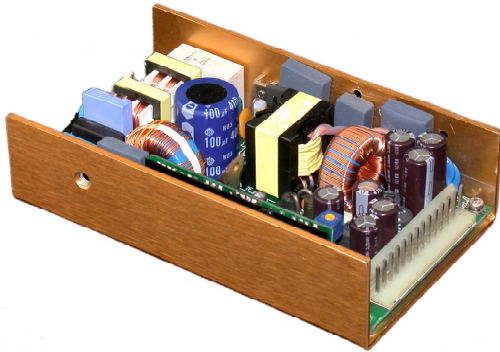


# HiTRON

## UNIVERSAL INPUT HARMONIC CORRECTION AC-DC OPEN FRAME SINGLE & MULTI-OUTPUT 105 WATTS INTERNAL SWITCHING POWER SUPPLIES HVP105 SERIES



### FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- MEET IEC 61000-3-2 HARMONIC CORRECTION
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR EN 55022 & FCC CLASS B
- CE MARKING COMPLIANCE

### SPECIFICATION

#### INPUT SPECIFICATION

**Input Voltage:** Typ. 90-264Vac with PFC.  
**Input Connector:** V-M connector.  
**Input Frequency:** 47-63Hz.  
**Inrush Current:**  $\leq 30.6A$  @230Vac.  
**Input Current:** Typ. 1.3A @115Vac, 0.63A @230Vac.  
**Dielectric Withstand:** Meet IEC 60950-1.  
**EMI:** Meet CISPR EN 55022 & FCC Class B.  
**Hold-up Time:** Typ. 35mS @115Vac & 230Vac.  
**Power Factor & Harmonic Correction:**  
Meet IEC 61000-3-2, PF typ. 0.99 @ full load.  
**Power Fail Signal:** Installed.  
**Earth Leakage:** Typ. 0.5mA @230Vac.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Connector:** V-M connector.  
**Output Wattage:** Typ. 105 watts.  
**Line Regulation:** Typ. 1.0%.  
**Load Regulation:** Main VO1 typ.  $\pm 1-2.0\%$ .  
Aux. VO2 typ.  $\pm 1-3.0\%$  (Magnetic Amp.).  
Aux. VO2, VO3 & VO4 typ.  $\pm 3-5.0\%$  (Common choke).  
**Noise & Ripple:** Typ. 1.0% peak to peak.  
**OVP:** Built-in at main output.  
**Remote Sensing:** Available at VO1.  
**Adjustability:** Available at 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:** Typ. 79-81%.  
**Switching Frequency:** 75K Hz.  
**Circuit Topology:** Fixed frequency forward circuit.  
**Transient Response:** Output voltage returns in less than 3mS following a 25% load change.  
**Safety Standard:** IEC 60950-1/UL 60950-1 Class I.  
**Power Density:** 3.8 Watts / Cubic Inch.  
**Operating Temperature:** 0 to +50°C under 20 cfm forced air cooling for full load.  
**Storage Temperature:** -20 to +85°C.  
**Temperature Coefficient:** Typ. 0.04% /°C.  
**Cooling:** Requested 20 cfm forced air flow for full rating loads.  
**Construction:** U-bracket 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 (Under air cooling)

MODEL NO.	MAIN VO1 ★@#	
	Typ.	Volt.
HVP105-19	25.0A	3.3V
HVP105-10	20.0A	5.0V
HVP105-11	8.5A	12.0V
HVP105-12	6.8A	15.0V
HVP105-13	4.2A	24.0V
HVP105-14	3.6A	28.0V
HVP105-15	2.8A	36.0V

### DUAL OUTPUT (Under forced air cooling)

MODEL NO.	MAIN VO1 ★@#		AUX. VO2 ▲	
	Typ.	Volt.	Typ.	Volt.
HVP105- 21	10.0A	5.0V	4.0A	12.0V
HVP105- 22	10.0A	5.0V	3.0A	15.0V
HVP105- 23	10.0A	5.0V	2.0A	24.0V
HVP105- 24	4.0A	12.0V	4.0A	12.0V
HVP105- 25	3.4A	15.0V	3.4A	15.0V
HVP105- 291	15.0A	3.3V	4.0A	12.0V
HVP105- 292	15.0A	3.3V	3.0A	15.0V

