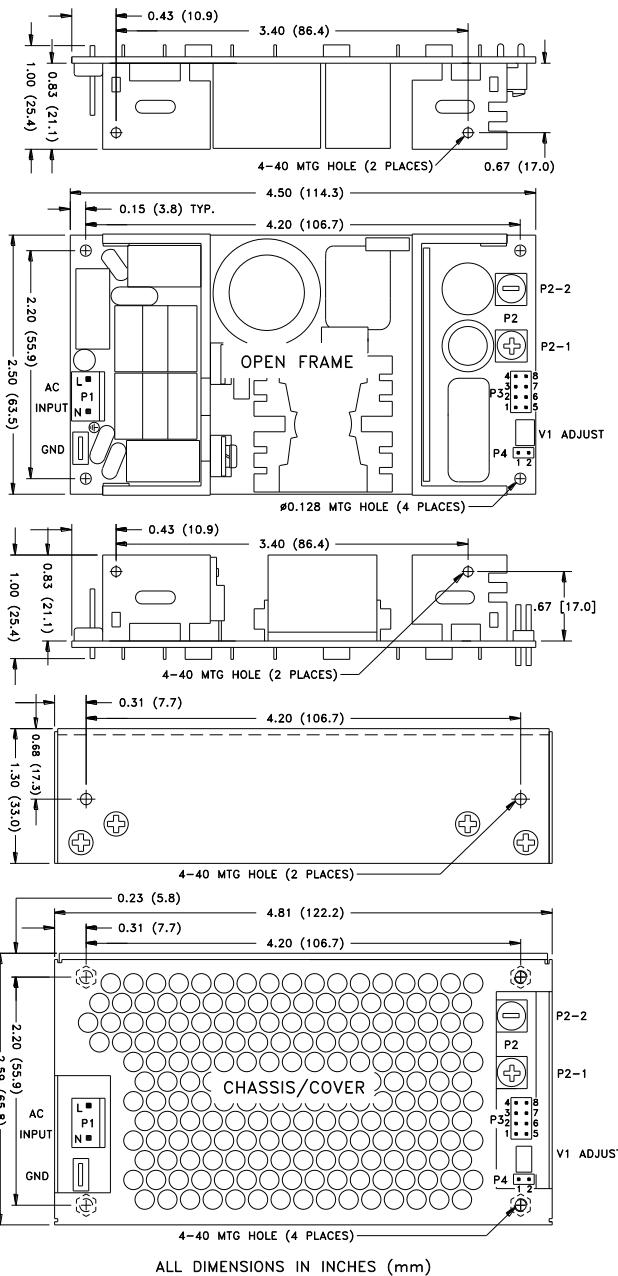


NXT-100 SERIES MECHANICAL SPECIFICATIONS



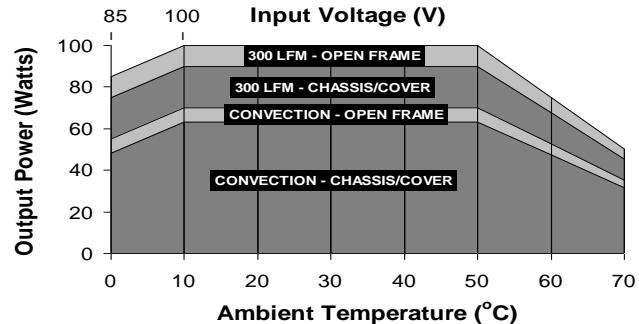
CONNECTOR SPECIFICATIONS

P1	LINE NEUTRAL	AC Input	0.156 friction lock header mates with Molex 09-50-3031 or equivalent crimp terminal housing with Molex 2478 or equivalent crimp terminal.
P2	OUTPUT 1 (+) 1  2 OUTPUT 1 (-)	DC Output	6-32 screw down terminal mates with #6 ring tongue terminal. (10 in-lb Max)
P3	SENSE (+) 4  8 OUTPUT 1 (+) SENSE (-) 3  7 OUTPUT 1 (-) ENABLE 2  6 P.F. RTN SENSE (-) 1  5 P.F. SIG (+)	Power Fail, Sense	0.100 friction lock header mates with Molex 22-55-2081 or equivalent crimp terminal housing with Molex 71851 or crimp equivalent terminal.
P4	SHARE BUS 1  2 INHIBIT	Inhibit, Load Share	0.100 friction lock header mates with Molex 50-57-9002 or equivalent crimp terminal housing with Molex 71851 or equivalent crimp terminal.
	 	Ground	0.187 quick disconnect terminal.

