

# HiTRON

## UNIVERSAL INPUT HARMONIC CORRECTION AC-DC N+1 REDUNDANCY AND ACTIVE CURRENT SHARING ENCLOSURE BOX WITH FAN TRIPLE OUTPUT 350 WATTS INTERNAL SWITCHING POWER SUPPLIES HVP348 SERIES



### FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- NO MINIMUM LOAD REQUIREMENT
- MEET IEC 61000-3-2 HARMONIC CORRECTION
- N+1 REDUNDANCY & OR-ING DIODES
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET EN 55022 CLASS B
- CE MARKING COMPLIANCE

### SPECIFICATION

#### INPUT SPECIFICATION

**Input Voltage:** Universal 90-264Vac with PFC.  
**Input Connector:** Molex Mini-Fit (F-M) 42404-06A1.  
**Input Frequency:** 47-63Hz.  
**Inrush Current:** Typ. 25A @230Vac(Active circuit).  
**Input Current:** Typ. 5.4A @115Vac, 1.7A@ 230Vac.  
**Dielectric Withstand:** Meet IEC 60950-1.  
**EMI:** Meet CISPR EN 55022 Class B.  
**Hold-up Time:** Typ. 38mS @ 115Vac & 230Vac.  
**Power Fail Signal:** Indicated by LEDs.  
**Power Factor Correction & Harmonic Correction:**  
 Meet IEC 61000-3-2, PF typ. 0.97-0.98 @ full load.  
**Remote Inhibit/Power Disable:** Installed.  
**Earth Leakage:** Less than 0.85 mA.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Connector:** Molex Mini-Fit (F-M) 42404-24A1.  
**Output Wattage:** Typ. 350 Watts.  
**Line Regulation:** Typ. 0.1%.  
**Load Regulation:** Independent & fully regulated Magnetic Amplifier outputs. VO1/VO2/VO3 typ.  $\pm 1.0\%$ .  
**Noise & Ripple:** Typ. 1% peak to peak.  
**OVP:** Available at VO1,VO2 & VO3 (Latch circuit).  
**Redundancy:** Available for N+1 redundancy & OR-ing diodes built-in at all rails.  
**Current Sharing:** Third-wire load sharing at VO1,2,3.  
**Adjustability:** Available at VO1,VO2 & VO3.  
**Over Current Protection (OCP):** Installed in output VO1,VO2 and VO3.  
**Over Temp. Protection (OTP):** By thermostat.  
**Overload Protection (OLP):** Fully protected against output overload and short circuit. Consult the factory for OLP setting.

#### GENERAL SPECIFICATION

**Efficiency:** Typ. 75-78.0%.  
**Switching Frequency:** 60K Hz.  
**Circuit Topology:** PWM 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:** 2.8Watts / Cubic Inch.  
**Operating Temperature:** 0 to +50°C.  
**Storage Temperature:** -20 to +85°C.  
**Temperature Coefficient:** 0.04%/°C.  
**Cooling:** Internal cooling fan installed.  
**Construction:** Enclosure box installed with internal cooling fan.  
**Hot Swappable (Insertion):** Installed.

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



In application

# OUTPUT VOLTAGE / CURRENT RATINGS CHART

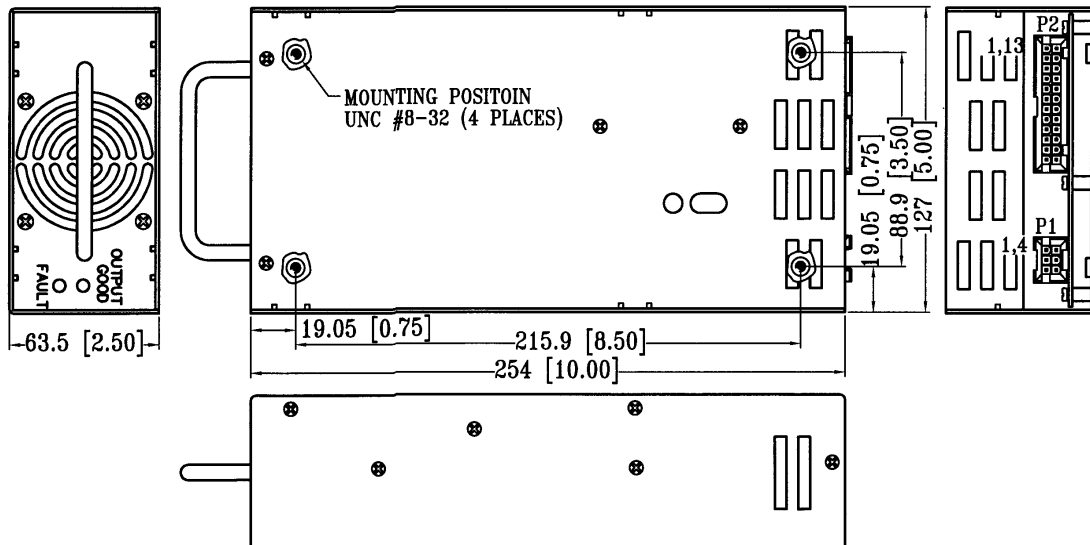
## TRIPLE OUTPUT

MODEL NO.	+VO1 ▲@★≡⊙		+VO2 ▲@★≡⊙		+VO3 ▲@★≡⊙	
	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.
HVP348-T050DI	28.0A	+5.0V	20.0A	+3.3V	10.0A	+12.0V
HVP348-T033EI	28.0A	+3.3V	22.0A	+5.0V	10.0A	+12.0V
HVP348-T050II	28.0A	+5.0V	10.0A	+12.0V	6.0A	+12.0V
HVP348-T033II	28.0A	+3.3V	12.0A	+12.0V	8.0A	+12.0V
HVP348-T050MI	28.0A	+5.0V	5.0A	+24.0V	6.0A	+12.0V
HVP348-T240EI	7.0A	+24.0V	14.0A	+5.0V	8.0A	+12.0V

Symbol: "★" OVP built-in. "@ " Adjustable. "≡" 3rd-wire current sharing. "▲" Installed with magnetic amplifier. "⊙" Installed with OR-ing diode.

## MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 1,200.0g (42.3 Oz.)



## INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT			TRIPLE OUTPUT				ASSORTED SIGNALS						
	AC-L	AC-N	AC-G	VO1	VO2	VO3	DC-COM	VO1≡	VO2≡	VO3≡	Fan Fail	Inhibit	Power Good	Power Disable
CONNECTOR & PIN#	P1-1	P1-5	P1-3	P2-1,2, P2-13,14	P2-7,8,20	P2-9,21	P2-3,4,5,15,16,17,18,19	P2-22	P2-10	P2-23	P2-11	P2-24	P2-12	P2-6

Mating connector: Molex Mini-Fit 42385-06A1.  
Molex Mini-Fit 42385-24A1.