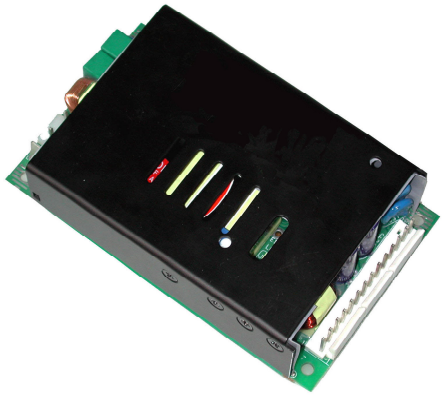
H HiTRON

UNIVERSAL INPUT HARMONIC CORRECTION AC-DC OPEN FRAME SINGLE & MULTIPLE OUTPUT 100 WATTS INTERNAL SWITCHING POWER SUPPLIES HVP101 SERIES



FEATURES:

- **ACCOMMODATE UNIVERSAL AC SOURCES**
- **PCB VERSION FORMAT**
- **MEET IEC1000-3-2 HARMONIC CORRECTION**
- **MEET UNIVERSAL SAFETY STANDARDS**
- **EMI MEET CISPR PUB. 22 & FCC CLASS B**
- **CE MARKING COMPLIANCE**

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 90-264Vac with PFC.
Input Connector: V-M connector & GND tag.
Input Frequency: 47-63Hz.
Inrush Current: Typ. 29A@230Vac.
Input Current: Typ. 1.3A @115Vac, 0.65A @230Vac.
Dielectric Withstand: Meet IEC950.
EMI: Meet CISPR EN55022 B & FCC Class B.
Hold-up Time: Typ. 18-25mS @ 115Vac & 230Vac.
Power Factor & Harmonic Correction:
Meet IEC1000-3-2, PF typ. 0.97-0.99 @ full load.
Power OK: Installed in VO1 & VO2.
Over Temperature Protection (OTP): By NTC at quad output only.
Earth Leakage: Less than 0.75mA @230Vac.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Connector: V-M connector.
Output Wattage: Typ. 100 Watts.
Line Regulation: Typ. 0.1%.
Load Regulation: Main VO1 typ. ±1-2%.
Aux. VO2 typ. ±1-2% (Magnetic Amp.).
Aux. VO3 typ. ±1-2% (Magnetic Amp.).
Aux. VO4 typ. ±2-3% (P.R.).
Noise & Ripple: Typ. 1% peak to peak.
OVP: Built-in at main VO1 & Aux.VO2 & VO3 (latch).
Remote Sensing: Available at VO1 & VO2.
Adjustability: Available at VO1,VO2 & VO3.
Over Current Protection: Built-in at all output.
Overload Protection (OLP): Fully protected against output overload and short circuit at any output. Consult the factory for OLP setting.

GENERAL SPECIFICATION

Efficiency: Typ. 75-80%.
Switching Frequency: PFC ckt. 75K Hz.
PWM ckt. 170-180K Hz.
Circuit Topology: Fixed frequency forward circuit.
Transient Response: Output voltage returns in less than 0.3mS following a 25% load change.
Safety Standard: IEC950/UL1950 Class I.
Operating Temperature: 0 to +50°C under forced air flow for full load.
Storage Temperature: -20 to +85°C.
Temperature Coefficient: 0.04% /°C.
Cooling: At least 30 cfm direct forward air flow is required to achieve full rating power.
Construction: PCB format.
Power Density: 5.6 Watts / Cubic Inch.

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In application

OUTPUT VOLTAGE / CURRENT RATINGS CHART

SINGLE OUTPUT (Under forced air flow)

MODEL NO.	MAIN VO1 ★@#		
	Typ.	Volt.	Peak
HVP101-S033200	20.0A	**3.3V**	25.0A
HVP101-S050160	16.0A	**5.0V**	20.0A
HVP101-S120085	8.5A	**12.0V**	9.0A
HVP101-S150068	6.8A	**15.0V**	7.0A
HVP101-S240042	4.2A	**24.0V**	6.0A
HVP101-S280036	3.6A	**28.0V**	5.0A
HVP101-S360028	2.8A	**36.0V**	4.0A
HVP101-S480021	2.1A	**48.0V**	3.0A

DUAL OUTPUT (Under forced air flow)

