

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

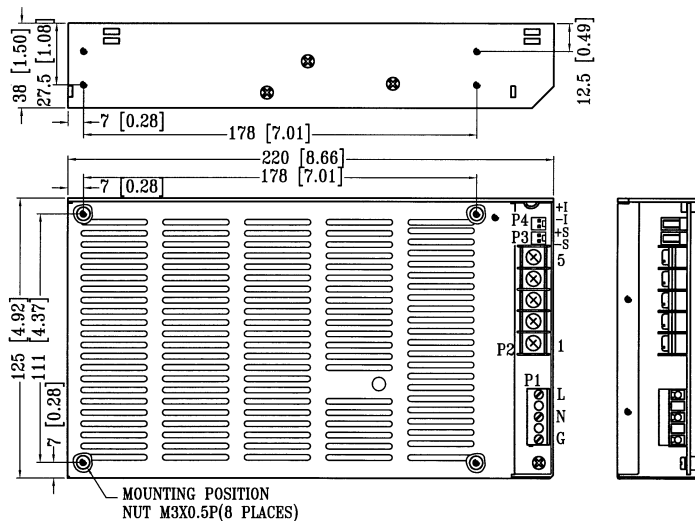
Symbol: "★" OVP built-in. "@" Adjustable. "◇" Floating(or isolated) output. "†" Stacked on main output.

"•" 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.