### TRIPLE OUTPUT (Under forced air cooling)

MODEL NO.	MAIN VO1 ★@#		AUX. VO2 ■		AUX. VO3 ■	
	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.
HVP105- 30	10.0A	+5.0V	3.4A	+12.0V	0.6A	-12.0V
HVP105- 31	10.0A	+5.0V	3.4A	+12.0V	1.0A	-5.0V
HVP105- 32	10.0A	+5.0V	1.5A	+24.0V	0.8A	-12.0V
HVP105- 33	10.0A	+5.0V	2.5A	+15.0V	0.6A	-15.0V
HVP105- 393	12.0A	+3.3V	3.4A	+12.0V	0.8A	-12.0V
HVP105- 394	12.0A	+3.3V	2.8A	+15.0V	0.6A	-15.0V

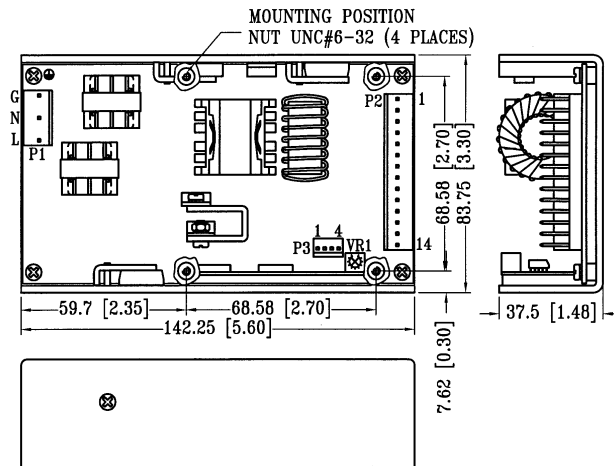
### QUAD OUTPUT (Under forced air cooling)

MODEL NO.	MAIN VO1 ★@#		AUX. VO2 ■		AUX. VO3 ■		AUX. ±VO4 ■	
	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.
HVP105- 40	10.0A	+5.0V	3.0A	+12.0V	0.6A	-12.0V	0.6A	12.0V
HVP105- 41	10.0A	+5.0V	3.0A	+12.0V	1.0A	-5.0V	1.0A	5.0V
HVP105- 42	10.0A	+5.0V	1.5A	+24.0V	0.6A	-12.0V	0.6A	12.0V
HVP105- 43	10.0A	+5.0V	2.5A	+15.0V	0.5A	-15.0V	0.5A	12.0V
HVP105- 490	12.0A	+3.3V	3.0A	+12.0V	1.0A	-12.0V	1.0A	5.0V
HVP105- 491	12.0A	+3.3V	2.5A	+15.0V	1.0A	-15.0V	1.0A	5.0V
HVP105- 492	12.0A	+3.3V	3.0A	+12.0V	0.6A	-12.0V	0.6A	12.0V
HVP105- 493	12.0A	+3.3V	2.5A	+15.0V	0.5A	-15.0V	0.5A	12.0V
HVP105- 494	12.0A	+3.3V	1.5A	+24.0V	0.6A	-12.0V	0.6A	12.0V

Symbol: "★" OVP built-in. "@@# Adjustable. "# Remote sensing. "■" Coupled filter inductor. "▲" Magnetic Amplifier Regulator.

### MECHANICAL DIMENSIONS: MM [INCHES]

**WEIGHT: 503.0g (17.74 Oz.)**



### INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT			SINGLE O/P		DUAL O/P		TRIPLE O/P			QUAD O/P					ASSORTED SIGNAL						
	AC-L	AC-N	AC-G	VOI	DC-COM	VOI	VO2	DC-COM	VOI	VO2	VO3	DC-COM	VOI	VO2	VO3	+VO4	-VO4	DC-COM	-S	+S	DC-COM	P.F.S.
CNTR & PIN #	P1-L	P1-N	P1-G	P2-1,2,3,4,5	P2-6,7,8,9,10	P2-1,2,3	P2-8,9	P2-4,5,6,7	P2-1,2,3	P2-8,9	P2-11	P2-4,5,6,7	P2-1,2,3	P2-8,9	P2-11	P2-13	P2-14	P2-4,5,6,7	P3-1	P3-2	P3-3	P3-4

Mating connector: Moles 5195 or 5239 series.