

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

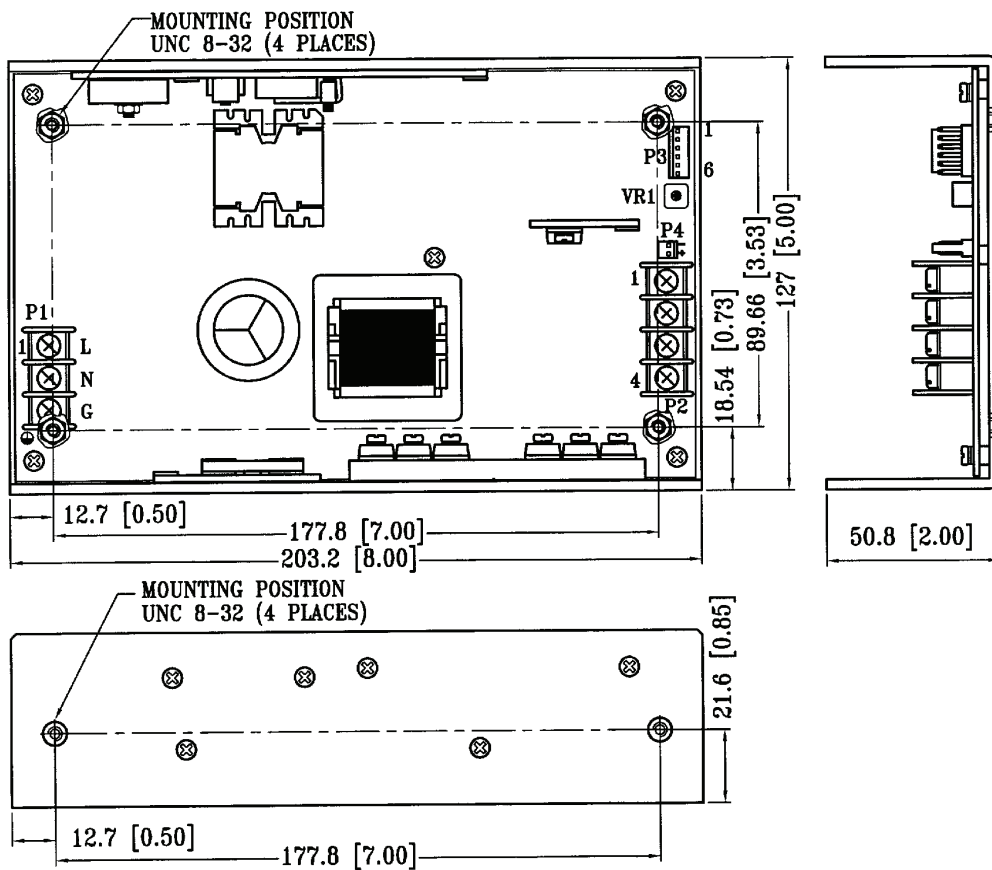
SINGLE OUTPUT

| 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 |