

# HiTRON

## **AUTO-RANGING INPUT AC-DC OPEN FRAME SINGLE & MULTI-OUTPUT 100 WATTS INTERNAL SWITCHING POWER SUPPLIES HIH100 & HVI100 SERIES**



### **FEATURES:**

- **AUTO-RANGING ACCOMMODATE AC SOURCES**
- **BOX OR L-BRACKET FORMAT**
- **MEET UNIVERSAL SAFETY STANDARDS**
- **EMI MEET CISPR PUB. 22 & FCC CLASS B**
- **CE MARKING COMPLIANCE**

### **SPECIFICATION**

#### **INPUT SPECIFICATION**

**Input Voltage:** Auto-ranging 115(90-132) Vac and 230(180-264) VAC. Transient threshold 150Vac typical. (Option for dual input selectable)  
**Input Connector:** See Pin assignment.  
**Input Frequency:** 47-63Hz.  
**Inrush Current:** Typ. 20A@115Vac, 40A@230Vac.  
**Input Current:** 2.5A @115Vac, 1.1A @ 230Vac.  
**Dielectric Withstand:** Meet IEC 60950-1.  
**EMI:** Meet CISPR PUB. 22 & FCC Class B.  
**Hold-up Time:** Typ. 22mS @115Vac, 27mS @230Vac.  
**Earth leakage:** Typ. 0.5mA @230Vac.  
**Power Fail Signal:** Installed.  
**Logic Inhibit:** Optional in HIH100-1X and HVI100-2X dual output series.

#### **OUTPUT SPECIFICATION**

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Wattage:** Typ. 100 watts.  
**Output Connector:** See pin assignment.  
**Line Regulation:** Typ. 0.1%.  
**Load Regulation:** Main VO1 typ.  $\pm 1.0\%$ .  
Aux. VO2 typ.  $\pm 2.0\%$ . (Magnetic Amp.)  
Aux. VO2 typ.  $\pm 5.0\%$ . (Stacked-on.)  
Aux. VO3/VO4 typ.  $\pm 1.5\%$ . (P.R.)  
**Noise & Ripple:** Typ. 1.0% peak to peak.  
**OVP:** Built-in at main VO1.  
**Adjustability:** Available at VO1 & VO2.  
**Remote Sense:** Optional in HIH100 & HVI100-2X.  
**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%.  
**Switching Frequency:** Fixed-frequency at 100K Hz.  
**Circuit Topology:** Fixed-frequency forward 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.  
**Power Density:** 1.56Watts / Cubic Inch.

**Operating Temperature:** 0 to +50°C under forced air flow for full load.  
**Storage Temperature:** -20 to +85°C.  
**Temperature Coefficient:** Typ. 0.04% /°C.  
**Cooling:** Recommended 20cfm cooling fan for full rating load.  
**Construction:** Enclosure box or L-bracket format.

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

MODEL NO.	MAIN VO1 @ ★ #		
	Typ.	Volt.	Peak
HIH100-10	20.0A	5V	25.0A
HIH100-11	8.3A	12V	11.0A
HIH100-12	6.7A	15V	10.0A
HIH100-13	4.2A	24V	6.0A
HIH100-14	3.6A	28V	5.0A
HIH100-15	2.2A	36V	3.2A

## DUAL OUTPUT

MODEL NO.	MAIN VO1 @★#◇			AUX. VO2 ◇▲@		
	Typ.	Volt.	Peak	Typ.	Volt.	Peak
HVI100-20	15.0A	5V	20.0A	5.0A	5.0V	6.0A
HVI100-21	10.0A	5V	15.0A	4.0A	12.0V	6.0A
HVI100-22	10.0A	5V	15.0A	3.0A	15.0V	4.0A
HVI100-23	6.0A	5V	12.0A	3.0A	24.0V	3.0A
HVI100-24	4.5A	12V	6.0A	4.5A	12.0V	6.0A
HVI100-25	3.5A	15V	4.0A	3.4A	15.0V	4.0A
HVI100-26	15.0A	5V	20.0A	8.0A	3.3V	6.0A

