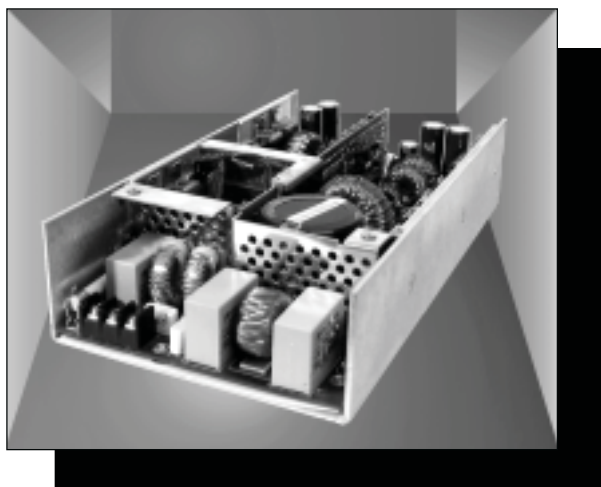


## **OBSOLETE PRODUCT**

Contact Factory for Replacement Model

# **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

### **AGENCY APPROVALS**



## Input Specifications

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

### 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  $\pm$  0.5 V<sub>DC</sub>.

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.

## Output Voltages and Maximum Rated Loads

MODEL NUMBER	OUTPUT #1		OUTPUT #2		OUTPUT #3		OUTPUT #4	
	V <sub>OUT</sub>	I <sub>MAX</sub>	V <sub>NOM</sub>	I <sub>MAX</sub> /I <sub>PK</sub>	V <sub>NOM</sub>	I <sub>MAX</sub> /I <sub>PK</sub>	V <sub>NOM</sub>	I <sub>MAX</sub>
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

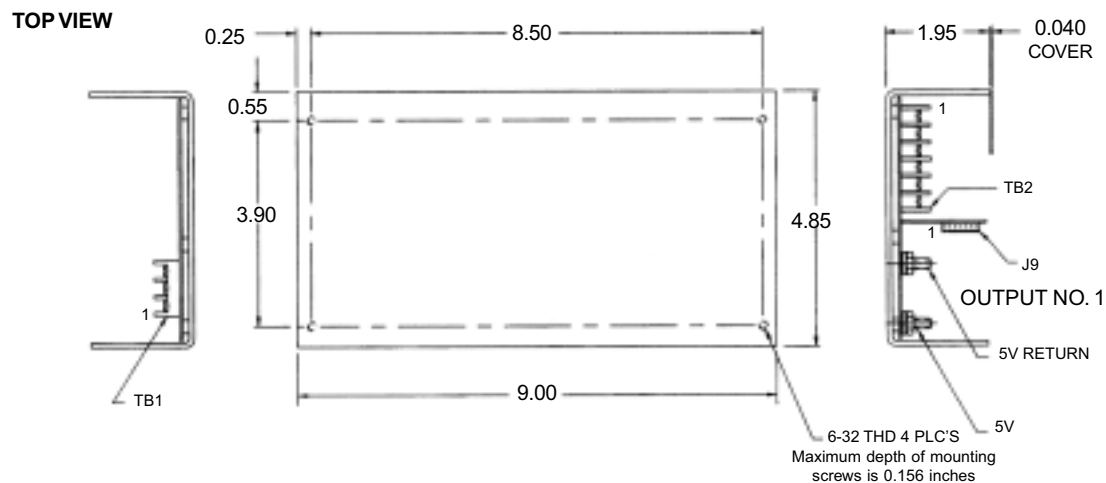
Note: Peak current ratings are for 10sec maximum. Total power not to exceed 300 watts.

## 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	Typ	Max	Units
Voltage Adjust 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 (T <sub>c</sub> )	After half hour warm-up		± 0.02		%/°C

## 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 Connector	
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		

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