

# NNTDM SERIES

## 1500-3000 WATT SINGLE OUTPUT

### SWITCHING POWER SUPPLIES

5.00" x 8.00" x 12.50"

POWER FACTOR CORRECTED, MILITARIZED

#### APPLICATIONS

The NNTDM series of "BULK" Power Rugged AC-DC power supplies provides highly regulated output power to 3000 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

- Active PFC (Power Factor Correction)
- High Efficiency Up to 90%
- Rugged Construction
- AC Input 100-132/180-264 VAC
- Built In DC Fan for Cooling
- OV, OL, OT Protection
- DC Good Signals
- Remote on/off & Remote Sense Functions
- $\pm 10\%$  Voltage Adjust

#### AVAILABLE OPTIONS

- Parallel Operation
- 3 Phase Input
- ORing Diode for Redundant Operation
- Rack / Panel Mount
- Ruggedized for shock & vibration
- 400 Hz Operation
- Conformal Coated

#### SAFETY AND EMISSIONS (DESIGNED TO MEET)

- 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

Input Range: (1500W) 90-132VAC/(2000-3000W) 180-264VDC 1Ø or 3Ø  
Input Frequency: 47-63Hz (400Hz Optional)  
Inrush Current: 30A at 115VAC/40A at 230 VAC (Cold Start)  
Input Current: 1500W=24A, 2000W=16A, 2500W=20A, 3000W=24A  
Efficiency: 83-90% Typical (Depending On Output Model)  
Hold-up time: 20ms At Full Load (Minimum)  
Leakage Current: <2.0mA maximum @ 240 VAC

##### OUTPUT

Adjustment Range:  $\pm 10\%$  (Minimum)  
Minimum Load: None  
Regulation: Line  $\pm 0.5\%$  Load  $\pm 0.5\%$   
Ripple/Noise: 200mV Peak To Peak Maximum (20 MHz)  
Set Point Accuracy:  $\pm 1\%$ (Except 5V= $\pm 2\%$ ) (Maximum)  
Output Voltage Adj:  $\pm 10\%$  Minimum  
Overcurrent Protection: 105-125% Automatic Recovery Constant Current  
Overvoltage Protection: 115-140% Of V1 Nominal  
Overtemperature Protection Heatsink Temp. 90°C  $\pm 5^\circ\text{C}$  Auto Recovery

##### ENVIRONMENTAL

Operating Temperature: -20°C to +50°C. Derate to 50% at +70°C  
Storage Temperature: -40°C to +85°C Max  
Cooling: Internal Ball Bearing DC Fan  
Humidity: 20-90% RH Non Condensing  
Weight: Approx: 12 Lbs  
Size: 5" x 8" x 12.5"



NSF-ISR

Registered  
to ISO 9001

## MODEL SELECTION

Nominal Value (VDC)	1500 WATT OUTPUT		2000 WATT OUTPUT		2500 WATT OUTPUT		3000 WATT OUTPUT	
	Maximum Current (ADC)	Model	Maximum Current (ADC)	Model	Maximum Current (ADC)	Model	Maximum Current (ADC)	Model
5V	300A	NNTDM-5-300	Consult Factory					
12V	125A	NNTDM-12-125	Consult Factory					
15V	100A	NNTDM-15-100	Consult Factory					
24V	62A	NNTDM-24-62	84A	NNTDM-24-84	104A	NNTDM-24-104	125A	NNTDM-24-125
28V	54A	NNTDM-28-54	72A	NNTDM-28-72	89A	NNTDM-28-89	107A	NNTDM-28-107
48V	31A	NNTDM-48-31	42A	NNTDM-48-42	52A	NNTDM-48-52	62A	NNTDM-48-62
110V	14A	NNTDM-110-14	18A	NNTDM-110-18	22A	NNTDM-110-22	27A	NNTDM-110-27

## OPTIONAL DESIGNATIONS

- PAR	Parallel Operation	- CC	Conformal Coating
- 3P	3 Phase Input	- 400Hz	400 Hz Operation
- RK	Rack Mount	- MIL	Ruggedized / Militarized
- HS	Hot Swap	- ORD	Redundant Operation

## MECHANICAL OUTLINE

