

# GNX-1000-DC

## LOW PROFILE -1000 WATTS

ONE TO FOUR OUTPUTS, **36 - 75 VDC INPUT**  
**40 AMP CAPABILITY ON V2 - 200 AMPS ON V1**



### FEATURES:

- Low Profile 2.5" x 8" x 12" in Size
- One to Four outputs
- All Outputs Independent
- Meets EN55022 Level A / FCC Class A
- No Additional Cooling Required up to 50 °C
- Wide Range Input (36-75VDC)
- Remote Sense On V1, V2 Outputs
- Greater than 150,000 Hrs MTBF
- Zero Wire Current Share on V1 & V2 Outputs

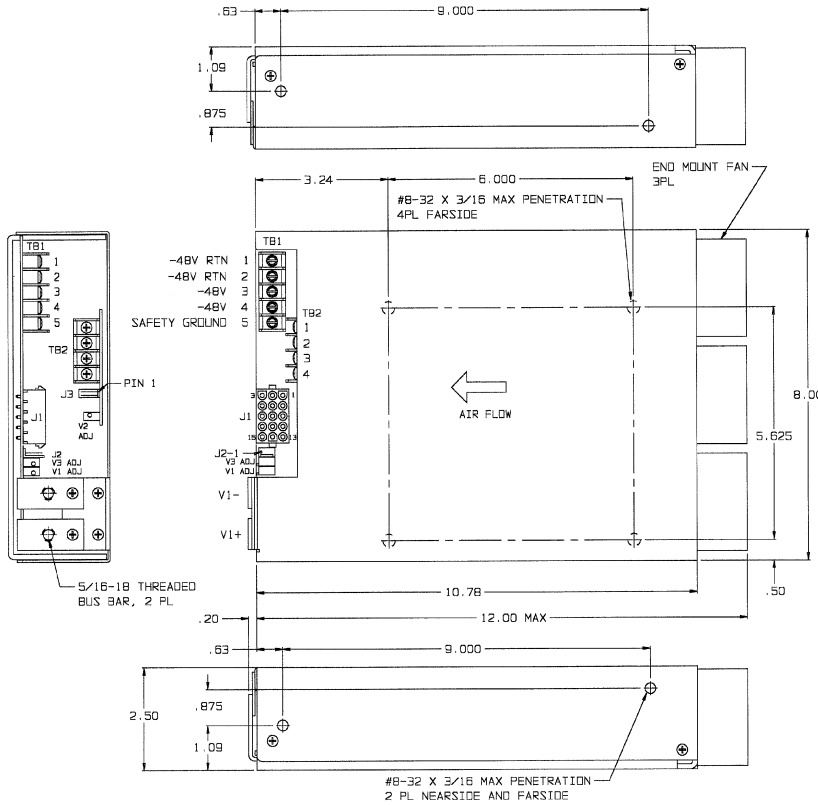


	OUTPUT VOLTAGE (VDC)	OUTPUT AMPERS (MAX)	OUTPUT POWER (WATTS)
V1	1.8 to 48	150 / 200*	1000
V2	1.8 to 24	40	200
V3	5 to 24	20/30pk	240
V4	3.3 to 24	10	120

\* 200A on single output version.

# GNX-1000-DC SERIES

## 1000 WATT COMPACT SIZE



DC INPUT (36-75 VDC CONTINUOUS RANGE)	
FUNCTION	-48VDC
TB1-1,2	-48V RTN
TB1-3,4	-48V
TB1-5	SAFETY GROUND
	CONNECTOR
	BARRIER STRIP
	#6-32 SCREWS
	3/8" CENTERS

DC OUTPUTS			
FUNCTION	DESCRIPTION	LOCATION	CONNECTOR
V1	+5V/150A	MAIN OUTPUT	5/16-18 THREADED BUS BARS
V2	+3.3V/40A	TB2-1,2	AMP MATE-N-LDK
	+3.3V RTN	TB2-3,4	#350830-1
V3	+12V/20A-30A PK	J1-12, 13, 14, 15	MATES WITH
	+12V RTN	J1-7, 8, 9, 10, 11	#350735-1
V4	+12V/10A FLOATING	J1-1, 2, 3	WITH PINS
	-12V/10A FLOATING	J1-4, 5, 6	

