C&D TECHNOLOGIES

Product Data Sheet

OBSOLETE PRODUCT
Contact Factory for Replacement Model

350 WATT DC/DC POWER SUPPLY

DNX350

FEATURES

- **Fully Isolated Outputs**
- **Low Profile: 9" x 4.85" x 2.00"**
- **One, Two, Three and Four Output Models**
- **Active Current Sharing on V1**
- **Optional Fan Covers (Top-Mounted or End-Mounted)**
- **Active Inrush Current Limiting**
- **36-72VDC Input**

DESCRIPTION

The DNX350 is a compact 350 watt, multiple output power supply that operates from a 36-72VDC source. All outputs are fully isolated and regulated. Active current sharing circuitry on Output #1, 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.

AGENCY APPROVALS

CE TÜV Rheinland c UL us

See "Safety" section on page 2 for more information

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Input Specifications

Parameter	Conditions	Min	Typ	Max	Units
Operating Range	DC	36	48	72	V_{DC}
Inrush Current Limiting					
	$36V_{DC}$			25	A_{PK}
	$72V_{DC}$			50	A_{PK}
Efficiency	$48V_{DC}$ at full load		70		%

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 (Optional)
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.

Over Voltage Protection
Output #1: 6.5V ± 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.

Active Inrush Current Limiting
Inrush current is independent of ambient temperature.

Transient Response
The peak output voltage excursion will not exceed 2% and will recover within 1% in 200 µsec for a 25% load step change.

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

Safety
Safety Certified to UL/CUL to 1950, File Number E131694.
TUV to EN60950/IEC 950.

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}/I_{PK}
DNX350-U1A	+5V	50A						
DNX350-U3A	± 5V	50A	± 12V	10A/12A	± 12V	8A/10A	-	-
DNX350-U3B	± 5V	50A	± 15V	10A/12A	± 15V	8A/10A	-	-
DNX350-U4C	± 5V	50A	± 12V	10A/12A	± 12V	8A/10A	± 5V	3.0A
DNX350-U4D	± 5V	50A	± 12V	10A/12A	± 12V	8A/10A	± 24V	1.5A
DNX350-U4E	± 5V	50A	± 12V	10A/12A	± 12V	8A/10A	± 12V	3.0A
DNX350-U4F	± 5V	50A	± 15V	10A/12A	± 15V	8A/10A	± 5V	3.0A
DNX350-U4G	± 5V	50A	± 15V	10A/12A	± 15V	8A/10A	± 24V	1.5A
DNX350-U4H	± 5V	50A	± 15V	10A/12A	± 15V	8A/10A	± 12V	3.0A
DNX350-U4I	± 5V	50A	± 15V	10A/12A	± 15V	8A/10A	± 12V	3.0A

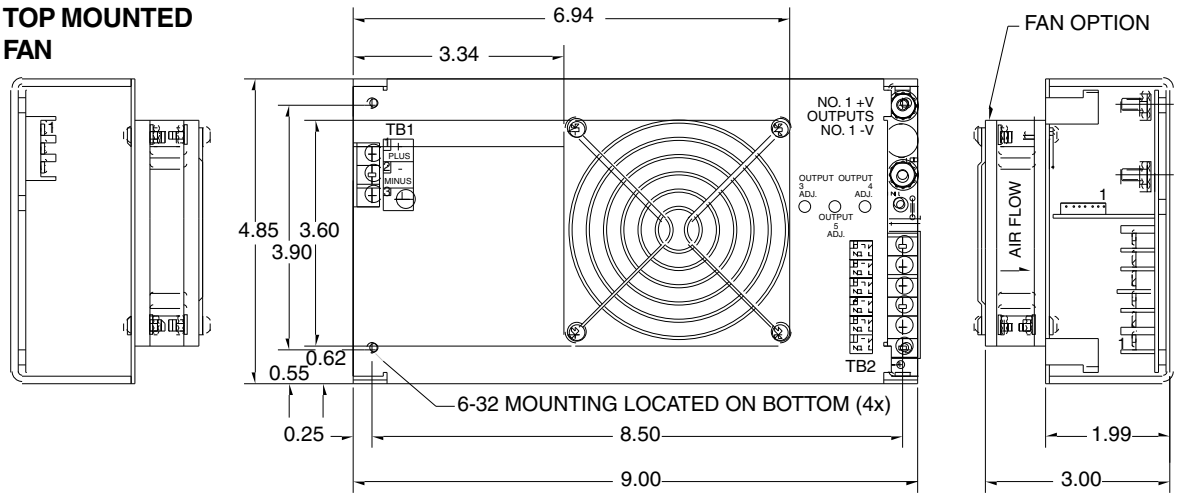
Output Specifications

Parameter	Limits
Regulation	
Line	± 0.03%
Load	±0.25%
Cross	±0.05%
Minimum Load	
Output #1	3.0A
Auxiliary Outputs	0.1A

