

# 300 WATT DC/DC Power Supply

# **DNX301**



#### **FEATURES**

- Fully Isolated Outputs
- Low Profile: 9" x 4.85" x 2.00"
- One, Two, Three and Four Output Models
- N+1 Current Sharing
- Optional Fan Mounted On Cover
- Active Inrush Current Limiting

#### DESCRIPTION

The DNX301 is a compact 300 watt, multiple output power supply. All outputs are fully isolated and regulated. Active current sharing circuitry on Output #1, together with control functions and alarm options, simplifies N+1 and redundant applications. Fan and disk drive applications are handled by the peak current ratings of the auxiliary outputs.



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### **Input Specifications**

Parameter	Conditions	Min	Тур	Max	Units
Operating Range	DC	36	48	72	VDC
Inrush Current Limiting					
	36 <b>V</b> □			25	Арк
	<b>72V</b> DC			50	Арк
Efficiency	48 VDC, at full load		70		%

#### **Remote Sense**

Remote Sense is provided on Output #1 and will compensate for 0.7V of line drop. Remote Sense leads are protected against open, short and reversal.

#### Remote On/Off (Optional)

The power supply is turned on with a TTL logic '1' (or open) signal and turned off by a switch closure or TTL logic '0' referenced to (-) sense terminal. Consult the factory for other options.

#### **Over Voltage Protection**

Output #1:  $6.5V \pm 0.5 V_{DC}$ .

The power supply will latch off until AC power is cycled.

#### **Over Current Protection**

Individual current limit on all outputs. Automatic recovery upon fault removal.

#### **Active Inrush Current Limiting**

Inrush current is independent of ambient temperature.

#### **Transient Response**

The peak output voltage excursion will not exceed 2% and will recover within 1% in 200  $\mu$ sec for a 25% load step change.

#### **Over Temperature Protection**

Thermal switch turns off power supply if overheating occurs and automatically restarts.

#### Safety

Safety certified to UL/CUL to 1950, File Number E131694 TUV to EN60950/IEC950.

#### Cooling

The unit is designed to operate with 30 CFM of airflow.

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## **Output Voltages and Maximum Rated Loads**

MODEL NUMBER	OUTPUT #1 Vout Imax	OUTPUT #2 Vnom Imax/Ipk	OUTPUT #3 Vnom Imax/Ipk	OUTPUT #4 Vnom Imax
DNX301-U3A	±5V 45A	± 12V 8A/10A	± 12V 8A/10A	
DNX301-U3B	±5V 45A	± 15V 8A/10A	± 15V 8A/10A	
DNX301-U4C	±5V 45A	± 12V 8A/10A	± 12V 8A/10A	± 5V 3.0A
DNX301-U4D	±5V 45A	± 12V 8A/10A	± 12V 8A/10A	± 24V 1.5A
DNX301-U4E	±5V 45A	± 12V 8A/10A	± 12V 8A/10A	± 12V 3.0A
DNX301-U4F	±5V 45A	± 15V 8A/10A	± 15V 8A/10A	± 5V 3.0A
DNX301-U4G	±5V 45A	± 15V 8A/10A	± 15V 8A/10A	± 24V 1.5A
DNX301-U4H	±5V 45A	± 15V 8A/10A	± 15V 8A/10A	± 12V 3.0A

Note: Maximum current ratings are for 10sec maximum. Total power not to exceed 300 watts.

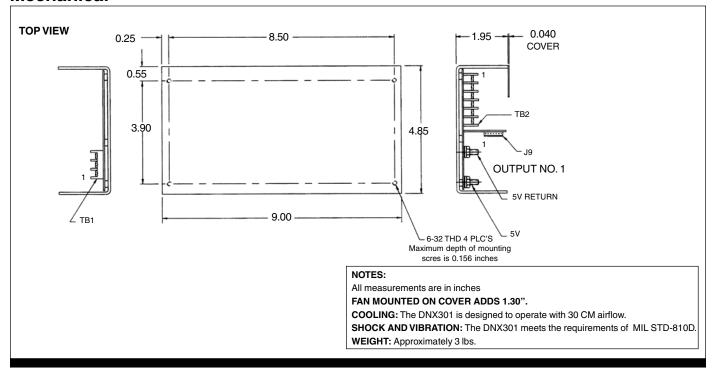
## **Output Specifications**

Parameter	Limits
Regulation	
Line	± 0.03%
Load	±0.25%
Cross	±0.05%
Minimum Load	
Output #1	3.0A
Auxiliary Outputs	0.1A

Parameter	Conditions	Min	Тур	Max	Units
Voltage Adustment Range			±5		%
PARD	20 MHz bandwidth			1	% P-P
Temperature					
Operating		0		50	°C
Storage		-20		+85	°C
Temperature Coefficient (Tc)	After half hour warm-up		± 0.02		%/°C

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## Mechanical



Terminal Block 1		Terminal Block 2		
POS	FUNCTION	POS FUNCTION		
1	DC +	1	-V2	
2	DC -	2	+V2	
3	Ground	3	-V3	
		4	+V3	
		5	-V4	
		6	+V4	

J9 Connector Molex No. 22-28-1090				
PIN FUNCTION				
1	+ Sense			
2	- Sense			
3	N/C			
4	N/C			
5	Start Up Sync.			
6	N/C			
7	7 Remote Inhibit			
8	8 Current Share			
9	Control Signal Rtn			

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