## TRIPLE OUTPUT

MODEL NO.	MAIN VO1 @★			AUX. VO2 †			AUX. ±VO3 •		
	Typ.	Volt.	Peak	Typ.	Volt.	Peak	Typ.	Volt.	Peak
HVI100-30	12.0A	+5V	15.0A	3.0A	+12V	5.0A	0.8A	12V	1.0A
HVI100-31	12.0A	+5V	15.0A	3.0A	+12V	5.0A	0.8A	5V	1.0A
HVI100-32	12.0A	+5V	15.0A	1.5A	+24V	2.5A	0.8A	12V	1.0A
HVI100-33	12.0A	+5V	15.0A	3.0A	+15V	5.0A	0.3A	15V	1.0A

## QUAD OUTPUT

MODEL NO.	MAIN VO1 @★			AUX. VO2 †			AUX. ±VO3 •			AUX. ±VO4 •		
	Typ.	Volt.	Peak	Typ.	Volt.	Peak	Typ.	Volt.	Peak	Typ.	Volt.	Peak
HVI100-40	12.0A	+5V	15.0A	2.5A	+12V	4.0A	0.8A	12V	1.0A	0.5A	12V	1.0A
HVI100-41	12.0A	+5V	15.0A	2.5A	+12V	4.0A	0.8A	5V	1.0A	0.6A	5V	1.0A
HVI100-42	12.0A	+5V	15.0A	1.0A	+24V	2.0A	0.8A	12V	1.0A	0.5A	12V	1.0A
HVI100-43	12.0A	+5V	15.0A	2.2A	+15V	4.0A	0.6A	12V	1.0A	0.4A	15V	1.0A

Symbol: "★" OVP built-in. "@" Adjustable. "◇" Floating(or isolated) output. "†" Stacked on main output.

"•" Installed with Post Regulator (P.R.). "# " Remote sensing.

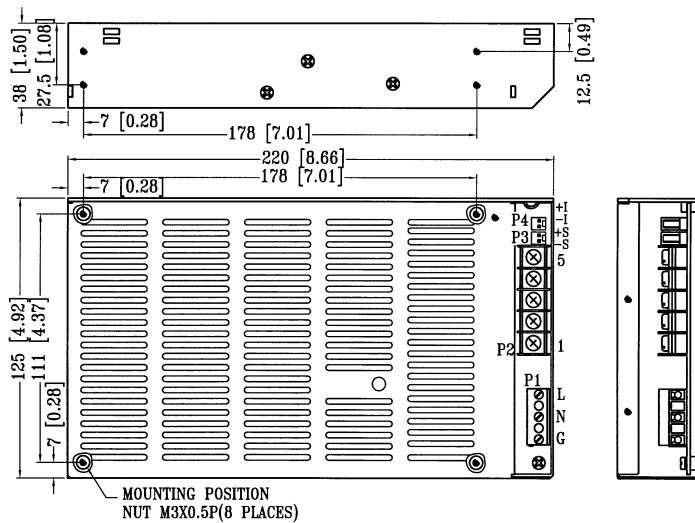
"▲" Installed with magnetic amplifier. "±" Positive or Negative selectable (factory set).

Remark: (1) At least 20% of typical main output current is required to maintain stated regulations.

(2) Peak output, less than 60sec. with 10% duty cycle.

(3) Max. current can't be drawn from all output at the same time.

## MECHANICAL DIMENSIONS: MM [INCHES]



**WEIGHT: 860.0g (30.3 Oz.)**

### PIN ASSIGNMENTS:

PIN #	HIH100 -1X	HVI100 -2X	HVI100 -3X	HVI100 -4X
P1-L	L	L	L	L
P1-N	N	N	N	N
P1-G	G	G	G	G
P2-1	PFS	PFS	PFS	PFS
P2-2	-VO1	-VO2	VO1	VO1
P2-3	-VO1	+VO2	VO1	VO1
P2-4	+VO1	+VO1	DC COM.	DC COM.
P2-5	+VO1	-VO1	DC COM.	DC COM.
P2-6	N.A.	N.A.	VO2	VO2
P2-7	N.A.	N.A.	VO3	VO3
P2-8	N.A.	N.A.	N.C.	VO4
P3+S	+SEN	+SEN	N.A.	N.A.
P3-S	-SEN	-SEN	N.A.	N.A.
P4+I	+INHIB	+INHIB	N.A.	N.A.
P4-I	-INHIB	-INHIB	N.A.	N.A.

### MATING CONNECTOR:

P3 MOLEX 5051 series

P4 MOLEX 5051 series.