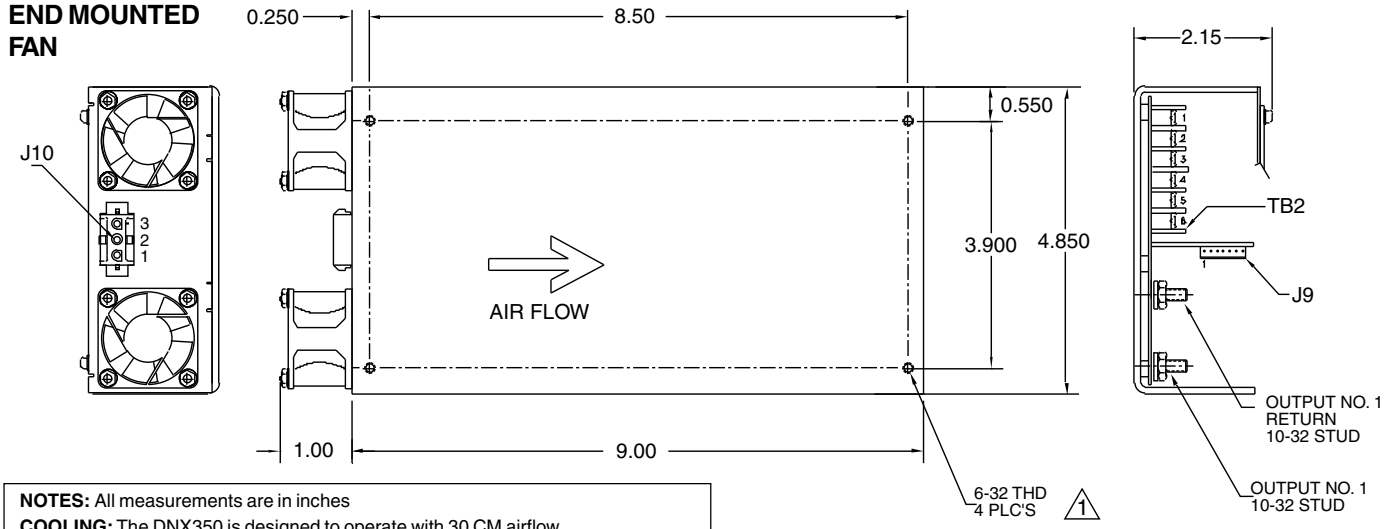
Parameter	Conditions	Min	Typ	Max	Units
Voltage Adustment Range	Nominal line on all outputs		±5		%
PARD	Peak-to-peak 20 MHz bandwidth			1	% P-P
Temperature					
Operating		0		50	°C
Storage		-20		+70	°C
Temperature Coefficient (T_C)	After half hour warm-up		± 0.02		%/°C

Mechanical

TOP MOUNTED FAN



END MOUNTED FAN



NOTES: All measurements are in inches
COOLING: The DNX350 is designed to operate with 30 CM airflow.
SHOCK AND VIBRATION: The DNX350 meets the requirements of MIL STD-810D.
WEIGHT: Approximately 3 lbs.

Terminal Block 1	
POS	**FUNCTION**
1	DC +
2	DC -
3	Ground

Terminal Block 2	
POS	**FUNCTION**
1	-V2
2	+V2
3	-V3
4	+V3
5	-V4
6	+V4

J9 Connector Molex No. 22-28-1090	
PIN	**FUNCTION**
1	+ Sense
2	- Sense
3	N/C
4	N/C
5	Start Up Sync.
6	N/C
7	Remote Inhibit
8	Current Share
9	Control Signal Rtn

J10 Connector* AMP 1-480701-1	
POS	**FUNCTION**
1	DC+
2	DC-
3	GROUND

*Used with end-mounted fan cover, option "V"