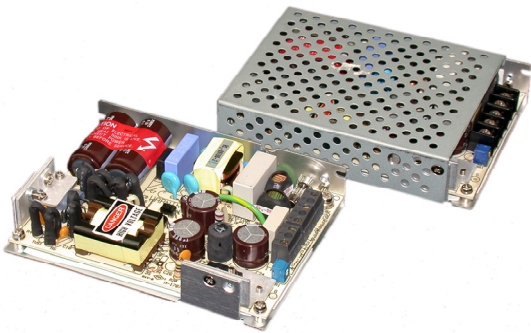


# HiTRON

## UNIVERSAL INPUT AC-DC OPEN FRAME SINGLE OUTPUT 50 WATTS INTERNAL SWITCHING POWER SUPPLIES HVI50 SERIES



### FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- EXTRA LOW PROFILE OPEN FRAME PCB OR BOX FORMAT
- HIGH QUALITY INDUSTRIAL GRADE
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR PUB. 22 & FCC CLASS B
- CE MARKING COMPLIANCE

### SPECIFICATION

#### INPUT SPECIFICATION

**Input Voltage:** Range 90-264Vac.  
Rating 100 to 240Vac.  
**Input Connector:** Barrier-Strip Screw Terminal Block or V-M or Mini PCB Terminal.  
**Input Frequency:** 47-63Hz.  
**Inrush Current:** Typ. 17A@230Vac.  
**Input Current:** Typ. 0.9A @115Vac, 0.45A @230Vac.  
**Dielectric Withstand:** Meet IEC 60950-1.  
**EMI:** Meet CISPR PUB. 22 & FCC B.  
**Hold-up Time:** Typ. 11mS @115Vac, 60mS @230Vac.  
**Earth Leakage:** Less than 0.3mA @ 230Vac.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Connector:** Barrier-Strip Screw Terminal Block or V-M or Mini PCB Terminal.  
**Output Wattage:** Typ. 50 Watts.  
**Line Regulation:** Typ. 0.1%.  
**Load Regulation:** Main VO1 typ.  $\pm 1.0\%$ .  
**Noise & Ripple:** Typ. 1.0% peak to peak.  
**OVP:** Built-in at main VO1 (Latch).  
**Adjustability:** Available at main VO1.  
**Overload Protection (OLP):**  
Fully protected against output overload and short circuit.  
OLP set at about 125-150% rating output wattage.  
Consult the factory for OLP setting.

#### GENERAL SPECIFICATION

**Efficiency:** Typ. 75-80%.  
**Switching Frequency:** Fixed freq. 88K Hz.  
**Circuit Topology:** Fixed freq. flyback circuit.  
**Transient Response:** Output voltage returns in less than 3mS following a 25% load change.  
**Safety Standard:** UL 60950-1/EN 60950-1 Class I.  
**Operating Temperature:** 0 to +50°C.  
**Storage Temperature:** -20 to +85°C.  
**Temperature Coefficient:** Typ. 0.03% /°C.  
**Cooling:** Free air convection cooling.  
**Construction format:** L-Bracket or box.  
**Industrial Grade:** High quality Industrial Grade.  
**Power Density:** 2.36Watts /Cubic Inch.

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



For the details of safety approval, please consult the factory.

## OUTPUT VOLTAGE / CURRENT RATINGS CHART

### SINGLE OUTPUT

#### L-bracket Format (without cover)

MODEL NO.	MAIN O/P VO1 @★		
	Typ.	Volt.	Peak
HVI50-10N	10.0A	5.0V	11.0A
HVI50-11N	4.2A	12.0V	4.5A
HVI50-12N	3.4A	15.0V	4.0A
HVI50-13N	2.2A	24.0V	2.5A
HVI50-14N	1.7A	32.0V	1.8A
HVI50-16N	1.2A	48.0V	1.3A
HVI50-19N	13.0A	3.3V	15.0A

Symbol: "★" OVP built-in. "@" Adjustable.  
 Remark: Peak output less than 60 seconds.

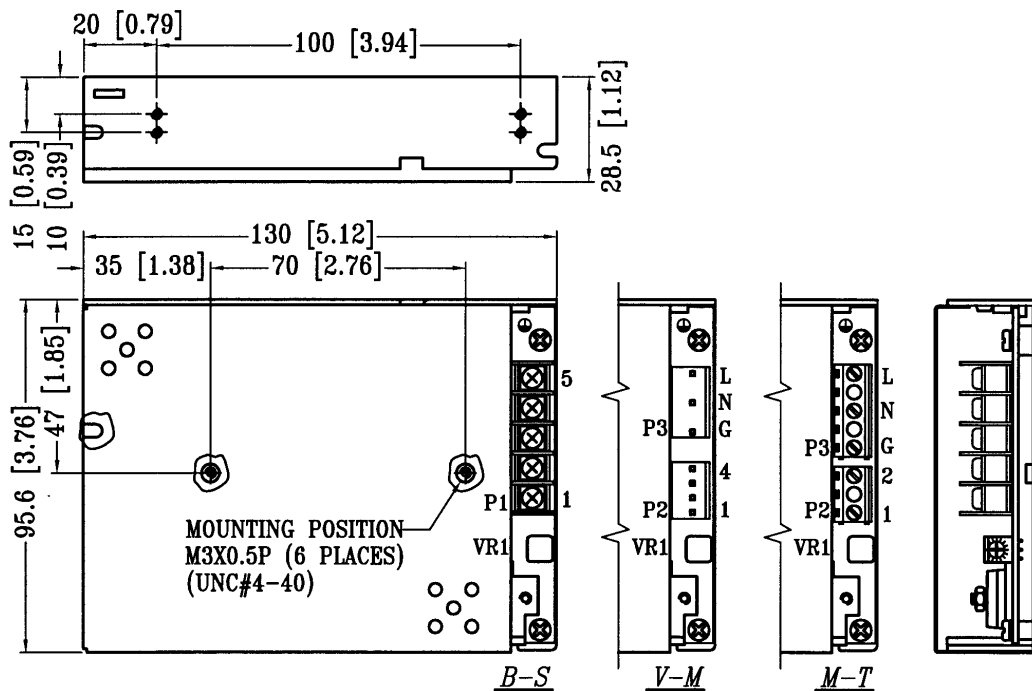
#### Enclosure Box Format (with cover)

MODEL NO.	MAIN O/P VO1 @★		
	Typ.	Volt.	Peak
HVI50-10N	8.0A	5.0V	11.0A
HVI50-11N	4.2A	12.0V	4.5A
HVI50-12N	3.4A	15.0V	4.0A
HVI50-13N	2.1A	24.0V	2.5A
HVI50-14N	1.6A	32.0V	1.8A
HVI50-16N	1.1A	48.0V	1.2A
HVI50-19N	10.0A	3.3V	15.0A

### MECHANICAL DIMENSIONS: MM [INCHES]

**WEIGHT:** Box 400.0g (14.1 Oz.)

L-B 332.0g (11.7 Oz.)



### INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT			SINGLE OUTPUT	
	AC-LINE	AC-NEUTRAL	AC-GROUND	VO1	DC COM
B-S CONNECTOR & PIN#	P1-5	P1-4	P1-3	P1-1	P1-2
V-M CONNECTOR & PIN#	P3-L	P3-N	P3-G	P2-1,2	P2-3,4
M-T CONNECTOR & PIN#	P3-L	P3-N	P3-G	P2-1	P2-2

Mating connector: Molex 5195 or 5239 series.