

PTCP SERIES
400-1000 WATT SINGLE OUTPUT
SWITCHING POWER SUPPLIES
2.66" x 4.75" x 11.50"
"COTS" POWER FACTOR CORRECTED

APPLICATIONS

The PTCP series 400-1000W AC-DC power supplies provides highly regulated output power from 400-1000 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
- 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: 60A max at 230VAC(cold start)
Input Current: 6.5A max @ 115VAC 3.5A max @ 230VAC
Efficiency: 85 typical (depending on output model)
Hold-up time: 16ms at full load (minimum)
Leakage Current: <3.5mA maximum @ 240 VAC

OUTPUT SPECIFICATIONS

Adjustment Range: $\pm 10\%$ (minimum)
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
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 ball bearing 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		800 WATTS		1000 WATTS	
Model	Output	Model	Output	Model	Output	Model	Output
PTCP - 5 - 80	3.5/5V@80A	PTCP-5-100	5V@100A	N/A	N/A	Consult Factory	
PTCP - 12 - 34	12V@34A	PTCP - 12 - 50	12V@50A	PTCP - 12 - 66	12V@66A		
PTCP - 15 - 27	15V@27A	PTCP - 15 - 40	15V@40A	PTCP - 15 - 53	15V@53A		
PTCP - 24 - 17	24V@17A	PTCP - 24 - 25	24V@25A	PTCP - 24 - 33	24V@33A	PTCP - 24 - 41	24V@41A
PTCP - 28 - 14	28V@14A	PTCP - 28 - 20	28V@20A	PTCP - 28 - 28	28V@28A	PTCP - 28 - 35	28V@35A
PTCP - 36 - 11	36V@11A	PTCP - 36 - 16	36V@16A	PTCP - 36 - 22	36V@22A	PTCP - 36 - 27	36V@27A
PTCP - 48 - 8	48V@8A	PTCP - 48 - 12	48V@12A	PTCP - 48 - 16	48V@16A	PTCP - 48 - 20	48V@20A

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

