

# TDDC-1500 SERIES 1500 WATT SINGLE OUTPUT DC-DC CONVERTER

11.75" x 5.13" x 1.73"

## APPLICATIONS

The TDDC-1500 series of DC-DC Converter provides highly regulated output power to 1500 watts. Rugged construction and superior quality make this DC-DC Converter ideal for harsh environment applications.

Available in standard, modified or fully custom configurations, for Industrial, Commercial, COTS, Ruggedized and Military applications.

## STANDARD FEATURES

- Low Profile 1U
- High Power Density
- 1000 VDC I/O Isolation
- Remote ON/OFF Control
- Forced Air Cooling, Internal Fan
- OV, OL, OT Protection
- Remote Sense
- Front End Input & Output Terminations

## AVAILABLE OPTIONS

- Parallel Operation
- Rack/Panel Mount
- Ruggedized For Shock & Vibration
- Conformal Coating

## SAFETY AND EMISSIONS

- Designed to meet MIL-STD-1275
- Designed to meet MIL-STD-461\*
- Designed to meet MIL-STD-810

\* Requires external EMI filter.



## SPECIFICATIONS

### INPUT SPECIFICATIONS

Input: 18-32 VDC  
Rise Time: 200 ms At Full Load  
DC Current: 23.5 A/ 48 VDC 11.6A/96 VDC  
Efficiency: 89-92% Typical (Depending On Output Model)

### OUTPUT SPECIFICATIONS

Output Adjustment Range: 24% to +29%  
Minimum Load: none  
Regulation: Line  $\pm$  1% Load  $\pm$  1%  
Ripple/Noise: 1% peak to peak maximum (20 MHz)  
Overcurrent Protection: 105-125% automatic recovery Constant Current  
Overvoltage Protection: 115-140% of V1 nominal  
Overtemperature Protection: Heatsink Temp. 85°C  $\pm$  5°C Auto Recovery

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: -25°C to +50°C. Derate to 50% at +65°C  
Storage Temperature: -40°C to +75°C max. 95% Relative Humidity  
Cooling: Internal Ball Bearing DC Fan  
Humidity: 20-90% RH Non Condensing  
Vibration: 10-500Hz, 2G 10 min./1 Cycle for 60 min. (3 axes)  
Shock: 20G Peak Half Sine Wave, 11ms  
Weight: Approx. 4.5 lbs.  
Size: 11.75" x 5.13" x 1.73"

*Design Excellence since 1976!*

**AS 9100**  
BUREAU VERITAS  
Certification  
Certificate No: US008267-1



# MODEL SELECTION

## 24-32 VDC INPUT

MODEL NUMBER	VOLTAGE	CURRENT
TDDC-1500-12	12V	85A
TDDC-1500-28	28V	53A
TDDC-1500-48	48V	31A

NOTE: OTHER VOLTAGES & CURRENTS AVAILABLE. CONSULT THE FACTORY. MINIMUM ORDER REQUIRED.

## OPTION DESIGNATIONS

- PAR	Parallel Operation
-CC	Conformal Coating
-ORD	Redundant Operation

- MIL	Ruggedized/Militarized
- PNL	Panel Mount
-RK	Rack Mount

## MECHANICAL OUTLINE

