

Hitron

UNIVERSAL INPUT AC-DC INTERNAL OPEN FRAME SWITCHING POWER SUPPLIES 10-12 WATTS SINGLE OUTPUT HVI12 SERIES



FEATURES:

- ACCOMMODATE UNIVERSAL AC INPUT
- LOW-PROFILE PCB FORMAT
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR PUB. 22 & FCC CLASS B
- **CE MARKING COMPLIANCE**

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Range typical 90-264Vac.

Rating 100 to 240Vac.

Input Connector: Molex 5045-NA or JST B3B-XH-A.

Input Frequency: 47-63Hz.

Inrush Current: Typical 20A at 230Vac. **Input Current:** Typical 0.34A at 115Vac,

Typical 0.17A at 230Vac.

Dielectric Withstand: Meet IEC 60950-1. EMI: Meet CISPR PUB.22 & FCC Class B. Hold-up Time: Typical 10mS at 115Vac,

Typical 40mS at 230Vac.

Leakage Current: Typical 0.3mA at 230Vac.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Wattage: Typical 10-12 Watts.

Output Connector: Molex 5045-NA or JST B3B-XH-A.

Line Regulation: Typical 0.1%. **Load Regulation:** Typical ±1-2.0%.

Noise & Ripple: Typical 1% peak to peak.

OVP: Built-in at main output VO1 (Zener diode).

Adjustability: Available at main output 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: Typical 70-75%. (various with output voltage)

Switching Frequency: Typical 45K Hz.

Circuit Topology: Fixed Frequency Flyback circuit. Transient Response: Output voltage returns in

less than 3mS following a 25% load change.

Safety Standard: Meet IEC 60950-1/UL 60950-1 Class I.

Operating Temperature: 0 to +50°C. **Storage Temperature:** -20 to +85°C.

Temperature Coefficient: Typical 0.04% /°C.

Cooling: Free air convection.

Construction: PCB open frame format. **Power Density:** 2.-2.4 Watts / Cubic Inch.

NOTE: (1)All measurement are at nominal input, full load and +25℃ unless otherwise specifications.

(2)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

DEFINED OUTPUT VOLTAGE (Vdc)	OUPUT VOLTAGE (Vdc) / CURRENT (A)			
3.0 Vdc ≤Any Voltage ≤24.0 Vdc	3.0-4.0V/3.0-2.7A, 4.1-5.0V/2.6-2.4A, 5.1-6.0V/2.3-2.0A, 6.1-7.0V/1.9-1.7A, 7.1-8.0V/1.6-1.5A, 8.1-9.0V/1.4-1.3A,			
	9.1-10.0V/ 1.3-1.2A, 10.1-11.0V/ 1.1-1.0A, 11.1-12.0V/ 1.0A, 12.1-13.3V/ 0.9A, 13.4-15.0V/ 0.8A, 15.1-17.1V/ 0.7A, 17.2-20.0V/ 0.6A, 20.1-24.0V/0.5A, 24.0V/ 0.6A.			

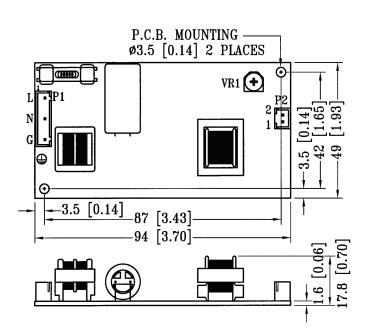
Note: Refer to the upper chart or specify the V/A ratings and consult factory for the exact Model No.

SINGLE OUTPUT (Model No. for example)

MODEL NO.	MAIN VO1 ★@		
	Volt.	Тур.	
HVI12-03030	3.0V	3.0A	
HVI12-03329	3.3V	2.9A	
HVI12-05024	5.0V	2.4A	
HVI12-09013	9.0V	1.3A	
HVI12-12010	12.0V	1.0A	
HVI12-15008	15.0V	0.8A	
HVI12-18006	18.0V	0.6A	
HVI12-24005	24.0V	0.5A	
HVI12-24006	24.0V	0.6A	

Symbol: "★" OVP built-in. "@" Adjustable.

MECHANICAL DIMENSIONS: MM [INCHES]



WEIGHT: 54.0g (1.9 Oz.)

INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

	AC INPUT			SINGLE	OUTPUT
ASSIGNMENT	AC-LINE	AC-NEUTRAL	AC-GROUND	VO1	DC COM
CONNECTOR & PIN #	P1-L	P1-N	P1-G	P2-2	P2-1

Mating connector: Molex 5051-N/ JST XHP-3.