



**UNIVERSAL INPUT HARMONIC CORRECTION
AC-DC HOT SWAPPABLE N+1 REDUNDANCY AND
ACTIVE CURRENT SHARING OPEN FRAME QUAD OUTPUT 350 WATTS
INTERNAL SWITCHING POWER SUPPLIES HVP351 SERIES**



FEATURES:

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

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 90-264Vac with PFC.
Main On/Off Switch: Installed.
Input Connector: Positronic PCIH47M400A1.
Input Frequency: 47-63Hz.
Inrush Current: Typ. 16A @ 230Vac (active).
Input Current: Typ. 4.0A @ 115Vac, 2.0A @ 230Vac.
Dielectric Withstand: Meet IEC 60950-1.
EMI: Meet EN 55022 CISPR PUB.22 & FCC Class A.
Power Factor Correction: Meet IEC 61000-3-2 Harmonic correction. PF typ. 0.96- 0.99.
Hold-up Time: Typ. 20mS @ 115 & 230Vac.
Power Fail/Good Signal: LED indications.
Over Temp. Protection (OTP): By thermostat.
Earth Leakage: Less than 0.65mA.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Connector: Positronic PCIH47M400A1.
Output Wattage: Typ. 350W with forced air flow.
Line Regulation: Typ. 0.1%.
Load Regulation: Main VO1 $\pm 1.0\%$.
 Aux. VO2 & VO3 $\pm 2.0\%$ (Magnetic Amp.).
 Aux. VO4: $\pm 5.0\%$ (Post Regulator).
Noise & Ripple: Typ. 1% peak to peak.
OVP: Available at VO1/VO2/VO3 (Latch).
Remote Sense: Available at VO1/VO2/VO3 rails.
N+1 Redundancy: Installed with internal OR-ing diodes at VO1,2 & 3 for N+1 redundant Operation.
Current Sharing: 3rd-wire load sharing at VO1,2,3 rails.
OR-ing diode: Built-in at VO1/VO2/VO3 rails.
Adjustability: Available at VO1/VO2/VO3 rails.
Over Current Protection: Installed in VO1/VO2/VO3 rails.
DC OK Signal: Available at VO1/VO2/VO3 rails.
Overload Protection (OLP): Fully protected against output overload and short circuit.
 Consult the factory for special OLP setting.

GENERAL SPECIFICATION

Efficiency: Typ. 65-70%.
Switching Frequency: 80K 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.
Hot Swappable: Available.
Power Density: 3.25Watts /Cubic Inch.

Operating Temperature: 0 to +50°C under 30 cfm forced air cooling for full load.
Storage Temperature: -20 to +85 °C.
Temperature Coefficient: Typ. 0.04% /°C.
Cooling: Required 30 cfm forced air flow
Construction: Enclosure box or U-bracket.
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

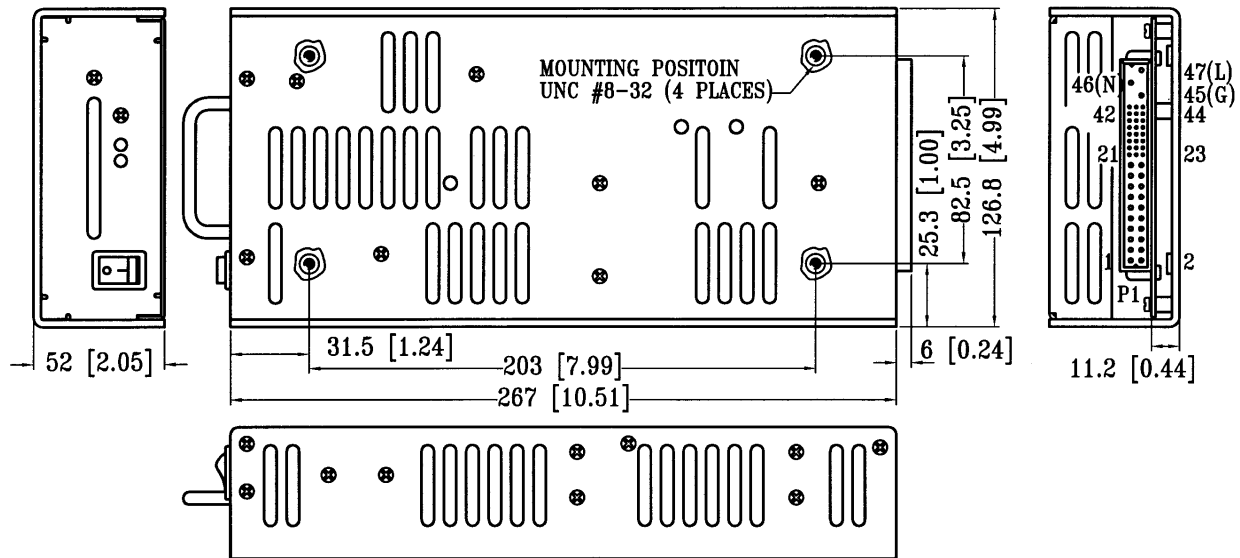
QUAD OUTPUT (Under 30 cfm forced air flow)

MODEL NO.	MAIN VO1 @★#≡⊙		AUX. VO2 @★#≡▲⊙		AUX. VO3 @★≡⊙▲#		AUX. VO4 ●	
	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.
HVP351-Q033BEI	35.0A	+3.3V	40.0A	+1.8V	16.0A	+5.0V	2.0A	+12V
HVP351-Q050DBI	35.0A	+5.0V	30.0A	+3.3V	16.0A	+1.8V	2.0A	+12V
HVP351-Q050DII	35.0A	+5.0V	30.0A	+3.3V	6.0A	+12V	2.0A	+12V
HVP351-Q050DMI	35.0A	+5.0V	30.0A	+3.3V	3.0A	+24V	2.0A	+12V

Symbol: "★" OVP built-in. "@" Adjustable. "●" Installed with Post Regulator(PR). "#" Remote sensing. "⊙" Installed with OR-ing diode.
 "▲" Installed with magnetic amplifier. "≡" Active circuit current sharing.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 2.1Kg (4.4 lb.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

	AC INPUT			QUAD OUTPUT					ASSORTED SIGNALS											
ASSIGNMENT	AC-LINE	AC-NEUTRAL	AC-GROUND	VO1	VO2	VO3	VO4	DC COM	VO1≡	-VO1#	+VO1#	VO2≡	-VO2#	+VO2#	VO3≡	-VO3#	+VO3#	Power Good	Power Fail	DC COM
CNTR & PIN#	47	46	45	3,4,5,6	17,18,19,20	1,2	8	7,9,10,11,12,13,14,15,16	27	33	30	24	34	28	21	25	22	23	31	26,29,32,35,36,37,38

Mating connector: PCIH47F400A1.