & vibration
- 400Hz Operation
- Conformal Coating
- LVBD (Battery Back-Up)

SAFETY AND EMISSIONS

- Designed to meet UL/cUL60950-1
- Designed to meet TUV EN60950-1
- Designed to meet EN55022 (Class A)
- Designed to meet EN 55024
- Designed to meet EN61000-3-2-3



SPECIFICATIONS

INPUT SPECIFICATIONS

Input: 100-264 VAC Single Phase
Input Frequency: 47-63Hz (400 Hz Optional)
Inrush Current: 70A max at 230VAC(cold start)
Input Current: 6.5A max @ 115VAC 3.6A max @ 230VAC
Efficiency: 88 typical (depending on output model)
Hold-up time: 16ms at full load (minimum)
Leakage Current: <1.2mA maximum @ 240 VAC

OUTPUT SPECIFICATIONS

Adjustment Range: $\pm 10\%$
Minimum Load: none
Regulation: Line $\pm 0.5\%$ Load $\pm 0.5\%$ Typical
Ripple/Noise: 150mV peak to peak maximum (20 MHz)
Set Point Accuracy: $\pm 1\%$ (except 5V $\pm 2\%$) (maximum)
Output voltage adj: $\pm 10\%$ minimum
Overcurrent Protection: 105-125% automatic recovery Constant Current
Overvoltage Protection: 115-140% of V1 nominal, Shut Down Resistant
Overtemperature Protection: Heatsink Temp. 90°C $\pm 5^\circ\text{C}$ Auto Recovery

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: 0°C to +50°C. Derate to 50% at +70°C
Storage Temperature: -40°C to +85°C max 95% Relative Humidity
Cooling: Internal DC fan
Humidity: 20-90% RH non condensing
Vibration: 10-500Hz, 2G 10min/1cycle for 60 min (3 axes)(Standard Unit)
Shock: 20G Peak Acceleration (Standard Unit)
Weight: Approx: 6.6 LBS
Size: 2.66" x 4.75" x 11.50"

MODEL SELECTION

400 WATTS		600 WATTS	
Model	Output	Model	Output
PTCD - 5 - 80	5V@80A	PTCD - 5 - 100	5V@100A
PTCD - 12 - 34	12V@34A	PTCD - 12 - 50	12V@50A
PTCD - 15 - 27	15V@27A	PTCD - 15 - 40	15V@40A
PTCD - 24 - 17	24V@17A	PTCD - 24 - 25	24V@25A
PTCD - 28 - 14	28V@14A	PTCD - 28 - 20	28V@20A
PTCD - 36 - 11	36V@11A	PTCD - 36 - 16	36V@16A
PTCD - 48 - 8	48V@8A	PTCD - 48 - 12	48V@12A

OPTION DESIGNATIONS

-WTO	WIDE TEMPERATURE OPERATION
-HSP	HOT SWAP
-ORD	REDUNDANT OPERATION (ORING DIODE)
-RK	RACK MOUNT
-MIL	RUGGEDIZED/MILITARIZED
-CC	CONFORMAL COATING
-LVBD	BATTERY BACK-UP
-PAR	PARALLEL OPERATION
-PNL	PANEL MOUNT
-400HZ	400 Hz OPERATION

Low Voltage Battery Disconnect

The LVBD module adds a new dimension to battery backup power supplies. The power supply simultaneously charges the battery and powers the load. If the AC power fails, the battery continues to support the load. However, when the battery voltage drops below a predetermined level, the LVBD module disconnects the battery from the load, thereby protecting the battery from the damaging effects of complete discharge.

MECHANICAL OUTLINE

