

# TDMSP -2000 SERIES 2,000 WATT SINGLE OUTPUT MILITARY GRADE SWITCHING POWER SUPPLIES 13" x 8" x 3" POWER FACTOR CORRECTED

## APPLICATIONS

The TDMSP-2000 series of Power Factor Corrected AC-DC power supplies provides highly regulated output power to 2000 watts. Rugged construction and superior quality make this power supply ideal for military and harsh environment applications. Available in standard, modified or fully custom configurations, for industrial, and Military applications on airborne shipboard and ground mobile platforms.

## STANDARD FEATURES

- Universal AC Input (100-264 VAC)
- Active PFC for EN61000-3-2 Class D Compliance
- Built In DC Fan for Cooling
- Current Share Function
- MS Connectors
- Remote On/ Off & Remote Sense Functions

## AVAILABLE OPTIONS

- Hot Swap
- Parallel Operation
- ORing Diode for Redundant Operation
- Rack/ Panel Mount
- Ruggedized for Shock & Vibration for MIL-STD-810
- 400 Hz Operation
- Conformal Coated
- Additional Filtering for MIL-STD-461
- 5V/ 0.5A Aux Output
- 12V/ 0.5A Aux Output

## SAFETY AND EMISSIONS

- Designed to meet UL/cUL60950-1
- Designed to meet TUV EN60950-1
- Designed to meet CBReport(IEC60950-1)
- Designed to meet CE Mark (LVD)
- Designed to meet EN55022 Class B (CISPR 22 B)



## INPUT SPECIFICATIONS:

Input: Universal AC Input Range 100-264VAC or 127-370VDC (See Note)  
 Input Frequency: 47-63Hz (400 Hz Optional)  
 Inrush Current: 25A Max at 115VAC/50A at 230 VAC (Cold Start)  
 Input Current: 16A Max @ 115VAC 10A Max @ 230VAC  
 Efficiency: 83-90% Typical (Depending on Output Model)  
 Hold-up time: 16ms at full load (Minimum)  
 Leakage Current: <2.0mA maximum @ 240 VAC  
 Harmonics: EN 61000-3-2, -3 Class D Compliant (0.99 PF Typical)  
 Note: 2000W @190-264 VAC  
 1500W @ 100-132 VAC

## OUTPUT SPECIFICATIONS:

Minimum Load: None (Typical 10%)  
 Adjustment Range:  $\pm 10\%$  (Minimum)  
 Regulation: Line & Load  $\pm 1\%$   
 Ripple/ Noise: 150mV Peak to Peak Maximum (20 MHz)  
 Output Voltage Adj:  $\pm 10\%$  Minimum  
 Overcurrent Protection: 105-125% Automatic Recovery Constant Current  
 Overvoltage Protection: 115-140% of V1 Nominal, Followed by Shutdown  
 Overtemperature Protection: Heatsink Temp. 90°C  $\pm 5^\circ\text{C}$  Auto Recovery

## ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature: -25°C to +50°C. Derate to 50% at +70°C  
 Storage Temperature: -40°C to +85°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 Acceleration — 11ms Half Sine per MIL-STD-810  
 Weight: Approx: 8.8 LBS  
 Size: 13" x 8" x 3"

