

## UNIVERSAL INPUT AC-DC OPEN FRAME DUAL OUTPUT 8 WATTS INTERNAL SWITCHING POWER SUPPLIES HVI08 SERIES



### FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- COMPACT 4x2x0.92 INCH PCB FORMAT
- DUAL CONVERTERS ARCHITECTURE
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR PUB. 22 & FCC CLASS B
- CE MARKING COMPLIANCE

### SPECIFICATION

#### INPUT SPECIFICATION

**Input Voltage:** Range typ. 90-264Vac.

Rating 100 to 240Vac.

**Input Connector:** V-M connector.

**Input Frequency:** 47-63Hz.

**Inrush Current:** 2.9A rms @ 230Vac 50Hz.

**Input Current:** Typ. 0.12A@115Vac, 0.066A@230Vac.

**Dielectric Withstand:** Meet IEC 60950-1.

**EMI:** Meet CISPR PUB. 22 & FCC Class B.

**Hold-up Time:** Typ. 30.4mS @115Vac, 154.mS @ 230Vac.

**Leakage Current:** 0.67mA for IEC60950 Touch Current.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.

**Output Current:** See Ratings Chart.

**Output Connector:** V-M connector.

**Output Wattage:** Typ. 8 watts.

**Line Regulation:** Typ. 0.1%.

**Load Regulation:** Main VO1 typ.  $\pm 0.6\%$ .

Aux. VO2 typ.  $\pm 0.6\%$ .

**Total Regulation:** Main VO1 typ.  $\pm 0.6\%$ .

Aux. VO2 typ.  $\pm 0.6\%$ .

**Noise & Ripple:** Typ. 1.0% peak to peak.

**OVP:** Built-in at VO1 & VO2(Clamp).

**Adjustability:** Available at VO1 and VO2.

**Overload Protection (OLP):**

Fully protected against outputs overload and short circuit.

Typ. OLP set at 125-150% of rating output power.

Consult the factory for OLP setting.

#### GENERAL SPECIFICATION

**Efficiency:** Typ. 63.7%. (Various with output voltage).

**Switching Frequency:** 82KHz.

**Circuit Topology:** Fixed frequency flyback circuit.

Dual converters for floating output.

**Transient Response:** Output voltage returns in less than 0.1mS following a 25% load change.

**Safety Standard:** IEC 60950-1 Class I.

**Operating Temperature:** -40°C to +85 °C under forced air flow for full load..

**Storage Temperature:** -40 to +85°C.

**Temperature Coefficient:** Typ. 0.04%/°C.

**Cooling:** Free air convection.

**Construction:** 4"x2"x0.92" PCB format.

**Power Density:** 1.35Watts / Cubic Inch.

Note: Due to requests in market and advances in technology, specifications subject to change without notification.

## OUTPUT VOLTAGE / CURRENT RATINGS CHART

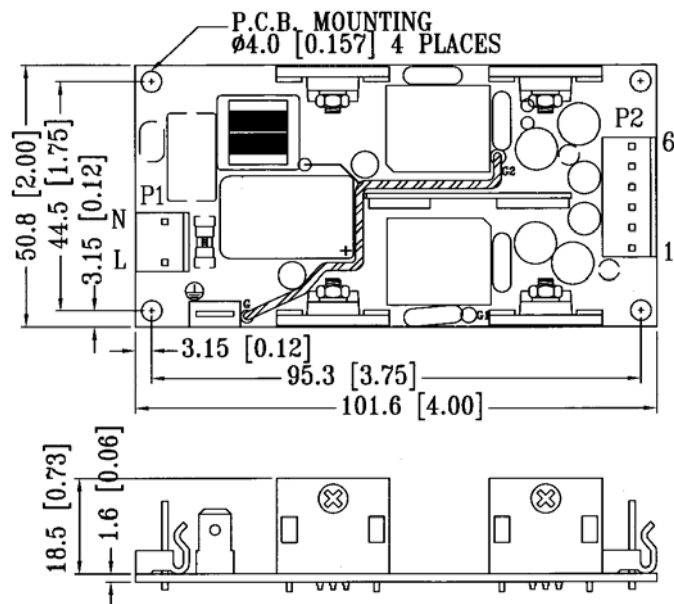
### DUAL OUTPUT

| MODEL NO.   | MAIN VO1 ★ |      |       | AUX. VO2 ◇ |       |       |
|-------------|------------|------|-------|------------|-------|-------|
|             | Min.       | Typ. | Volt. | Min.       | Typ.  | Volt. |
| HVI08-D033Q | 0A         | 1.5A | 3.3V  | 0A         | 0.10A | 48V   |
| HVI08-D033M | 0A         | 1.5A | 3.3V  | 0A         | 0.20A | 24V   |
| HVI08-D033K | 0A         | 1.5A | 3.3V  | 0A         | 0.30A | 15V   |
| HVI08-D033I | 0A         | 1.5A | 3.3V  | 0A         | 0.40A | 12V   |
| HVI08-D033E | 0A         | 1.5A | 3.3V  | 0A         | 0.96A | 5V    |
| HVI08-D050Q | 0A         | 1.0A | 5.0V  | 0A         | 0.10A | 48V   |
| HVI08-D050M | 0A         | 1.0A | 5.0V  | 0A         | 0.20A | 24V   |
| HVI08-D050K | 0A         | 1.0A | 5.0V  | 0A         | 0.30A | 15V   |
| HVI08-D050I | 0A         | 1.0A | 5.0V  | 0A         | 0.40A | 12V   |
| HVI08-D050E | 0A         | 1.0A | 5.0V  | 0A         | 0.96A | 5V    |

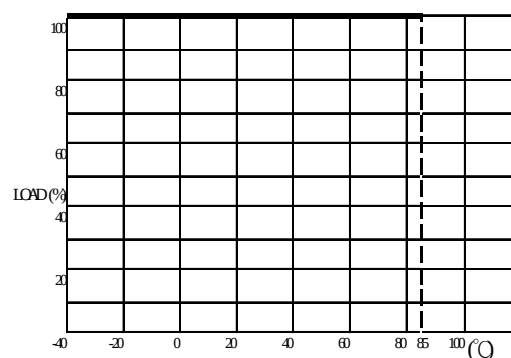
Symbol: "★" OVP built-in. "◇" Floating (or isolated) output

### MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 100g (3.53Oz.)



### DERATING CHART:



### INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

| ASSIGNMENT | AC INPUT |      |      | DUAL OUTPUT |      |        |      |
|------------|----------|------|------|-------------|------|--------|------|
|            | AC-L     | AC-N | AC-G | VO1+        | VO1- | VO2+   | VO2- |
| CNTR/PIN#  | P1-3     | P1-1 | G    | P2-1,2      | P2-3 | P2-5,6 | P2-4 |

Mating connector: P1,2 Molex # 5195 or 5239 series.