

## High Power Supplies 900/1000 Watt AC/DC Universal Input Power Supply

## SUMMARY

- 90 -264 Vac nominal input range
- Overvoltage and short circuit protection
- Approved to UL, CSA and EN Standards
- Power Good LED
- Low Leakage
- 12 V Auxiliary output

The GPMP Series are universal input AC/DC power supplies with power factor correction (PFC) with up to 1000 Watts output power. The GPMP product incorporates true inhibit, power fail alarm and fan control. The series is approved to EN60601-1 to reduce design-in time and end system compliance costs



All specifications are typical at nominal input, full load at 25 °C unless otherwise stated

## SPECIFICATIONS

OUTPUT SPECIFICATIONS		
Output Power	Integral forced air	1000 Watts max.
Total Regulation		See table
Rise time	At turn-on	3.0 s max.
Transient response	Main output 25% 0.1 A/ $\mu$ s	3.5% max. dev. 350 $\mu$ s recovery to 1%
Temperature Coef- ficient		+/-0.03%/oC
Overvoltage protection		125% +/-10%
Short Circuit protection	block wall	Yes

INPUT SPECIFICATIONS		
Input Voltage range	Universal input	100-240 nom (85 - 264 max) Vac
Input frequency		47 Hz to 63 Hz
Input surge current		40 A max.
Ground Leakage current	264 Vac 60 Hz	160 $\mu$ A
Input current	120 Vac	10.0 A
	230 Vac	5.5 A
Input fuse	F1,F2	15.0 A

EMC INFORMATION		
Conducted emissions	EN55011	Level B
Radiated emissions	EN55011	Level A
Line freq. harmonics	EN61000-3-2	Class A
Voltage fluctuations	EN61000-3-3	Complies (clause 5b)
ESD Air	EN61000-4-2	8 kV contact
ESD Contact	EN61000-4-2	6 kV air
Radiated immunity	EN61000-4-3	3 V/m
Fast Transients (EFT)	EN61000-4-4	2 kV 5 kHz
Line surge immunity	EN61000-4-5	1 kV diff /2 kV cm
Conducted immunity	EN61000-4-6	3 Vrms
Power freq. mag. field	EN61000-4-8	3 A/m
Voltage dip immunity	EN61000-4-11	Unit will ride through without loss of output at 75% of rated load with AC power fail warning.

ENVIRONMENTAL SPECIFICATIONS		
Thermal Performance	operating ambient (see ratings chart)	-20 °C -50 °C
	non-operating	-40 to +85 °C
	0 - 50 °C Convection cooled	1000 Watts
Maximum Altitude	operating / non-operating	10,000 ft. / 40,000 ft. max.
Relative Humidity	non-condensing	5% - 90% RH
Vibration (operating)	0.003 g <sup>2</sup> /Hz	1.5 g <sub>rms</sub> 3 axes 10 min/axis
Vibration (non-operating)	0.026 g <sup>2</sup> /Hz	5.0 g <sub>rms</sub> 3 axes, 1 hr/axis
Shock	half-sine 20 g <sub>pk</sub>	10 ms, 3 axes, 6 shocks total
Shock	half-sine 40 g <sub>pk</sub>	10 ms, 3 axes, 6 shocks total

GENERAL SPECIFICATIONS		
Hold-up time	120 Vac, 60 Hz	30 ms at 1000 Watts output
Efficiency	120 Vac 1000 W output	>84 %
isolation voltage	input to ouput input to ground	4000 Vac 1800 Vac
Switching frequency	fixed	70 KHz, +/- 10 KHz
Safety Approvals	UL/EN/IEC 60601-1 CSA22.2 No.60601-1	
Maximum weight	2 kg (4.4 lbs)	

MODEL NUMBER	Output	Peak Output	Features	Ripple	Regulation
GPMP1000-24	24 V 41.7 A	24 V 43 A	+/-5% adjust	240 mV	+/- 0.5%
GPMP1000-48	48 V 20.8 A	48 V 22 A	+/-5% adjust	240 mV	+/- 0.5%
GPMP900-24	24 V 37.5 A	24 V 39.5 A	+/-5% adjust	240 mV	+/- 0.5%
GPMP900-48	48 V 18.8 A	48 V 20.8 A	+/-5% adjust	240 mV	+/- 0.5%

