

HiTRON

**AUTO-RANGING INPUT HARMONIC CORRECTION
AC-DC N+1 REDUNDANCY AND ACTIVE CURRENT SHARING
OPEN FRAME SINGLE & MULTI-OUTPUT 350 WATTS
INTERNAL SWITCHING POWER SUPPLIES HVP350 SERIES**



FEATURES:

- ACCOMMODATE WORLD-WIDE AC SOURCES
- MEET IEC 61000-3-2 HARMONIC CORRECTION
- N+1 REDUNDANCY & CURRENT SHARING
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR PUB. 22 CLASS A
- CE MARKING COMPLIANCE

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Auto-ranging input 115Vac(90-132Vac) and 230Vac(180-264Vac).
Input Connector: Molex Mini-Fit 42404-06.
Input Frequency: 47-63 Hz.
Inrush Current: Typ. 25A @ 230Vac(Active).
Input Current: Typ. 4.0A @ 115Vac, 2.0A @ 230Vac.
Dielectric Withstand: Meet IEC 60950-1.
EMI: Meet CISPR PUB.22 & FCC Class A.
Hold-up Time: Typ. 7-8.5mS @ 115Vac/50mS @ 230Vac.
Power Factor Correction & Harmonic Correction:
 Meet IEC 61000-3-2, PF typ. 0.97-0.99 @ full load.
Over Temperature Protection: With thermostat.
Earth Leakage: Less than 1.0mA.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Connector: Molex Mini-Fit 42404-24.
Output Wattage: Typ. 350W under forced air flow.
Line Regulation: Typ. 0.1%.
Load Regulation: Main O/P VO1 $\pm 1-2.0\%$ typ.
 Aux. O/P VO2 $\pm 2-3\%$ typ. (Magnetic Amp).
 Aux. O/P VO3 $\pm 3-5.0\%$ typ. (P.R.).
Noise & Ripple: Typ. 1% peak to peak.
OVP: Built-in at O/P VO1 and VO2. (Latch type).
Adjustability: Available at VO1 & VO2 output.
Remote Sense: Available at O/P VO1 and VO2.
Redundancy: Available for N+1 redundant operation.
Current Sharing: Third-wire current sharing.
OR-ing diodes: Installed in all outputs.
Power OK: Installed.
Overload Protection (OLP): Fully protected against output overload and short circuit.
 Consult the factory for OLP setting.

GENERAL SPECIFICATION

Efficiency: Typ. 71-77%.
Switching Frequency: Typ. 50K Hz.
Circuit Topology: PWM Fixed Frequency Forward Circuit.
Transient Response: Output voltage returns in typically 2mS following a 25% load change.
Safety Standard: UL 60950-1/EN 60950-1 Class I.
Power Density: 3.25Watts / Cubic Inch.

Operating Temperature: 0 to +50°C under 30 cfm forced air flow for full load.
Storage Temperature: -20 to +85°C.
Temperature Coefficient: 0.04%/°C.
Cooling: At least 30cfm forced cooling air flow for full load operation.
Long Term Stability: After 20 minute warm-up, 0.1% for 8 hours.
Construction: Enclosure box with handler.

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 (W/fan cooling)

MODEL NO.	MAIN VO1 @★#≡	
	Typ.	Volt.
HVP350-S033700	70.0A	3.3V
HVP350-S050650	65.0A	5.0V
HVP350-S120270	27.0A	12.0V
HVP350-S150220	22.0A	15.0V
HVP350-S240140	14.0A	24.0V
HVP350-S280120	12.0A	28.0V
HVP350-S360100	10.0A	36.0V
HVP350-S480075	7.5A	48.0V

DUAL OUTPUT (Under 30cfm forced air cooling)

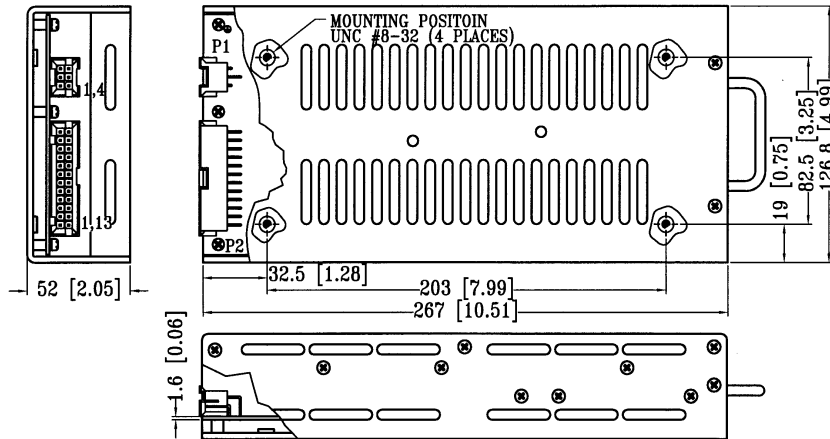
MODEL NO.	MAIN VO1 @★#≡		AUX. VO2 @★▲#≡	
	Typ.	Volt.	Typ.	Volt.
HVP350-D120E	19.0A	+12.0V	24.0A	+5.0V
HVP350-D150E	15.5A	+15.0V	24.0A	+5.0V
HVP350-D240E	10.0A	+24.0V	24.0A	+5.0V
HVP350-D050D	35.0A	+5.0V	24.0A	+3.3V
HVP350-D120D	15.0A	+12.0V	24.0A	+3.3V
HVP350-D150D	12.0A	+15.0V	24.0A	+3.3V

TRIPLE OUTPUT (Under 30 cfm forced air cooling)

MODEL NO.	MAIN VO1 ○@★#≡		AUX. VO2 @★○▲#≡		AUX. -VO3 ●○	
	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.
HVP350-T120EI	17.0A	+12.0V	23.0A	+5.0V	1.0A	-12.0V
HVP350-T120EE	17.0A	+12.0V	23.0A	+5.0V	1.0A	-5.0V
HVP350-T240EI	8.5A	+24.0V	23.0A	+5.0V	1.0A	-12.0V
HVP350-T150EK	13.5A	+15.0V	23.0A	+5.0V	1.0A	-15.0V
HVP350-T050DI	30.0A	+5.0V	30.0A	+3.3V	1.0A	-12.0V
HVP350-T033DK	35.0A	+3.3V	25.0A	+3.3V	1.0A	-15.0V
HVP350-T120DI	20.0A	+12.0V	25.0A	+3.3V	1.0A	-12.0V
HVP350-T150DK	16.0A	+15.0V	25.0A	+3.3V	1.0A	-15.0V

Symbol: "★" OVP built-in. "≡" 3rd-wire current sharing. "@ " Adjustable. "▲" Installed with magnetic amplifier.
 "●" Installed with Post Regulator (P.R.). "○" OR-ing diodes. "#" Remote sensing.

**MECHANICAL DIMENSIONS: MM [INCHES] WEIGHT: 1,872.0g (66.0 Oz.) for Enclosure box.
 1,675.0g (59.0 Oz.) for U-Bracket.**



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

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

Mating connector: Molex # 42385-06& 42385-24.