

Universal AC Input Switchers

5-10 Watts GP Series



THE **XP**ERTS IN POWER

- 85-264 VAC Input
- Single & Dual Outputs
- PCB Mounting
- Eurocard Mounting Option
- DIN Rail Mounting Option
- Chassis Mounting Option
- International Safety Approvals

Specification

Input

- *Input Voltage* 85-264 VAC (110-370 VDC)
- *Input Frequency* 47-440 Hz
- *Inrush Current* 20 A typical at 100 VAC, 40 A typical at 200 VAC, (cold start & full load)

Output

- *Hold Up Time* 10 ms at 85 VAC full load
- *Output Voltage* See Table, $\pm 5\%$ initial tolerance
- *Line Regulation* See Table
- *Load Regulation* See Table
- *Ripple & Noise* See Table
- *Short Circuit & Overload Protection* Operates $>105\%$ of rating & recovers automatically

General

- *Temperature Coefficient* 0.02%/°C typical
- *Switching Frequency* 250 kHz
- *Efficiency* See Table
- *Isolation* 3000 VAC 1 min, 500 VDC 50 Mohm Input to Output, 2000 VAC 1 min, 500 VDC 50 Mohm Input to Case, FG 500 VAC 1 min, 500 VDC 50 Mohm Output to Case, FG

Environmental

- *Operating Temperature* 0 °C to +55 °C, derate linearly to 80% at -10 °C to 25% at +70 °C for 85-132 VAC, & 45% at +65 °C for 133-264 VAC
- *Humidity* 20-95% RH non-condensing
- *Shock* 50 G for 11 ms, once on each X, Y & Z axis
- *Vibration* 10-55 Hz at 10 G, 3 mins period 60 mins each along each along X, Y & Z axis

EMC & Safety

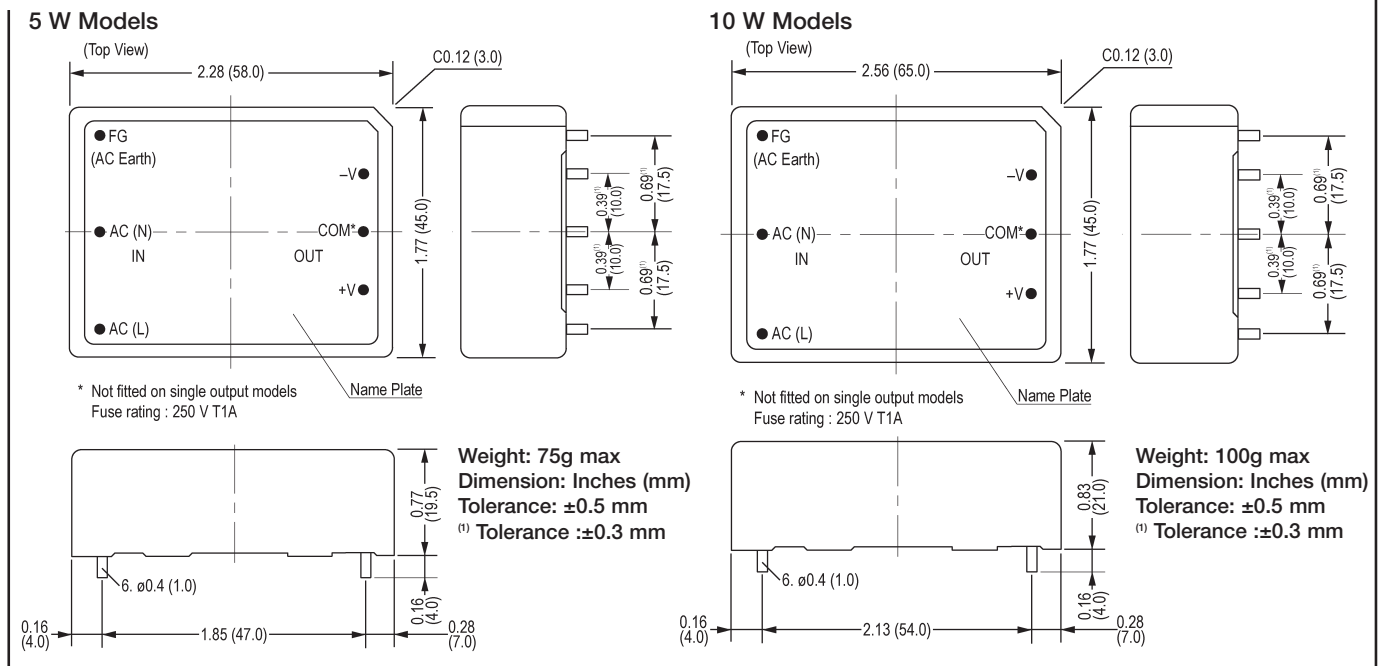
- *Safety Approvals* IEC950, EN60950, UL1950, VDE 0160, CSA 22.2 No.234
N.B. To comply with with CSA agency approval units are labelled with nominal AC input voltage & frequency
- *EMC* FCC Curve B, VDE 0871 Curve B, & EN55022B conducted noise with addition of 0.1 μ F 'X' capacitor fitted across AC input