NOTES
1. Integral forced air cooling
2. Peak rating is for 1 minute maximum 10% duty cycle
3. Noise measurent 20 MHz Bandwidth, differential mode. Measured with scope probe directly across output terminals of the power supply.
4. 12 V Auxiliary output does not shutdown with inhibit

MECHANICAL NOTES
The GPMP series is factory configured with option 1 connectors. Options 2 and 3 are available, Please contact factory for other connector arrangements

#### OPTION 1

J1: PHOENIX P/N 1732034

- 1 ☐ AC INPUT LINE
- 2 ☐ AC INPUT NEUTRAL
- 3 ☐ AC INPUT SFTY GND 

J7: PHOENIX P/N 1706785  
(2 REQUIRED)


- 4 ☐ OUTPUT #1
- 3 ☐ OUTPUT #1
- 2 ☐ RETURN
- 1 ☐ RETURN

J5: PHOENIX P/N 1726066

- 1 ☐ FAN ON/OFF
- 2 ☐ +12V AUX
- 3 ☐ COMMON
- 4 ☐ INHIBIT
- 5 ☐ AC POWER FAIL
- 6 ☐ DC POWER GOOD

#### OPTION 2

J1: PHOENIX P/N 1732034

- 1 ☐ AC INPUT LINE
- 2 ☐ AC INPUT NEUTRAL
- 3 ☐ AC INPUT SFTY GND 

BUSS BAR #1

BUSS BAR #2


J5: PHOENIX P/N 1726066

- 1 ☐ FAN ON/OFF
- 2 ☐ +12V AUX
- 3 ☐ COMMON
- 4 ☐ INHIBIT
- 5 ☐ AC POWER FAIL
- 6 ☐ DC POWER GOOD

#### OPTION 3

J1: PHOENIX P/N 1804807

MATING CONNECTOR PHOENIX 1804917

- 1 ☐ AC INPUT LINE
- 2 ☐ AC INPUT NEUTRAL
- 3 ☐ AC INPUT SFTY GND 

J5: PHOENIX P/N 1802414

MATING CONNECTOR PHOENIX 1754495  
(2 REQUIRED)

