

TCD SERIES
400-1000 WATT SINGLE OUTPUT
SWITCHING POWER SUPPLIES
2.50" x 5.00" x 11.00"
RUGGED, HARSH ENVIRONMENT

APPLICATIONS

The TCD 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

- Full Range Input
- Low Noise and Ripple
- Built In DC Fan For Cooling
- DC Good Signal
- Remote On/Off & Remote Sense Functions
- Rugged Construction
- Light Weight

AVAILABLE OPTIONS

- Auto Line Selection
- 3 Phase Input
- Parallel Operation
- ORing Diode for Redundant Operation
- Rack / Panel Mount
- Ruggedized for Shock & Vibration (MIL-STD-810)
- 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)



SPECIFICATIONS

INPUT SPECIFICATIONS:

Input: 90-132/180-264V VAC Switch Select
Input Frequency: 47-63Hz
Inrush Current: 35A/115 VAC, 55A/230 VAC
Input Current: 17.5A / 115 VAC, 10A / 230 VAC
Efficiency: 85 typical (depending on output model)
Hold-up time: 20ms/ 230 VAC, 15ms / 115 VAC
Leakage Current: <2.5mA 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)
Overcurrent Protection: 105-125% Shut Down, Repower to Recover
Overvoltage Protection: 115-140% Repower to Recover
Overtemperature Protection: Heatsink Temp. 70°C $\pm 5^\circ\text{C}$ Auto Recovery

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: 0°C to +50°C
Storage Temperature: -40°C to +85°C max 95% Relative Humidity
Cooling: 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: 5.5 LBS
Size: 2.50" x 5.00" x 11.00"



NSF-ISR

Registered
to ISO 9001

MODEL SELECTION

400 WATTS			600 WATTS		800 WATTS			1000 WATTS	
Model	Nominal Voltage (VDC)	Maximum Current (ADC)	Model	Maximum Current (ADC)	Model	Nominal Voltage (VDC)	Maximum Current (ADC)	Model	Maximum Current (ADC)
TCD - 5 - 80	5V	80A	TCD - 5 - 100	100A	TCD - 5 - 150	5V	150A	N/A	N/A
TCD - 12 - 34	12V	34A	TCD - 12 - 50	50A	TCD - 12 - 66	12V	66A	TCD - 12 - 83	83A
TCD - 15 - 27	15V	27A	TCD - 15 - 40	40A	TCD - 15 - 53	15V	53A	TCD - 15 - 66	66A
TCD - 24 - 17	24V	17A	TCD - 24 - 25	25A	TCD - 24 - 33	24V	33A	TCD - 24 - 41	41A
TCD - 28 - 14	28V	14A	TCD - 28 - 21	21A	TCD - 28 - 28	28V	28A	TCD - 28 - 35	35A
TCD - 48 - 8	48V	8A	TCD - 48 - 12	12A	TCD - 48 - 16	48V	16A	TCD - 48 - 20	20A

OPTION DESIGNATIONS

-ALS	AUTO LINE SELECT
-ORD	REDUNDANT OPERATION (ORING DIODE)
-RK	RACK MOUNT
-MIL	RUGGEDIZED/MILITARIZED
-CC	CONFORMAL COATING
-LVBD	BATTERY BACK-UP
-PAR	PARALLEL OPERATION
-PNL	PANEL MOUNT

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