APPLICATIONS INFORMATION

1. Continuous Output Power must not exceed 100W.
2. Generally, adequate cooling is provided when semiconductor case temperatures do not exceed 70°C rise and transformer temperature does not exceed 60°C rise at any specified ambient temperature.
3. Sufficient area must be provided around power supply to allow natural movement of air to develop in convection-cooled applications.
4. This product is intended for use as a professionally-installed component within information technology, industrial, and medical equipment and is not intended for stand-alone operation.
5. A minimum load of 10% is required on Output 1 to ensure proper regulation of remaining outputs.
6. This product includes only one fuse in the input circuit. In consideration of clause 8.11.5 of IEC 60601-1:2005, a second fuse may be required in neutral conductor of the end product.
7. Peak-to-Peak Output Ripple and Noise is measured directly at the output terminals of the power supply, without the use of the probe ground lead or retractable tip (tip-and-barrel method), 20MHz bandwidth.
8. This product was type-tested and safety-certified using the dielectric strength test voltages listed in Table 6 of IEC 60601-1:2005. In consideration of Clause 8.8.3, care must be taken to insure that the voltage applied to a reinforced insulation does not overstress different types and levels of insulation. Primary and secondary-to-ground capacitors may need to be disconnected prior to performing a dielectric strength test on the power supply or the end product. It is highly recommended that the DC test voltages listed in DVB.1, Annex DVB of UL 60601-1 1st Edition are not exceeded during a production-line dielectric strength test of the assembled end product. Please consult factory for further information.
9. This power supply has been safety-approved and final-tested using a DC dielectric strength test. Please consult factory before performing an AC dielectric strength test.
10. Remote-Sense terminals may be used to compensate for cable losses up to 400mV depending on model. The use of a twisted pair, decoupling capacitors and an appropriately-rated low-impedance capacitor connected across the load will increase noise immunity.
11. Maximum screw penetration into bottom chassis mounting holes is 0.100 inches. Maximum screw penetration into side chassis mounting holes is 0.250 inches.
12. To comply with emissions specifications, all four mounting hole pads must be electrically connected to a common metal chassis. Chassis/Cover option is recommended. Refer to Operating Instructions for additional information.
13. Common RF shielding precautions may need to be taken to assure emissions compliance. Refer to Operating Instructions for additional information.
14. Power Fail (AC-Good) feature provides a logic-low warning signal from an open collector transistor output 10ms prior to loss of output from AC failure.
15. 300LFM of airflow must be maintained one inch above the top of the heatsinks in any direction in open-frame forced-air applications; and one inch above and toward any of the three perforated sides of the cover in forced-air Chassis/Cover applications.
16. Low forward-voltage-drop oring diodes must be used in all load-sharing applications in 2.5 through 15V models. Oring diodes must be used on 24 through 48V models used in fault-tolerant applications but are optional in power-boosting applications. Oring diode power dissipation must be subtracted from the maximum output-power rating of each model.
17. Current-carrying conductors in load-sharing applications must be short and symmetrical.
18. Refer to Load-Share Evaluation Board data sheet for additional load-share applications information.
19. P3-2 Load Share Enable and P4-2 Remote Inhibit will share a common negative return pin P3-1.
20. Remote Inhibit option will require an outside TTL compatible source.

MAX P_{OUT} VS. AMBIENT TEMPERATURE/INPUT VOLTAGE



Derating requirements – Chart above applies to models 1003 thru 1008 only. 100W 300 LFM forced air, open frame. 70W convection cooled open frame. Derate 10% with Chassis and Cover. Derate $1.0W_{OUT}/1V_{IN}$ below $100V_{IN}$ and between $100V_{IN}$ and $85V_{IN}$. Use larger of the two deratings when using chassis/cover below $100V_{IN}$. Derate output power linearly to 50% between 50° and 70° C.

TYPICAL LOAD SHARE/REMOTE SENSE APPLICATION

