

Jasper Electronics

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.

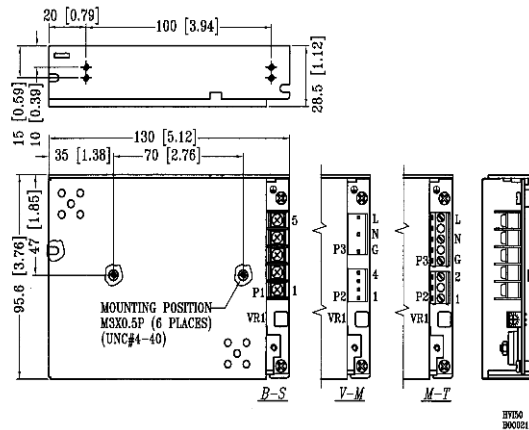
Enclosure Box Format (with cover)

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.