

TDRCP-HS SERIES

1000-3000 WATT SINGLE OUTPUT HOT SWAP 1U, RACK MOUNT SWITCHING POWER SUPPLIES

APPLICATIONS

The TDRCP-HS Series of Hot Swap Rack Mount AC-DC power supplies provides highly regulated output power to 1000 watts per module. 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

- (N+1) Redundant, Parallel Operations
- Universal AC Input / Full Range
- Active PFC for EM61000-3-2,-3
- Built in DC Fan for Cooling
- Current Share Function
- AC-DC Good Signal
- Remove ON / OFF & Remote Sense Functions
- 5 V / 0.5 A Auxiliary Output
- Internal Oring Diode

AVAILABLE OPTIONS

- Battery Back-Up (LVBD)
- Ruggedized for Shock and Vibration
- 400 Hz Operation
- Conformal Coating

SAFETY AND EMISSIONS

- Designed to meet UL/cUL60950-1
- Designed to meet TUV EN60950-1
- Designed to meet CB Report (IEC 60950-1)
- Designed to meet CE Mark (LVD)
- Designed to meet EN55022 Class B (CISPR 22 B)



SPECIFICATIONS

INPUT SPECIFICATIONS:

Input: Universal Input Range 100-240 VAC / 127-370 VDC
Input Frequency: 47-63Hz
Inrush Current: 50 A (cold start)
Input Current: 25 A max @ 115VAC 40 A max @ 230VAC
Efficiency: 83-90% typical (depending on output model)
Hold-up time: 16ms at full load (minimum)
Leakage Current: <1.1 mA maximum @ 240 VAC
Harmonics: EN 61000-2-3,-3 Class D Compliant (0.99 PF Typical)

OUTPUT SPECIFICATIONS

Minimum Load: none
Regulation: Line $\pm 0.5\%$ Load $\pm 0.5\%$ Typical
Ripple/Noise: 200 mV peak to peak maximum (20 MHz)
Set Point Accuracy: $\pm 1\%$ (except 5 V $\pm 2\%$) (maximum)
Output voltage adj: $\pm 10\%$ minimum (each module)
Overcurrent Protection: 105-125% automatic recovery Constant Current
Overvoltage Protection: 115-150% of V1 nominal
Overtemperature Protection: Heatsink Temp. $75^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Auto Recovery

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: -20°C to $+50^{\circ}\text{C}$. Derate to 50% at $+70^{\circ}\text{C}$
Storage Temperature: -40°C to $+85^{\circ}\text{C}$ 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)
Shock: 20G Peak Acceleration (Standard Unit)
Weight: Approx: 21 Lbs. (3 module rack)
Size: 14" x 19" x 1.75"

MODEL SELECTION

Single Module Model	Output Voltage	Current (A)	Single Module Model	Output Voltage	Current (A)	Single Module Model	Output Voltage	Current (A)
TDRCP-HS-12-60	12V	60A	TDRCP-HS-12-120	12V	120A	TDRCP-HS-12-180	12V	180A
TDRCP-HS-15-48	15V	48A	TDRCP-HS-15-96	15V	96A	TDRCP-HS-15-144	15V	144A
TDRCP-HS-24-41	24V	41A	TDRCP-HS-24-82	24V	82A	TDRCP-HS-24-123	24V	123A
TDRCP-HS-28-35	28V	35A	TDRCP-HS-28-70	28V	70A	TDRCP-HS-28-105	28V	105A
TDRCP-HS-48-20	48V	20A	TDRCP-HS-48-40	48V	40A	TDRCP-HS-48-60	48V	60A
1000 W			2000 W IN PARALLEL / 1000 W REDUNDANT			3000 W IN PARALLEL / 2000 W REDUNDANT		

NOTE: Other Voltages and currents available, consult the factory for your exact needs.

MECHANICAL OUTLINE