OUTPUT VOLTAGE & CURRENT RATINGS							GP
Output Voltage	Output Current	Efficiency (Typical @ 100 VAC)	Regulation		Ripple & Noise Pk-Pk	Model Number	
			Line ⁽¹⁾	Load ⁽²⁾			
5 V	1.00 A	65%	20 mV	40 mV	80/120 mV	GP05US05	
12 V	0.45 A	67%	40 mV	100 mV	120/150 mV	GP05US12	
±12 V (24 V)	0.22 A	67%	60 mV	600 mV	120/150 mV	GP05UD12	
±15 V (30 V)	0.17 A	67%	75 mV	750 mV	120/150 mV	GP05UD15	
5 V	2.00 A	70%	20 mV	40 mV	80/120 mV	GP10US05	
12 V	0.90 A	72%	48 mV	100 mV	120/150 mV	GP10US12	
±12 V (24 V)	0.45 A	72%	60 mV	600 mV	120/150 mV	GP10UD12	
±15 V (30 V)	0.35 A	72%	75 mV	750 mV	120/150 mV	GP10UD15	

Notes

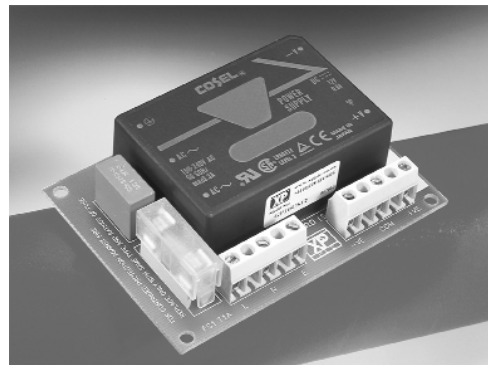
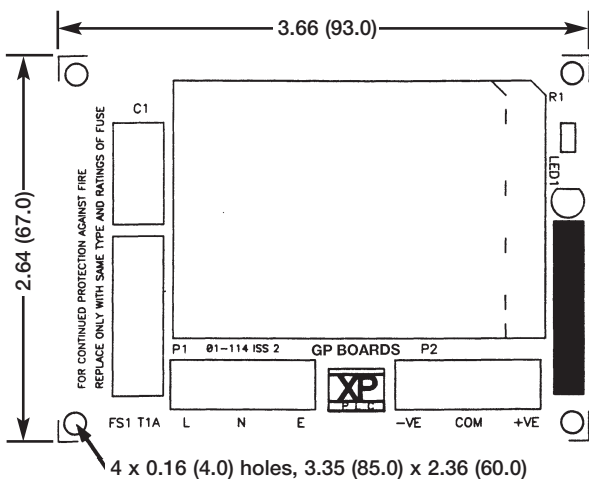
1. Measured low line to high line.
2. Measured no load to full load.

Mechanical Details



Mounting Options

The GP-BOARD is designed to accept any of the GP series models, in addition it can be supplied with a DIN HOUSING for mounting on DIN rails - both top hat and G types. Order **GP-BOARD(S)** for single output models and **GP-BOARD(D)** for dual output models.



The GP-EUROCARD (3.94 (100) x 6.31 (160)) is designed to accept any combination of two GP series models to provide dual, triple and quad outputs. In addition it can be supplied with a GP-E/CARD KIT which includes 6TE front panel and plastic cover for rear of pcb.