

HiTRON

UNIVERSAL INPUT HARMONIC CORRECTION AC-DC N+1 REDUNDANCY AND ACTIVE CURRENT SHARING ENCLOSURE PLUG-IN BOX TRIPLE OUTPUT 500 WATTS INTERNAL SWITCHING POWER SUPPLIES HVP500 SERIES



FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- DUAL CONVERTER ARCHITECTURE
- MEET IEC 61000-3-2 HARMONIC CORRECTION
- HOT-SWAPPABLE/OR-ING DIODES FOR N+1 REDUNDANCY
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET EN 55022 CLASS A
- CE MARKING COMPLIANCE

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 90-264 Vac with PFC.
Input Connector: IEC320-3P with On/Off Switch.
Input Frequency: 47-63Hz.
Inrush Current: Typ. 24.0A@230Vac (Active).
Input Current: Typ. 7.0A@115Vac/ 3.5A@230Vac.
Dielectric Withstand: Meet IEC 60950-1.
EMI: Meet EN 55022 Class A.
Hold-up Time: Typ. 28mS @ 115Vac & 230Vac.
Power OK Signal: Available at VO1, VO2 & VO3.
Power Factor Correction: Meet Harmonic Correction IEC 61000-3-2. PF typ. 0.97-0.98.
Over Temperature Protection: By thermostat.
Power-On LED Indicator: Installed.
Earth Leakage: Less than 0.78mA@230Vac.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Connector: Molex Mini-Fit 5569-24.
Output Wattage: 500 watts max.
Line Regulation: Typ. 0.1%.
Load Regulation: Main VO1 typ. $\pm 2.0\%$.
Main VO2 typ. $\pm 2.0\%$.
Aux. VO3 typ. $\pm 2.5\%$ (Magnetic Amp).
Noise & Ripple: Typ. 1-2.0% peak to peak.
OVP: Built-in at all outputs (Latch).
Over Current Protection: Installed in all outputs.
Redundancy: All three O/P available for N+1 redundancy operation.
Current Sharing: 3rd-wire current sharing for VO1,2.
OR-ing Diode: Installed in VO1,2,3.
Adjustability: Available at VO1,2,3.
Remote Sense: Available at VO1 & VO2.
Overload Protection (OLP): Fully protected against output overload or short circuit.
Consult the factory for OLP setting.

GENERAL SPECIFICATION

Efficiency: Typ. 65-70%.
Switching Frequency: Fixed frequency at 60K Hz.
Circuit Topology: PWM fixed-frequency forward circuit.
Transient Response: Output voltage returns in typ. 0.3mS following a 25% load change.
Safety Standard: UL 60950-1/EN 60950-1 Class I.
Hot Swappable: Available.
Power Density: 2.72 Watts/ Cubic Inch.
Operating Temperature: 0 to +50°C.
Storage Temperature: -20 to +85°C.
Temperature Coefficient: Typ. 0.04% /°C.
Cooling: Cooling fan installed inside.
MTBF: About 60,000 hours at full load and 25°C condition by MIL-HDBK-217F spec.
Construction: Enclosure box with cooling fan.

