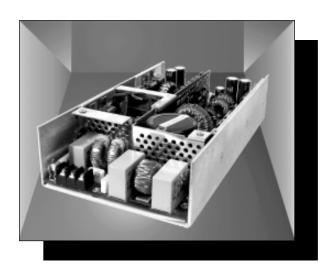


**Product Data Sheet** 

# 300 WATT AC/DC Power Supply

# **NX301**



## **DESCRIPTION**

The NX301 is a compact 300 watt Power Factor Corrected, multiple output power supply. All outputs are fully isolated and regulated. Active current sharing circuitry, 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.

### **FEATURES**

- Active Power Factor Correction
- Fully Isolated Outputs
- Low Profile: 9" x 4.85" x 2.00"
- One, Two, Three and Four Output Models
- N+1 Current Sharing
- FCC/VDE Class B EMI Filter Standard
- Optional Fan Mounted On Cover



## **Input Specifications**

Parameter	Conditions	Min	Тур	Max	Units
Operating Range	47-63 Hz	90		264	VAC
Inrush Current Limiting					
	120VAC, cold start			35	Арк
	240VAC, cold start			70	Арк
Efficiency					
120V	120V, full load		70		%
240V	240V, full load		75		%
Power Factor Correction (PFC)			0.99		
Meets	IEC 1000-4-7/EN61000-3-2 (formerly IEC	555-2)			

#### **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

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 ± 0.5 VDC.

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.

#### **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.

#### **Output Isolation**

All outputs are fully isolated.

#### **Power Fail Signal**

Upon AC input voltage removal, the power fail signal drops to logic zero at least 5msec before loss of DC output. On AC input turn-on, signal remains low until outputs are in regulation. Consult the factory for other options.

#### N + 1 Load Share

Output #1 has active load sharing circuitry. Units will load share within 1.5% of Maximum Rated Load.

#### **Over Temperature Protection**

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

#### Safety

UL Recognized: UL File Number E14675 (1950 & 1012) CSA Certified: CSA File Number LR 9070-154C

(C22.2 No. 234-M90, Level 6)

TUV License Number: R9576031 (EN60950) (IEC950)

#### Cooling

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

Page 2 NX301 3/98 REV B

# **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
NX301-U3A	±5V 45A	± 12V 8A/10A	± 12V 8A/10A	
NX301-U3B	±5V 45A	± 15V 8A/10A	± 15V 8A/10A	
NX301-U4C	±5V 45A	± 12V 8A/10A	± 12V 8A/10A	± 5V 3.0A
NX301-U4D	±5V 45A	± 12V 8A/10A	± 12V 8A/10A	± 24V 1.5A
NX301-U4E	±5V 45A	± 12V 8A/10A	± 12V 8A/10A	± 12V 3.0A
NX301-U4F	±5V 45A	± 15V 8A/10A	± 15V 8A/10A	± 5V 3.0A
NX301-U4G	±5V 45A	± 15V 8A/10A	± 15V 8A/10A	± 24V 1.5A
NX301-U4H	±5V 45A	± 15V 8A/10A	± 15V 8A/10A	± 12V 3.0A
NX301-U3N	±5 45A	±5 8A	±12 8A	
NX301-U4P	±5 45A	±12 8A	±15 8A	±12 3.0A

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

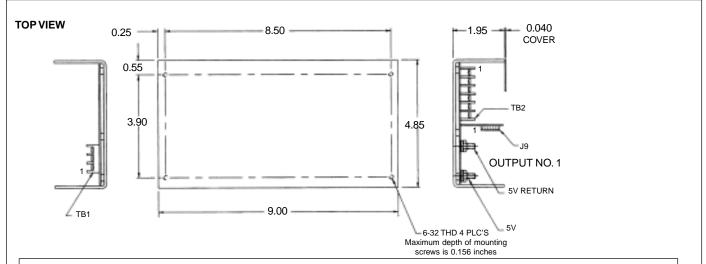
# **Output Specifications**

Parameter	Limits
Regulation	
Line	± 0.03%
Load	±0.25%
Cross	±0.05%
Minimum Load	
Output #1	3.0A
Auxiliary Outputs	0.1A
Hold-Up Time	25mSec at Full Load

Parameter	Conditions	Min	Тур	Max	Units
Voltage Adustment Range			±5		%
PARD	20 MHz bandwidth			1	% P-P
Temperature					
Operating		0		50	°C
	Derates to half power			70	°C
Storage		-20		+85	°C
Temperature Coefficient (Tc)	After half hour warm-up		± 0.02		%/°C

NX301 3/98 REV B Page 3

## Mechanical



NOTES:

All measurements are in inches

FAN MOUNTED ON COVER ADDS 1.30".

COOLING: The NX301 is designed to operate with 30 CM airflow.

SHOCK AND VIBRATION: The NX301 meets the requirements of MIL STD-810D. (Vibration-Method 514.3 Procedure I; Shock-Method 516.3 Procedure I).

WEIGHT: Approximately 3 lbs.

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

J9 Connector		J9 Con	nector
PIN	FUNCTION		Molex No.
1	+ Sense	Connector	22-28-1090
2	- Sense		
3	N/C		
4	N/C		
5	Start Up Sync.		
6	Power Fail		
7	Remote Inhibit	_	
8	Current Share		
9	Cntl Signal Rtn		
-	2 2.9	1	

Standard Options are shown, consult factory for other available options.

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Page 4 NX301 3/98 REV B