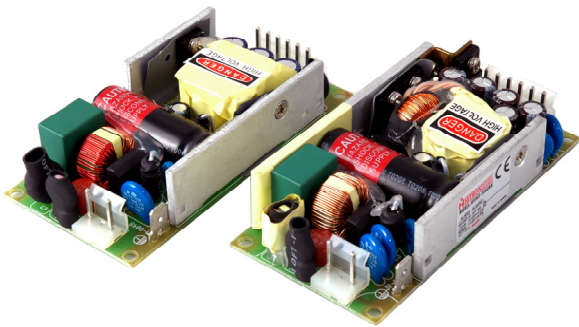


# HiTRON

## UNIVERSAL INPUT AC-DC OPEN FRAME SINGLE & TRIPLE OUTPUT 43 WATTS INTERNAL SWITCHING POWER SUPPLIES HVI43 SERIES



### FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- COMPACT 4"x2"x1" PCB FORMAT
- 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:**  $\leq 12A$  rms cold start @230Vac.  
**Input Current:** Typ. 0.7A@115Vac, 0.35A@230Vac.  
**Dielectric Withstand:** Meet IEC 60950-1.  
**EMI:** Meet CISPR PUB. 22 & FCC Class B.  
**Hold-up Time:** Typ. 20mS @115Vac, 100mS @ 230Vac.  
**Earth Leakage:** Less than 0.4mA @230Vac.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Connector:** V-M connector.  
**Output Wattage:** Typ. 42 watts.  
**Line Regulation:** Typ. 0.2%.  
**Load Regulation:** Main VO1 typ.  $\pm 2-3\%$ .  
Aux.VO2 typ.  $\pm 4-6\%$ (Common choke).  
Aux.VO3 typ.  $\pm 3.0\%$ (P.R.).  
**Noise & Ripple:** Typ. 1.0% peak to peak.  
**OVP:** Built-in at main output VO1(Latch).  
**Adjustability:** Not available.  
**Overload Protection (OLP):** Fully protected against outputs overload and short circuit.  
Typ. OLP set at 105-120% of rating output power.  
Consult the factory for OLP setting

#### GENERAL SPECIFICATION

**Efficiency:** Typ. 75-80%(Various with output voltage).  
**Switching Frequency:** 130 KHz or 70KHz.  
**Circuit Topology:** Fixed frequency forward circuit for triple output and 5V/3.3V of single output.  
Fixed frequency flyback circuit for high voltage of single output.  
**Transient Response:** Output voltage returns in less than 0.5mS following a 50% load change.  
**Safety Standard:** IEC 60950-1 Class I.  
**Power Density:** 5.5Watts / Cubic Inch.  
**Operating Temperature:** 0 to +50 °C under forced air flow for full load. Derate by 1.3W/ °C from 40°C to 50 °C.  
**Storage Temperature:** -20 to +85°C.  
**Temperature Coefficient:** Typ. 0.04%/°C.  
**Cooling:** At least 5 cfm(100LFM) direct forward air flow is required to achieve full rating power.  
**Construction:** 4"x2"x1" PCB format.

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



In application

## OUTPUT VOLTAGE / CURRENT RATINGS CHART

### SINGLE OUTPUT

MODEL NO.	MAIN VO1 ★				
	Min.	Typ.	Volt.	Max.	Peak
HVI43-S033800	0.2A	8.00A	3.3V	8.00A	10A
HVI43-S050800	0.2A	8.00A	5.0V	8.00A	10A
HVI43-S120340	0.0A	3.40A	12.0V	3.40A	4A
HVI43-S150270	0.0A	2.70A	15.0V	2.70A	3A
HVI43-S240170	0.0A	1.70A	24.0V	1.70A	2A
HVI43-S480085	0.0A	0.85A	48.0V	0.85A	1A

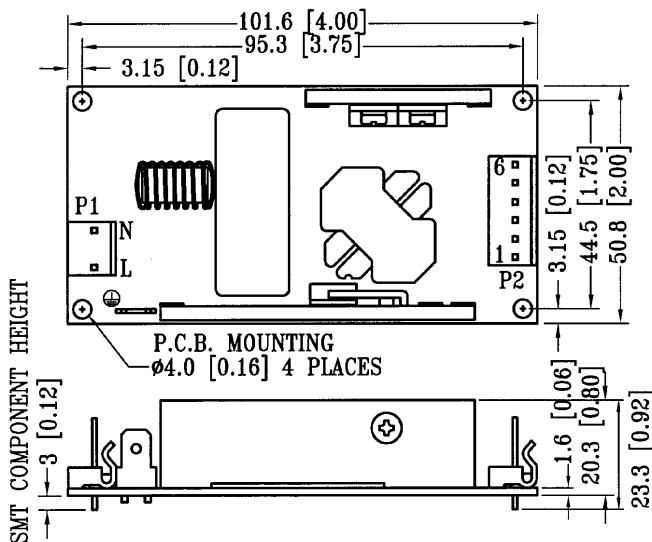
### TRIPLE OUTPUT

MODEL NO.	MAIN +VO1 ★					AUX. +VO2■					AUX. -VO3●				
	Min.	Typ.	Volt.	Max.	Peak	Min.	Typ.	Volt.	Max.	Peak	Min.	Typ.	Volt.	Max.	Peak
HVI43-T050II	0.5A	4.0A	+5.0V	6A	8A	0.1A	1.5A	+12V	2.0A	3.0A	0A	0.5A	-12V	0.5A	1A
HVI43-T050MI	0.5A	4.0A	+5.0V	6A	8A	0.1A	0.7A	+24V	1.0A	1.5A	0A	0.5A	-12V	0.5A	1A
HVI43-T050KK	0.5A	4.0A	+5.0V	6A	8A	0.1A	1.0A	+15V	1.5A	2.0A	0A	0.5A	-15V	0.5A	1A
HVI43-T033EI	0.5A	6.0A	+3.3V	6A	8A	0.2A	3.0A	+5V	3.0A	4.0A	0A	0.5A	-12V	0.5A	1A

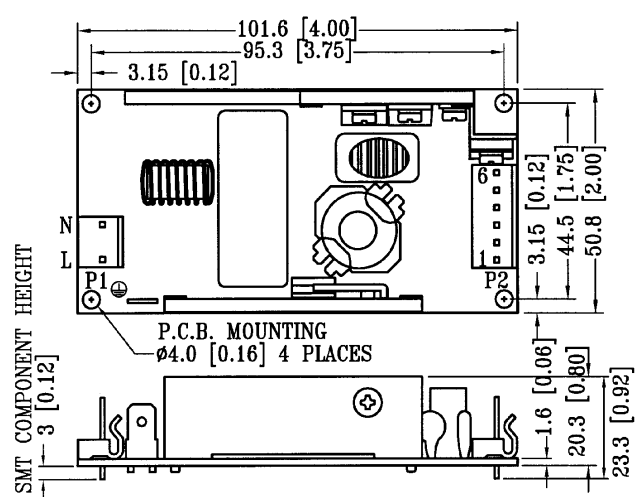
Symbol: "★" OVP built-in. "■" Couple common choke. "●" Post-Regulated.

### MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 145g (5.12 Oz.)



SINGLE OUTPUT



TRIPLE OUTPUT

### INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT CNTR/PIN#	AC INPUT			SINGLE OUTPUT		TRIPLE OUTPUT			
	AC-L	AC-N	AC-G	VO1	DC COM	VO1	VO2	VO3	DC COM
	P1-L	P1-N	G	P2-1,2	P2-3,4	P2-1,2	P2-6	P2-5	P2-3,4

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