

**Product Data Sheet** 

# 350 WATT AC/DC Power Supply

# **NX350**



#### **DESCRIPTION**

The NX350 is a compact 350 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



Internet: http://www.cdpowerelectronics.com

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## **Input Specifications**

Parameter	Conditions	Min	Тур	Max	Units
Operating Range	47-63 Hz	90		264	VAC
Inrush Current Limiting					
	120Vac, cold start			37	Apk
	240Vac cold start			70	Арк
Efficiency					
	120V, full load		70		%
	240V, full load		75		%
Power Factor Correction (PFC)			0.99		
Meet	s IEC 1000-4-7/EN61000-3-2 (formerly IE	C 555-2)	1	1	1

#### **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/Of

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  $\mu sec$  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.

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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/Ipk
NX350-U3A	± 5V 50A	± 12V 10A/12A	± 12V 8A/10A	
NX350-U3B	± 5V 50A	± 15V 10A/12A	± 15V 8A/10A	
NX350-U4C	± 5V 50A	± 12V 10A/12A	± 12V 8A/10A	± 5V 3.0A/4.0A
NX350-U4D	± 5V 50A	± 12V 10A/12A	± 12V 8A/10A	± 24V 1.5A/2.0A
NX350-U4E	± 5V 50A	± 12V 10A/12A	± 12V 8A/10A	± 12V 3.0A/4.0A
NX350-U4F	± 5V 50A	± 15V 10A/12A	± 15V 8A/10A	± 5V 3.0A/4.0A
NX350-U4G	± 5V 50A	± 15V 10A/12A	± 15V 8A/10A	± 24V 1.5A/2.0A
NX350-U4H	± 5V 50A	± 15V 10A/12A	± 15V 8A/10A	± 12V 3.0A/4.0A

Note: Peak current ratings are for 10sec maximum. Total power not to exceed 350 watts.

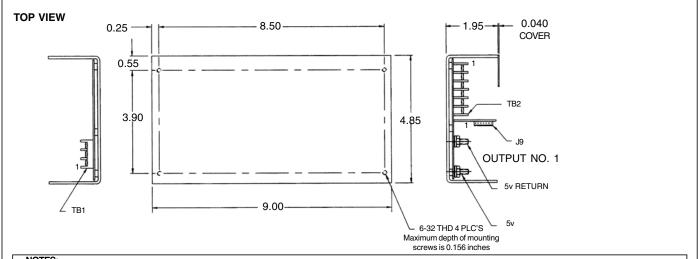
## **Output Specifications**

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	20mSec at Full Load	

Parameter	Conditions	Min	Тур	Max	Units
Voltage Adustment Range	Nominal line on all outputs		±5		%
PARD	Peak-to-peak 20 MHz bandwidth			1	%
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

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### Mechanical



NOTES:

All measurements are in inches

FAN MOUNTED ON COVER WILL ADD 1.30".

COOLING: The NX350 is designed to operate with 30 CM airflow.

SHOCK AND VIBRATION: The NX350 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		Termi	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.

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