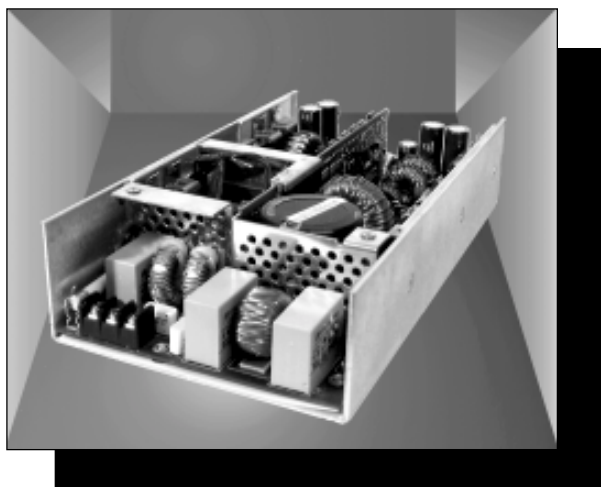


300 WATT AC/DC POWER SUPPLY

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_{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.

Transient Response

The peak output voltage excursion will not exceed 2% and will recover within 1% in 200 μ 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 _{OUT}	I _{MAX}	V _{NOM}	I _{MAX} /I _{PK}	V _{NOM}	I _{MAX} /I _{PK}	V _{NOM}	I _{MAX}
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

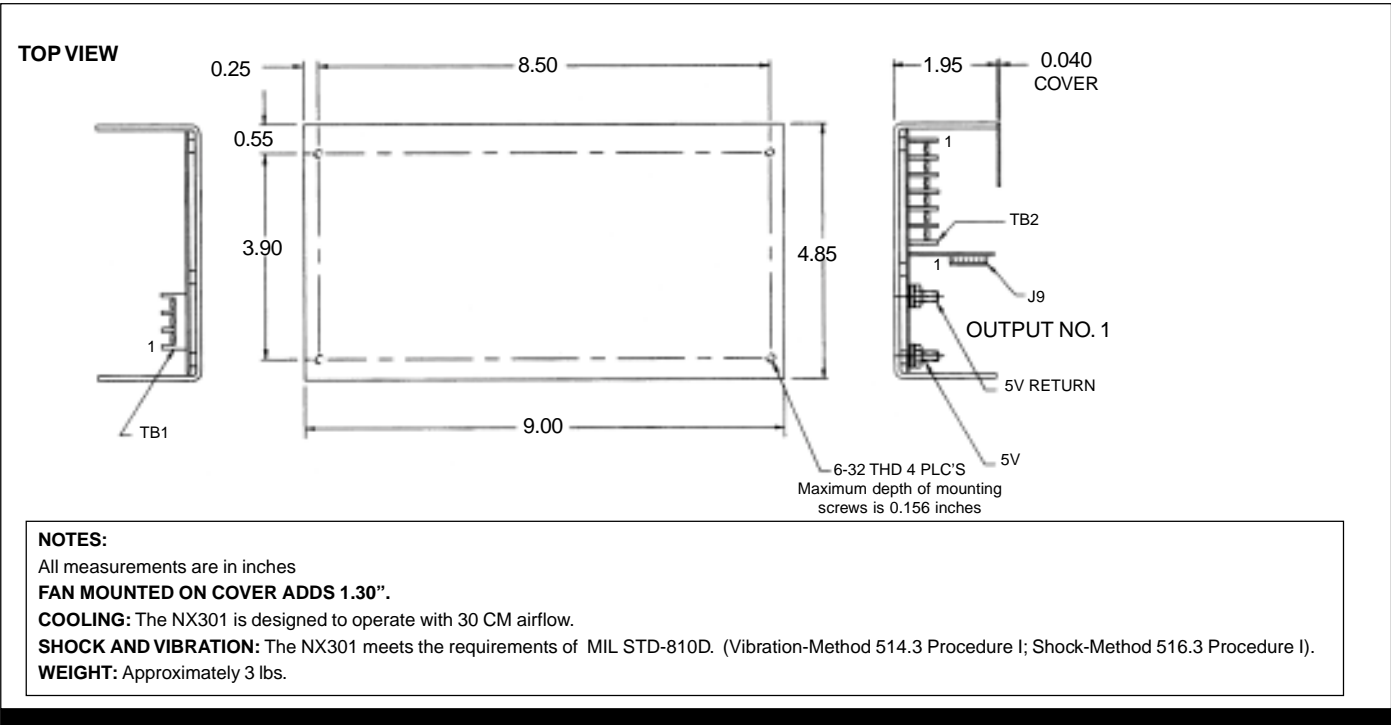
Note: Peak current ratings are for 10sec maximum. Total power not to exceed 300 watts.

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 (Tc)	After half hour warm-up		± 0.02		%/°C

Mechanical



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.

The information provided herein is believed to be reliable; however, C&D Technologies assumes no responsibility for inaccuracies or omissions. C&D Technologies assumes no responsibility for the use of this information, and all use of such information shall be entirely at the user's own risk. Prices and specifications are subject to change without notice. No patent rights or licenses to any of the circuits described herein are implied or granted to any third party. C&D Technologies does not authorize or warrant any C&D Technologies product for use in life support devices/systems or in aircraft control applications.