Universal AC Input Switchers

5-10 Watts
GP Series

THE XPERTS IN POWER



- 85-264 VAC Input
- Single & Dual Ouptuts
- 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, ±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 µF 'X' capacitor fitted across AC input*

OUTPUT VOLTAGE & CURRENT RATINGS — GP

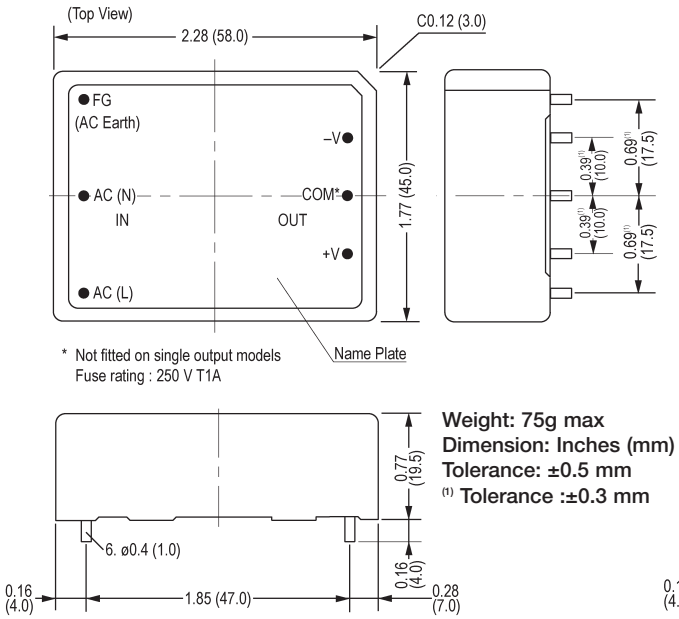
Output Voltage	Output Current	Efficiency (Typical @ 100 VAC)	Regulation Line[1]	Regulation Load[2]	Ripple & Noise Pk-Pk	Model Number
5 V	1.00 A	65%	20 mV	40 mV	80/120 mV	**GP05US05**
12 V	0.45 A	67%	40 mV	100 mV	120/150 mV	**GP05US12**
±12 V (24 V)	0.22 A	67%	60 mV	600 mV	120/150 mV	**GP05UD12**
±15 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.*

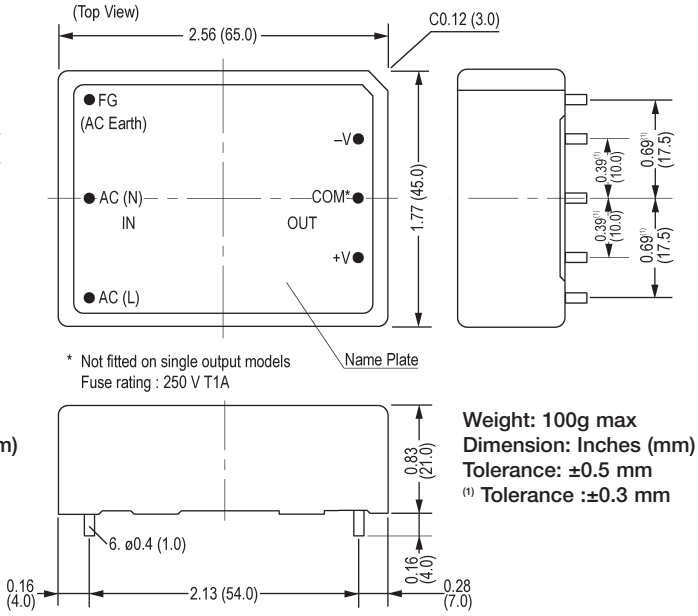
Mechanical Details

5 W Models



Weight: 75g max
Dimension: Inches (mm)
Tolerance: ±0.5 mm
(1) Tolerance :±0.3 mm

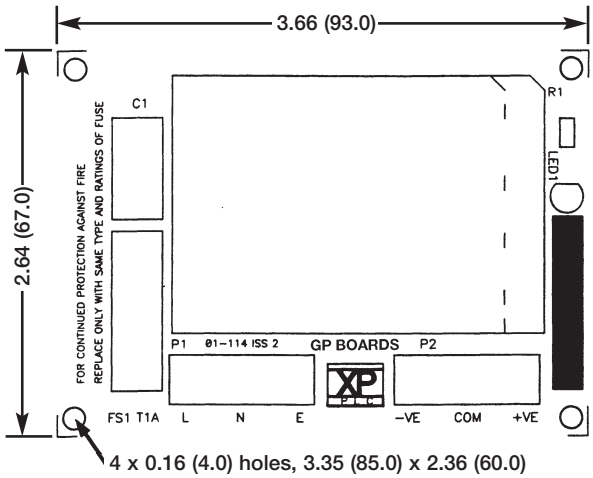
10 W Models

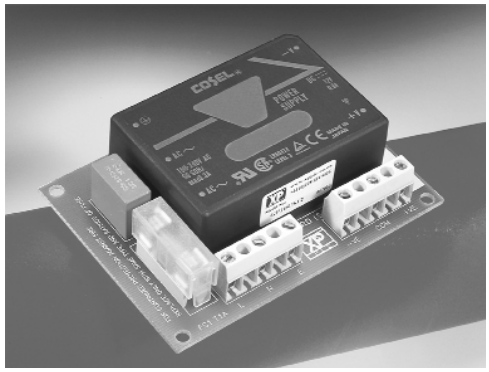


Weight: 100g max
Dimension: Inches (mm)
Tolerance: ±0.5 mm
(1) Tolerance :±0.3 mm

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.