## MODEL SELECTION

MODEL NUMBER	VOLTAGE	CURRENT
TDMSP-2000-24	24V	80A
TDMSP-2000-28	28V	71A
TDMSP-2000-48	48V	42A

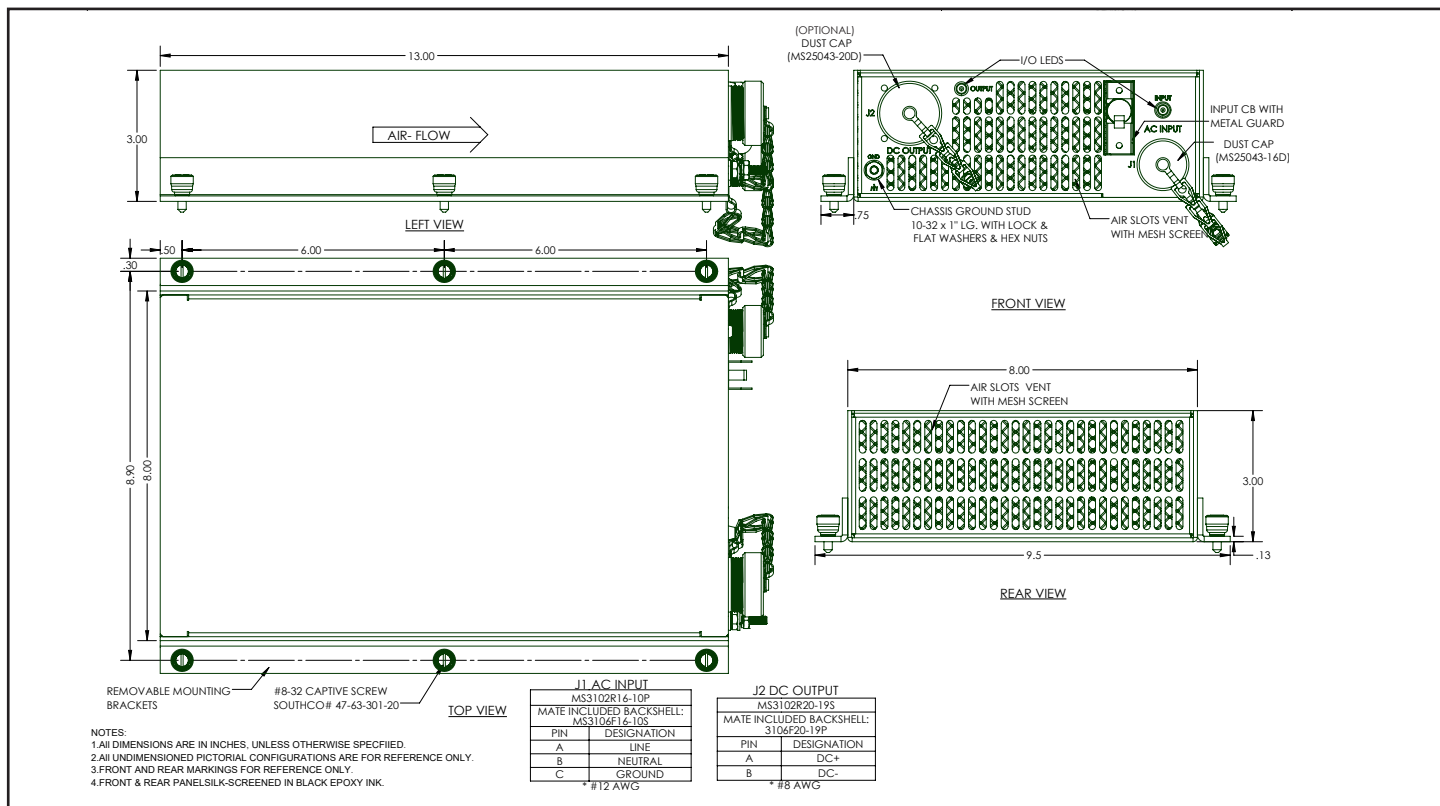
NOTE: OTHER VOLTAGES & CURRENTS AVAILABLE.  
 CONSULT THE FACTORY. INPUT VOLTAGE RANGE DETERMINE OUTPUT POWER  
 NOTE: 2000W @ 190-264 VAC  
 1500W @ 100-132 VAC

## OPTION DESIGNATIONS

<b>-HSP</b>	Hot Swap
<b>-ORD</b>	Redundant Operation
<b>-PAR</b>	Parallel Operation
<b>-CC</b>	Conformal Coating

<b>-MIL</b>	Ruggedized/ Militarized
<b>-PNL</b>	Panel Mount
<b>-RK</b>	Rack Mount
<b>-4Hz</b>	400 Hz Operation

## MECHANICAL OUTLINE



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