

## PTCP-HS SERIES 1000-3000 WATT HOT SWAP POWER SYSTEMS RACK MOUNT (N + 1) REDUNDANT

### APPLICATIONS

The PTCP-HS Series of Hot Swap Power Supplies provides continuous power from 1000 to 3000 watts depending on module count. The system is 2U in height and is loaded with standard features making the ideal for "Critical System" use where no down time can be tolerated. Each 1000 watt module can be removed while the system is active should one Module need service. Custom rack configurations and battery back-up systems are also available, contact Technology Dynamics Inc. for exact needs.



### STANDARD FEATURES

- Power Factor Correction
- Universal AC Input
- All Outputs Tightly Regulated
- OV, OL and OT Protection Main Output
- Remote Sensing Post Isolation Diodes
- All Inputs Equipped with Isolation Diodes for Redundancy
- LED Indicators for:  
Input Power Good/Output Power Good
- Forced Current Sharing
- Floating Connectors for Hot Swap Insertion
- MTBF > 150,000 Hours

### AVAILABLE OPTIONS

- Circular Connectors
- Low Voltage Battery Disconnect (LVBD) for Battery Back-up Operation.
- Conformal Coating
- Ruggedized for Shock and Vibration
- Additional EMI Filtering

### SPECIFICATIONS

#### ELECTRICAL

Input: 90-264VAC Single Phase; 47-63Hz

Line Regulation:  $\pm .3\%$

Load Regulation:  $\pm 2\%$

Ripple: 1% peak to peak, not to exceed 100mV

Efficiency: 80% typical single output units

70% typical multiple output units

Hold Up Time: 20ms (minimum)

In-rush Current: 60A (maximum) 1/2 cycle

Protection: OV, OL and OT

#### MECHANICAL & ENVIRONMENTAL

Operating Temperature: 0°C to +50°C (standard)

40°C to +85°C

Storage Temperature: -40°C to +85°C

Cooling: Internal DC fan

Weight: 25 lbs. (11.3 kg) for 3 module system

Size: 3.5"(H) x 19"(W) Std Rack x 17.9"(L)

88.9mm(H) x 482.6mm(W) x 457.2mm(L)

# MODEL SELECTION

Assuming 3 modules per rack shelf

1200W OR 400W PER MODULE			1800W OR 600W PER MODULE		3000W OR 1000W PER MODULE	
MODEL	NOMINAL VOLTAGE (VDC)	MAXIMUM CURRENT (ADC)	MODEL	MAXIMUM CURRENT (ADC)	MODEL	MAXIMUM CURRENT (ADC)
PTCP-HS-5-180	3.3/5V	180A	PTCP-HS-5-240	240A	Consult Factory	
PTCP-HS-12-102	12V	102A	PTCP-HS-12-150	150A		
PTCP-HS-15-81	15V	81A	PTCP-HS-15-120	120A		
PTCP-HS-24-51	24V	51A	PTCP-HS-24-75	75A	PTCP-HS-24-123	123A
PTCP-HS-36-33	36V	33A	PTCP-HS-36-48	48A	Consult Factory	
PTCP-HS-48-24	48V	24A	PTCP-HS-48-36	36A	PTCP-HS-48-60	60A

## OPTION DESIGNATIONS

-MIL	RUGGEDIZED/MILITARIZED
-LVDB	BATTERY BACK-UP
-MSC	MS CONNECTOR
-CC	CONFORMAL COATING
-EMI	EMI FILTERING (MIL-STD-461)

### 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

