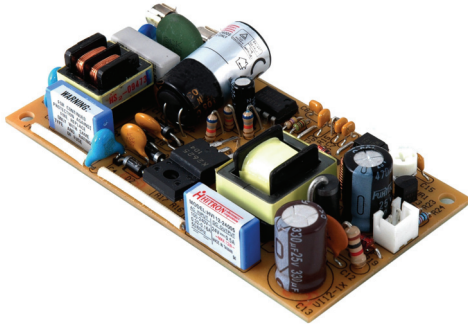


# HiTRON

## 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  $\pm 1-2.0\%$ .

**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°C 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)	OUTPUT 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.

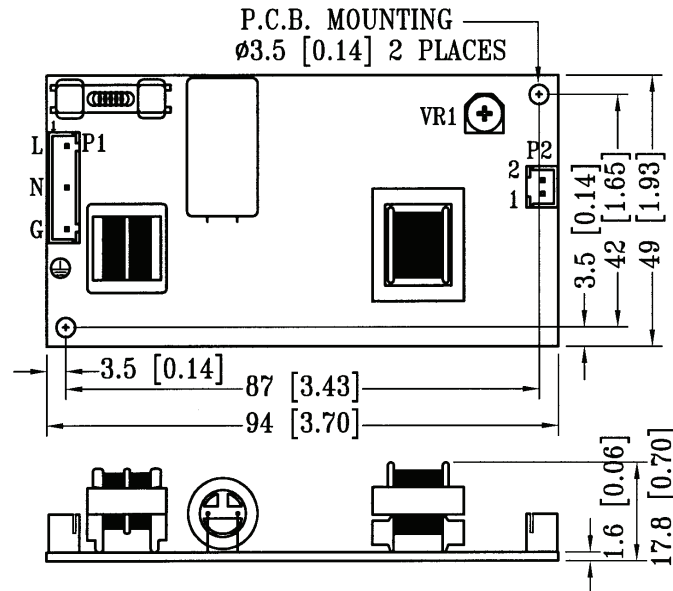
## SINGLE OUTPUT (Model No. for example)

MODEL NO.	MAIN VO1 ★@	
	Volt.	Typ.
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

ASSIGNMENT	AC INPUT			SINGLE OUTPUT	
	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.