

**Product Data Sheet** 

# **OBSOLETE PRODUCT**

**Contact Factory for Replacement Model** 

# 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

#### **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  | Apk   |
| Efficiency                    |  |        |      |     |       |
|                               | 120V, full load                            |        | 70   |     | %     |
|                               | 240V, full load                            |        | 75   |     | %     |
| Power Factor Correction (PFC) |  |        | 0.99 |     |       |
| Meets                         | E IEC 1000-4-7/EN61000-3-2 (formerly IEC 5 | 555-2) | 1    | 1   | I     |

#### **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<br>Vout Imax | OUTPUT #2<br>Vnom Imax/Ipk | OUTPUT#3<br>Vnom Imax/Ipk | OUTPUT#4<br>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.

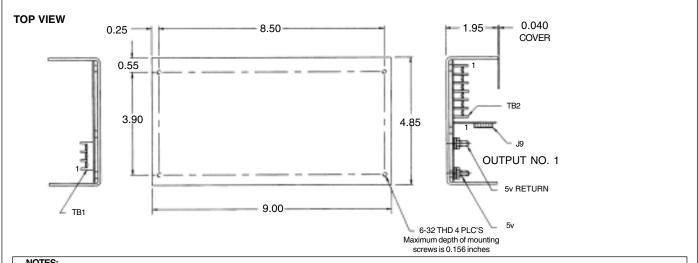
## **Output Specifications**

| 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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