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



In application

OUTPUT VOLTAGE / CURRENT RATINGS CHART

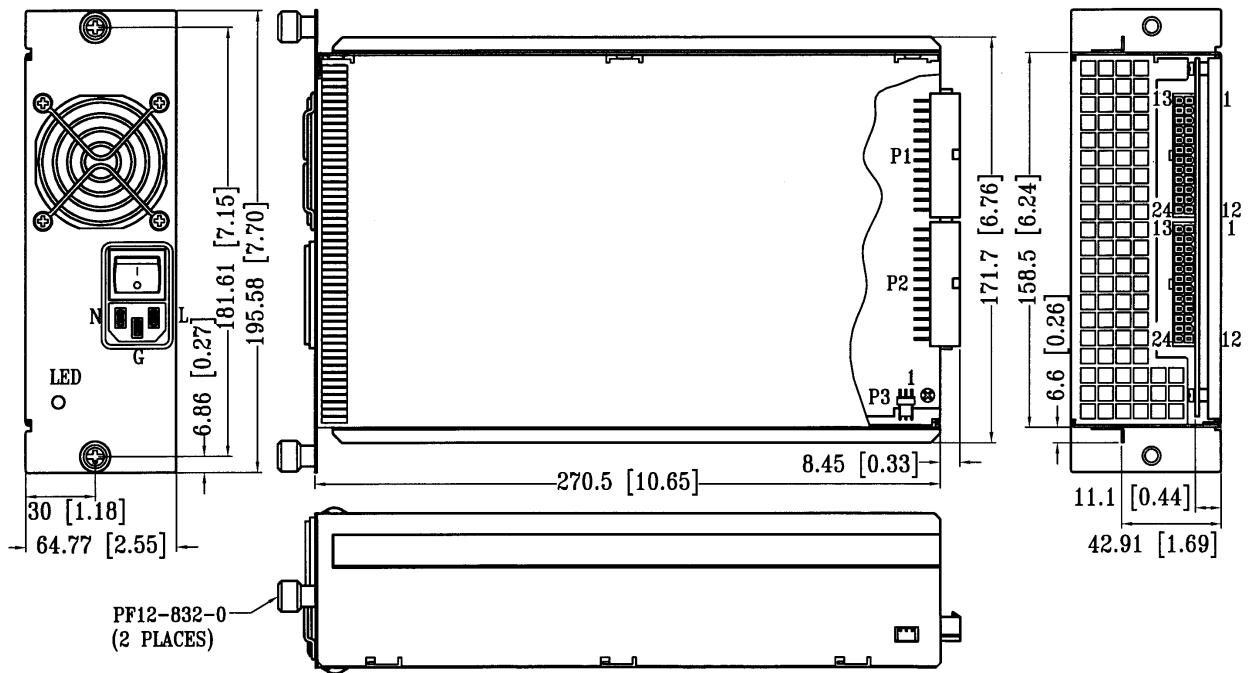
TRIPLE OUTPUT

MODEL NO.	MAIN VO1 @★#≡⊙		MAIN +VO2 @★≡⊙#		AUX. +VO3 @★▲⊙	
	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.
HVP500-T033EI	100.0A	+3.3V	25.0A	+5.0V	4.0A	+12.0V
HVP500-T033EK	100.0A	+3.3V	25.0A	+5.0V	3.2A	+15.0V
HVP500-T033EM	100.0A	+3.3V	25.0A	+5.0V	2.0A	+24.0V
HVP500-T050DI	75.0A	+5.0V	25.0A	+3.3V	4.0A	+12.0V
HVP500-T050DK	75.0A	+5.0V	25.0A	+3.3V	3.2A	+15.0V
HVP500-T050DM	75.0A	+5.0V	25.0A	+3.3V	2.0A	+24.0V

Symbol: "★" OVP built-in. "@@" Adjustable. "⊙" Installed with OR-ing diode. "▲" Installed with magnetic amplifier. "≡" Active load sharing. "#" Remote sense.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 3,500.0g. (7.72 lb.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENTS

ASSIGNMENT	AC INPUT			TRIPLE OUTPUT				ASSORTED SIGNAL									
	AC-L	AC-N	AC-G	VO1	VO2	VO3	DC COM	P.OK	+VO1≡	+VO2≡	VO1+#	VO1-#	VO2+ #	VO2- #	+VO1 MSR	+VO2 MSR	+VO3 MSR
CONNECTOR & PIN #	L	N	G	P1-1~4,12~15,23,24 P2-1,2,13,14	P2-3,4,15,16	P2-20,21	P1-5~11,16~22 P2-5,6,7,8,17,18,19	P2-10	P2-11	P2-24	P2-9	P2-12	P2-22	P2-23	P3-1	P3-2	P3-3

Mating connector: Molex 5557-24 or 42358-24.

Remark: <MSR> means output measurement Point.