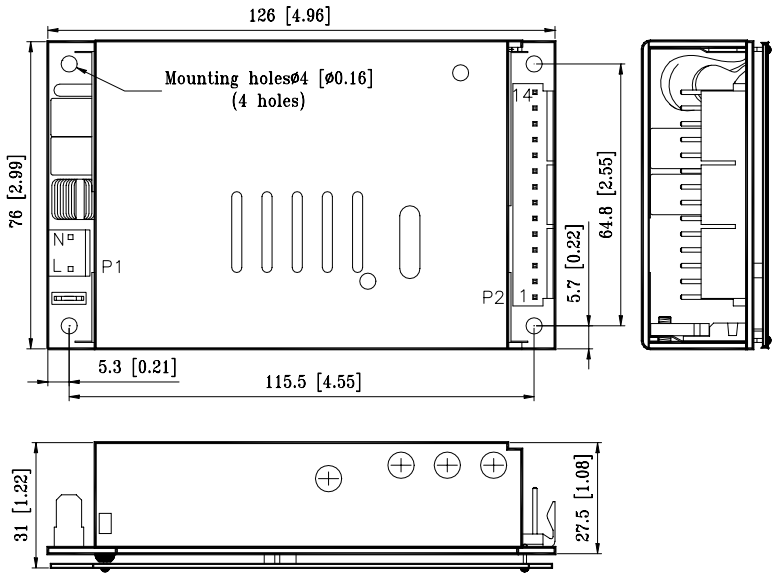
MODEL NO.	MAIN VO1 ★@#		AUX. VO2 ▲#	
	Typ.	Volt.	Typ.	Volt.
HVP101-D050E	12.0A	**+5.0V**	6.0A	**+5.0V**
HVP101-D050I	12.0A	**+5.0V**	4.0A	**+12.0V**
HVP101-D050K	12.0A	**+5.0V**	3.0A	**+15.0V**
HVP101-D050D	12.0A	**+5.0V**	8.0A	**+3.3V**
HVP101-D033I	15.0A	**+3.3V**	4.0A	**+12.0V**
HVP101-D033K	15.0A	**+3.3V**	3.0A	**+15.0V**

QUAD OUTPUT (Under forced air flow)

MODEL NO.	MAIN VO1 ★@#		AUX. VO2 ★@▲#		AUX. VO3 ★@▲		AUX. VO4 ●	
	Typ.	Volt	Typ.	Volt	Typ.	Volt	Typ.	Volt
HVP101-Q050DII	12.0A	**+5.0V**	6.0A	**+ 3.3V**	1.5A	**+12V**	0.5A	**-12V**
HVP101-Q050DIE	12.0A	**+5.0V**	7.0A	**+ 3.3V**	1.5A	**+12V**	0.5A	**- 5V**
HVP101-Q050MII	10.0A	**+5.0V**	1.5A	**+24.0V**	1.5A	**+12V**	0.2A	**-12V**
HVP101-Q050KIE	10.0A	**+5.0V**	2.5A	**+15.0V**	1.5A	**+12V**	0.4A	**- 5V**
HVP101-Q050KII	8.0A	**+5.0V**	2.5A	**+15.0V**	2.0A	**+12V**	0.2A	**-12V**

Symbol: "★" OVP built-in. "@" Adjustable. "#" Remote sense. "●" Installed with Post Regulator. "▲" Installed with magnetic amplifier.
Remark: Peak output, less than 60 Sec. with 10% duty cycle.

MECHANICAL DIMENSIONS: MM [INCHES] WEIGHT: 368.0g(12.97 Oz.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENTS

	AC INPUT			SINGLE OUTPUT				DUAL OUTPUT						QUAD OUTPUT								
ASSIGNMENT	L	N	GND	VO1	DC COM	+VO1#	P.OK	VO1	VO2	DC COM	+VO1 #	+VO2 #	P.OK	VO1	DC COM	VO2	VO3	VO4	VO1+ #	VO2+ #	VO1,2- #	P. OK
CONNECTOR & PIN #	P1-3	P1-1	Tab	P2-6,7,8, 9,10,11	P2-1,2, 3,4,5	P2-13	P2-14	P2-9, 10,11	P2-6, 7,8	P2-1,2, 3,4	P2-13	P2-12	P2-14	P2-1,2, 3,4	P2-5,6 7,8	P2-9,10	P2-11	P2-12	P3-3	P3-4	P3-1	P3-2

Mating connector: Molex 5195 or 5239 series.