- 1 ☐ FAN ON/OFF
- 2 ☐ +12V AUX
- 3 ☐ COMMON
- 4 ☐ INHIBIT
- 5 ☐ AC POWER FAIL
- 6 ☐ DC POWER GOOD

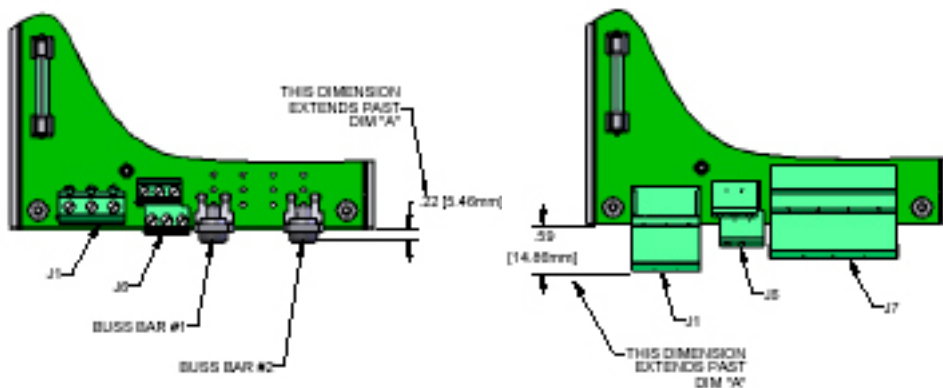
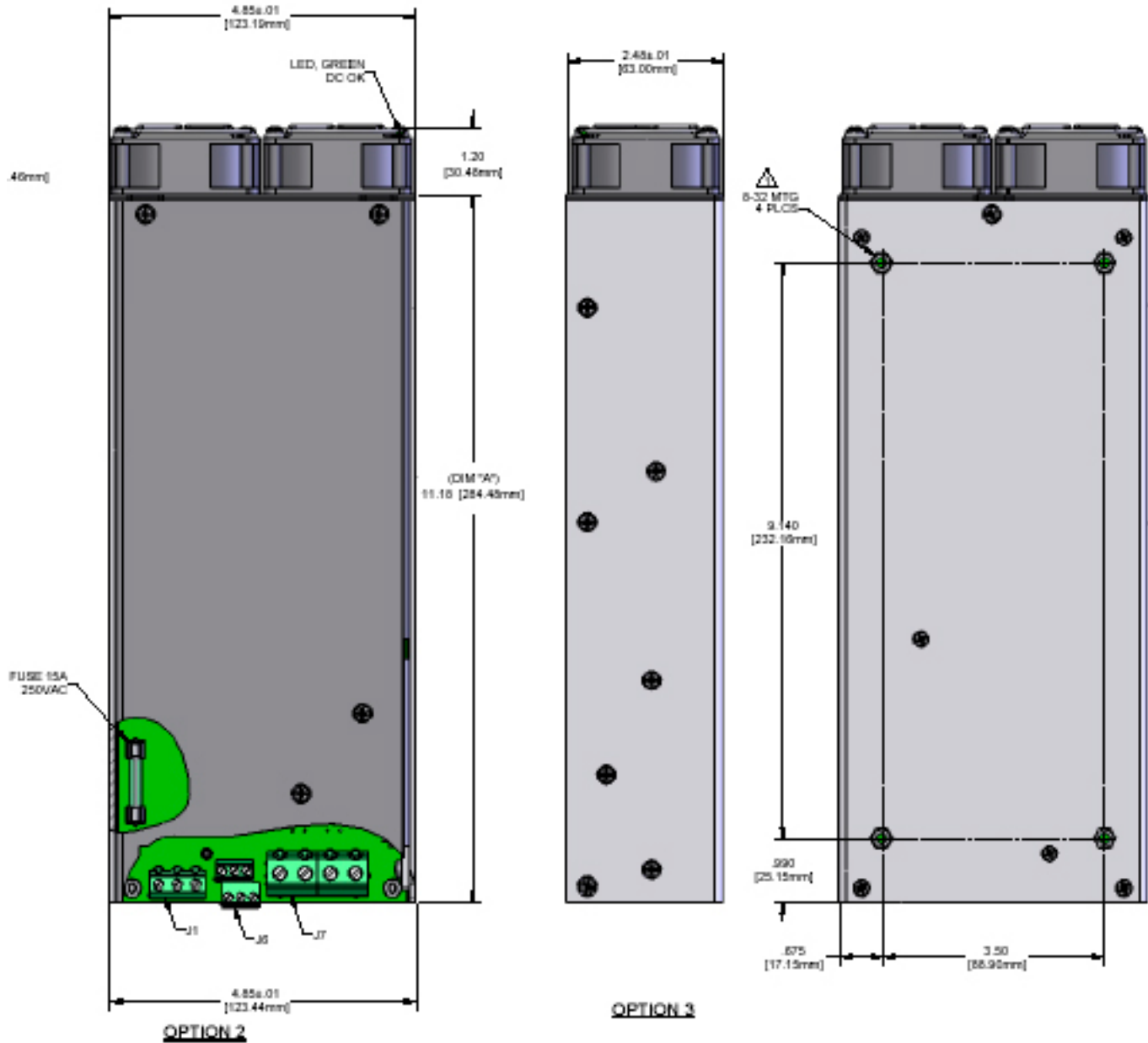
J7: PHOENIX P/N 1998959

MATING CONNECTOR PHOENIX 1913523

- 4 ☐ OUTPUT #1
- 3 ☐ OUTPUT #1
- 2 ☐ RETURN
- 1 ☐ RETURN

## OUTLINE AND MOUNTING DRAWING

Other drawings and SolidWorks™ 3D Models are available on request.



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GPMP900/1000 Rev X2 5/25/05.

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