STATUS AND CONTROL			
FUNCTION	LOCATION	NOTES	CONNECTOR
REMOTE SENSE	J2-1	OUTPUT #1 SENSE	MOLEX #22-04-1041
	J2-2	OUTPUT #1 SENSE RTN	MATES WITH
FAIL	J2-3	REFERENCE TO	MOLEX #22-01-1044
INHIBIT	J2-4	COMMON	
REMOTE SENSE	J3-1	OUTPUT #2 SENSE	MOLEX #22-04-1021
	J3-2	OUTPUT #2 SENSE RTN	MATES WITH MOLEX #22-01-1024

**NOTES:**

1. INHIBIT IS OPEN TO RUN. CONTACT CLOSURE TO THE NEGATIVE SENSE LINE OR A TTL LEVEL "0" TURNS OFF DC OUTPUTS.
2. FAIL SIGNAL IS A NORMAL LOGIC "1" TTL SIGNAL WHICH GOES LOW UNDER ANY OF THE FOLLOWING CONDITIONS:
  - a). WHENEVER THE +5V OR THE +3.3V OUTPUT FAILS.
  - b). WHENEVER THERE IS AN OVER TEMPERATURE CONDITION.
  - c). WHENEVER THERE IS AN OVER VOLTAGE SHUT DOWN.
3. 36-75VDC INPUT.
4. TOTAL OUTPUT POWER NOT TO EXCEED 1000 WATTS.

<b>Nominal Input Voltage</b>	-48 VDC, 32A max.	<b>Overtemperature Protection</b>	Unit shuts down if overheated. Recycle DC to reset.
<b>Operational Input</b>	36-75 VDC	<b>Current Limiting</b>	All outputs short circuit protected with foldback protection. Automatic recovery upon removal of the short.
<b>Inrush Current</b>	Less than 5 msec. 60 amperes @ -48 VDC.	<b>Paralleling</b>	Two or more supplies can be operated in parallel and will share V1/V2 current to within 10% of each other.
<b>Fusing</b>	50 Ampere, 300 VDC, Class G	<b>Remote Sense</b>	Compensates for up to 0.5V total distribution voltage drop on the V1 & V2 outputs.
<b>Hold up time</b>	1msec minimum after loss of DC Input at full load and nominal input.	<b>INH</b>	Open to Run, Contact closure to return , turns off all outputs.
<b>Efficiency</b>	70% typical	<b>FAIL Signal</b>	Normal logic '1' TTL signal which goes low whenever the V1 , V2 outputs fail, an overtemperature condition, an over voltage shut down.
<b>Turn on time</b>	1 sec max. from power up. All output voltages come up within 10msec of each other.	<b>Cooling</b>	Integral fans provide 50cfm of air flow.
<b>Line and Load Regulation</b>	±2% over DC input range and 0 to 100% load change.	<b>Operating Temperature</b>	-40°C to 50°C operating temperature with full load.
<b>Minimum Load</b>	5% minimum load required on V1 for V2 to regulate to full load. No minimum load required on V2-V4.	<b>Stability</b>	All outputs 0.1% for 8 hrs. after 30 minute warm-up.
<b>Ripple &amp; Noise</b>	Through 20MHz 1% max. or 100mv whichever is greater for all outputs, peak to peak, with coaxial probe and 0.1uF/10uF capacitors at the connector.	<b>Humidity</b>	Up to 95% non-condensing.
<b>Transient Response</b>	Output maximum excursion of ± 5% for 50% load step. Recovery less than 500 µsec.	<b>Storage Temperature</b>	-40°C to 85°C.
<b>Overshoot/Undershoot</b>	No turn-on or turn-off overshoot.	<b>Size</b>	8" x 2.5" x 12" <b>Weight:</b> 12 lbs.
<b>Output Isolation</b>	Isolated from chassis ground, 50Vdc.	<b>EMC</b>	Meets EN55022 Level A / FCC Class A conducted.
<b>Input/Output Isolation</b>	1500 VDC from input to both chassis/outputs. SELV construction.	<b>Safety</b>	UL 1950, CSA C22.2 No. 950, EN60950.
<b>Reverse Voltage</b>	Protected against reverse voltage to supply current rating.		
<b>Overvoltage Protection</b>	Shutdown at 130% of nominal Vout V1, V2, V3. V4 failsafe design. Recycle input power to reset.		

SERIES BREAKDOWN: **GNX-1000X1-DC**  
 where X1= S for Single output, D for Dual output, T for Triple output or Q for Quad output

REV: -