

# HiTRON

## UNIVERSAL INPUT HARMONIC CORRECTION (PFC) AC-DC MEDICAL APPLICATION INTERNAL OPEN FRAME SWITCHING POWER SUPPLIES 250 WATTS SINGLE OUTPUT HIMP250 SERIES



### FEATURES:

- ACCOMMODATE UNIVERSAL AC INPUT
- MEET IEC 61000-3-2 HARMONIC CORRECTION (PFC)
- MEET MEDICAL STANDARD EN 60601-1/UL 60601-1
- EMI MEET EN 55011 / FCC CLASS A
- CE MARKING COMPLIANCE

### SPECIFICATION

#### INPUT SPECIFICATION

**Input Voltage:** Typical 90-264Vac with PFC.  
**Input Connector:** B-S connector.  
**Input Frequency:** 47-63Hz.  
**Inrush Current:** 11.5Arms at 230Vac.  
**Input Current:** 2.64A at 115Vac, 1.29A at 230Vac.  
**Dielectric Withstand:** Meet IEC 60601-1.  
**EMI:** Meet EN 55011 FCC Class A.  
**Hold-up Time:** Typical 20.8mS at 115Vac,  
Typical 23.2mS at 230Vac.  
**Power Fail Signal:** Installed.  
**Power Factor & Harmonic Correction:**  
Meet IEC 61000-3-2, PF typ. 0.98-0.99 at full load.  
**Over Temperature Protection:** By thermostat.  
**Leakage Current:** Less than 0.047mA at 230Vac.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Connector:** B-S connector.  
**Output Wattage:** Typical 250 watts.  
**Line Regulation:** Typical 1.0%.  
**Load Regulation:** Typical  $\pm 0.5\%$ .  
**Noise & Ripple:** Typical 1.0% peak to peak.  
**OVP:** Built-in.  
**Adjustability:** Available.  
**Remote on/off:** Available.  
**DC OK Signal:** Installed.  
**Overload Protection (OLP):**  
Fully protected against outputs overload and short circuit.  
Consult the factory for OLP setting.

#### GENERAL SPECIFICATION

**Efficiency:** Typical 83-87 %. (various with output voltage).  
**Switching Frequency:** 130KHz.  
**Circuit Topology:** PWM fixed frequency forward circuit.  
**Transient Response:** Output voltage returns in less than  
64mS following a 25% load change.  
**Safety Standard:** Meet Medical standards IEC 60601-1/  
UL 60601-1/EN 60601-1 Class I.

**Operating Temperature:** 0 to +50 °C under 30 CFM  
forced air cooling.  
**Storage Temperature:** -20 to +85°C.  
**Cooling:** Requested 30 CFM forced air flow for full load.  
**Construction:** U-bracket construction format.  
**Power Density:** 3.13Watts / Cubic Inch.

NOTE: (1)All measurement are at nominal input, full load and +25°C unless otherwise specifications.

(2)Due to requests in market and advances in technology, specifications subject to change without notification.



In application.

## OUTPUT VOLTAGE/CURRENT RATINGS CHART

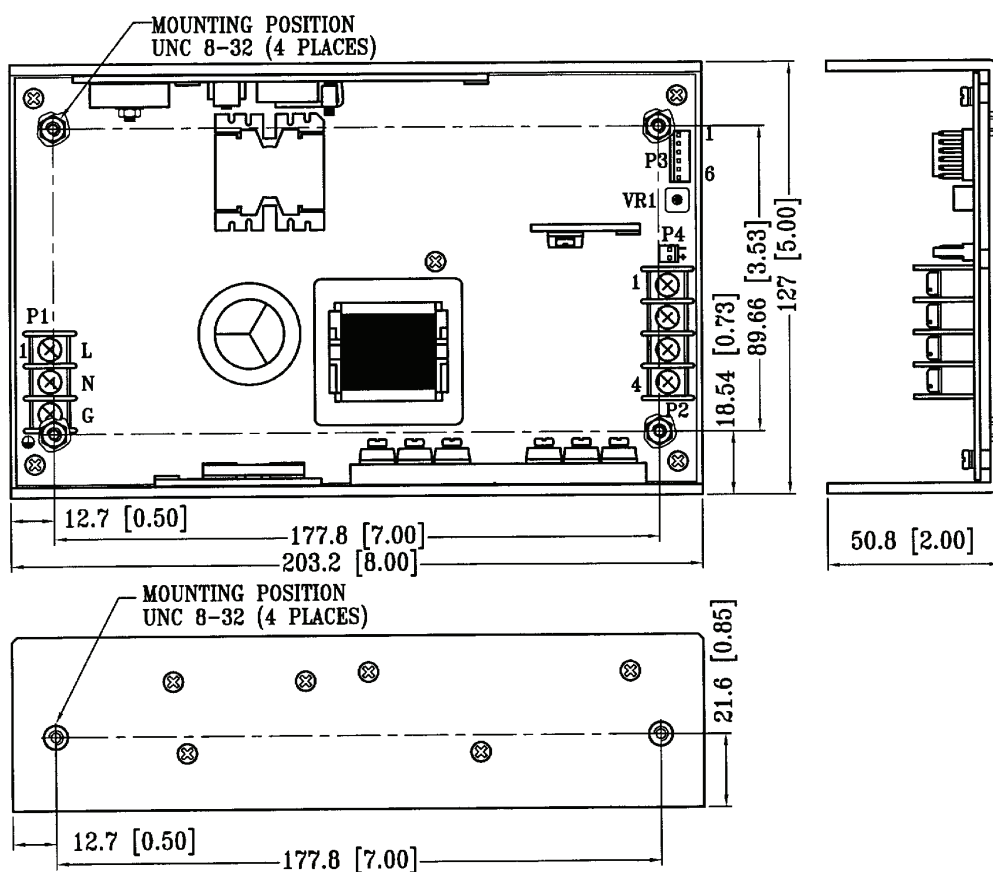
### SINGLE OUTPUT

MODEL NO.	MAIN OUTPUT ★	
	Typ.	Volt.
HIMP250-S120210	21.0A	12.0Vdc
HIMP250-S150170	17.0A	15.0Vdc
HIMP250-S240105	10.5A	24.0Vdc
HIMP250-S480052	5.2A	48.0Vdc

Symbol: “★” OVP built-in.

### MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 1.4Kg (49.3 Oz.)



### INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT CNTR/PIN#	AC INPUT			SINGLE OUTPUT		ASSORTED SIGNALS						
	AC-L	AC-N	AC-G	VOI	DC COM	DC OK	FAL	EXT OFF	+S	-S	FAN	COM
	P1-L	P1-N	P1-G	P2-1,P2-2	P2-3,P2-4	P3-1	P3-2	P3-3	P3-4	P3-5	P4-1	P4-2