## GNX-250 LOW PROFILE - 300 WATTS

ONE TO FOUR OUTPUTS - 20A CAPABILITY ON V2 POWER FACTOR CORRECTED 90-264 VAC 60 AMPS COMBINED CURRENT ON V1 & V2 OUTPUTS



## **FEATURES:**

Low Profile 1.61" x 4.8" x 6" in Size
One to Four outputs
Meets EN55022 Level A / FCC Class A
No Additional Cooling Required up to 50 °C
Power Factor Corrected Input (90-264VAC)
Zero Wire Current Share on V1 Output
Greater than 150,000 Hrs MTBF





|            | OUTPUT<br>VOLTAGE (VDC) | OUTPUT<br>AMPERS (MAX) | OUTPUT<br>POWER (WATTS) |
|------------|-------------------------|------------------------|-------------------------|
| <b>V</b> 1 | 2 to 48                 | 40                     | * 300                   |
| <b>V2</b>  | 2 to 24                 | 20                     | 120                     |
| <b>V</b> 3 | 5 to 24                 | 5                      | 50                      |
| <b>V</b> 4 | 2 to 24                 | 2                      | 50                      |

<sup>\* 300</sup>W Single output rated.



## **GNX-250 SERIES 300 WATT COMPACT SIZE**

| AC       | AC INPUT (90-264 VAC CONTINUOUS RANGE) |               |               |  |  |
|----------|--|---------------|---------------|--|--|
| FUNCTION | 115VAC                                 | 2AV OES       | CONNECTOR     |  |  |
| TB1-1    | LINE                                   | LINE 1        | BARRIER STRIP |  |  |
| TB1-2    | NEUTRAL                                | LINE 2        | #6-32 SCREWS  |  |  |
| TB1-3    | SAFETY GROUND                          | SAFETY GROUND | .325" CENTERS |  |  |

|          | DC DUT           | PUTS        |                   |
|----------|------------------|-------------|-------------------|
| FUNCTION | DESCRIPTION      | LOCATION    | CONNECTOR         |
| V1       | +5V/40A          | MAIN DUTPUT | BUS BARS          |
|          | +5V RTN          |             | # 8-32 THREADS    |
| V2       | +3.3V/20A        | J1-4, 5, 10 | AMP #770743-1     |
|          | RTN              | J1-3, 8, 9  | MATES WITH CONN   |
| V3       | +12V/4A          | J1-7        | #770580-1 WITH    |
|          | RTN              | J1-2        | SUCKETS #171639-1 |
| V4       | +12V/2A FLOATING | J1-1        | (AWG #20 TO #16)  |
|          | -12V/2A FLUATING | J1-6        |                   |

| STATUS AND CONTROL |                   |                     |                   |  |  |
|--------------------|-------------------|---------------------|-------------------|--|--|
| FUNCTION           | ON LOCATION NOTES |                     | CONNECTOR         |  |  |
| REMOTE SENSE       | J2-1              | DUTPUT #1 SENSE     | MOLEX #22-04-1041 |  |  |
|                    | J2-2              | DUTPUT #1 SENSE RTN | HTIW ZETAM        |  |  |
| FAIL               | J2-3              | REFERENCE TO        | MULEX #22-01-1044 |  |  |
| INHIBIT            | J2-4              | COMMON              |                   |  |  |

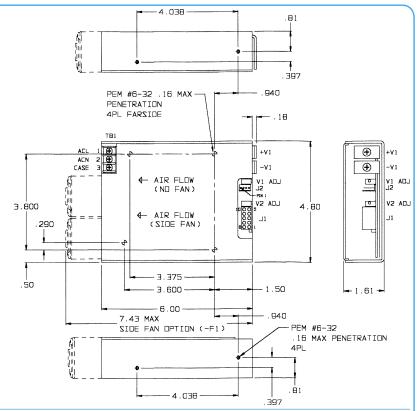
## NOTES:

- 1. INHIBIT IS OPEN TO RUN. CONTACT CLOSURE TO THE NEGATIVE SENSE LINE OR A TTL LEVEL "O" TURNS OFF DC DUTPUTS.

  2. FAIL SIGNAL IS A NORMAL LOGIC "1" TTL SIGNAL WHICH GOES LOW UNDER
- ANY OF THE FOLLOWING CONDITIONS:

  a). WHENEVER THE +5V OUTPUT FAILS.

  - b). WHENEVER THERE IS AN OVER TEMPERATURE CONDITION
  - c). WHENEVER THERE IS AN OVER VOLTAGE SHUT DOWN.
  - d). WHENEVER THERE IS AN AC INPUT FAILURE (5msec WARNING BEFORE OUTPUTS GO OUT OF REGULATION)
- 3. 90-264VAC INPUT POWER FACTOR CORRECTED



**Nominal Input Voltage** 100-240 VAC. 47-63 Hz. 400Hz. available. Frequency

**Operational Input** 

Power Factor 0.99 Typical at Full Load. Voltage Range

Meets EN 61000-3-2.

Inrush Current Less than 4 msec. 30 amperes @ 115 VAC

or 60 amperes @ 230 VAC.

**Brownout Protection:** Holds Regulation to 85 Vac. **Fusing** 5 Ampere, 250 VAC, Internal.

Hold up time 20msec minimum after loss of AC Input at full load

and nominal input

**Efficiency** 75% typical Turn on time Less than 1 sec.

Line and Load V1 output ± 2% over AC input range and 0 to 100% loading. V2-V4 outputs hold 1% over AC input Regulation

range and 0 to 100% load. 10% minimum load required

on V1 for full load regulation on V2-V4.

Adjustability Outputs #1, #2 adjustable ± 5% minimum.

Output #3, #4 fixed.

Ripple & Noise 1% PARD or 100mv which ever is greater.

20MHz bandwidth.

**Transient Response** Output maximum excursion of  $\pm$  5% for 50% load

step. Recovery less than 500 µsec.

**Short Circuit and** Overload Protection All outputs are protected from short circuit and overload. Automatic recovery.

Overshoot No turn-on or turn-off overshoot.

**Output Isolation** Isolated from ground 50 Vdc. **Reverse Voltage** Protected against reverse voltage to supply

current rating.

Overvoltage Shutdown at 130% of nominal Vout (V1-V3).

Protection V4 Fail safe design.

Overtemperature Unit shuts down if overheated. AC must be recycled. Protection

-F1 models equipped with Integral fan. Cooling

up to 50°C Ambient full power.

Models without -F1 fans, user provides min. 17 CFM.

Input/Output Isolation 4242 VDC, SELV construction.

Remote Sense Up to 0.5 volts total in load. (V1 Output) Open Sense Lead Protection

Remote On/Off Open to Run, Contact closure to return, turns off

all outputs.

Fail Provides TTL "0" 5ms before output voltage goes out

of regulation band upon loss of AC power. Also Provides TTL "1" open collector when output #1 is

above 4.6V (for 5V nominal output).

**Operating Temperature** -20°C to 50°C full output.

Stability All outputs 0.1% for 8 hrs. after 30 minute warm-up.

Humidity Up to 95% non-condensing.

Size 1.61"x 4.8"x 6" Weight: 4 lbs. Meets FCC Class A and EN55022 Level A **EMI** Safety UL 1950, CSA C22.2 No. 950, EN60950.

SERIES BREAKDOWN: GNX-250X1-P-(F1)