

TCD-HS SERIES

1000-3000 WATTS

HOT SWAP POWER SYSTEMS

3.5" x 19.0" x 17.9"
RACK MOUNT (N+1) REDUNDANT

APPLICATIONS

The TCD-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.



SPECIFICATIONS

ELECTRICAL

Input: 90-264 VAC Single Phase; 47-63 Hz
Line Regulation: $\pm .3\%$
Load Regulation: $\pm 2\%$
Ripple: 1% Peak To Peak, Not To Exceed 100 mV
Efficiency: 80% Typical
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 (Optional)
Storage Temperature: -40°C to + 85°C max
Cooling: Internal DC Fan
Weight: Approx.: 25 lbs. (11.3 kg) For 3 Module System
Size: 3.5" (H) x 19.0" (W) x 17.9" (L)
88.9 mm (H) x 482.6 mm (W) x 457.2 mm (L)

STANDARD FEATURES

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

AVAILABLE OPTIONS

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

MODEL SELECTION

OUTPUT VOLTAGE	1000 W		2000 W IN PARALLEL / 1000 W REDUNDANT		3000 W IN PARALLEL / 2000 W REDUNDANT	
	MODEL NUMBER	CURRENT	MODEL NUMBER	CURRENT	MODEL NUMBER	CURRENT
12 V	TCD-HS-12-60	60 A	TCD-HS-12-120	120 A	TCD-HS-12-180	180 A
15 V	TCD-HS-15-48	48 A	TCD-HS-15-96	96 A	TCD-HS-15-144	144 A
24 V	TCD-HS-24-41	41 A	TCD-HS-24-82	82 A	TCD-HS-24-123	123 A
28 V	TCD-HS-28-35	35 A	TCD-HS-28-70	70 A	TCD-HS-28-105	105 A
48 V	TCD-HS-48-20	20 A	TCD-HS-48-40	40 A	TCD-HS-48-60	60 A

OPTIONAL 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

