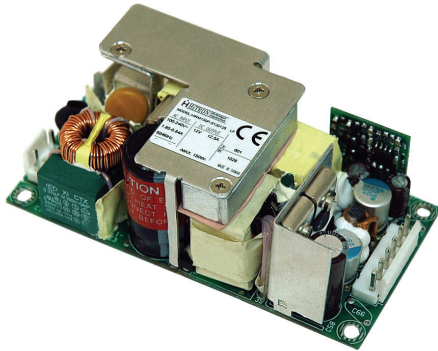


# HiTRON

## UNIVERSAL INPUT HARMONIC CORRECTION RESONANT DESIGN AC-DC MEDICAL & ITE APPLICATION INTERNAL OPEN FRAME SWITCHING POWER SUPPLIES 150 WATTS SINGLE OUTPUT HIRM150P SERIES



### FEATURES:

- 4" X 2" X 1.34" COMPACT SIZE
- ACCOMMODATE UNIVERSAL AC INPUT
- MEET IEC 61000-3-2 HARMONIC CORRECTION
- RESONANT DESIGN CIRCUIT
- AUXILIARY FAN +12V OUTPUT
- EMI MEET CISPR EN 55011/EN55022 & FCC CLASS B
- MEET UNIVERSAL SAFETY STANDARDS
- CE MARKING COMPLIANCE

### SPECIFICATION

#### INPUT SPECIFICATION

**Input Voltage:** Typical 90-264Vac with PFC.  
**Input Connector:** Molex connector or equivalent.  
**Input Frequency:** 47-63Hz.  
**Inrush Current:** 10.5Arms at 230Vac.  
**Input Current:** Typical 1.53A at 115Vac, 0.78A at 230Vac.  
**Dielectric Withstand:** Meet IEC 60601-1/IEC60950-1.  
**EMI:** Meet CISPR EN 55022 & FCC Class B conducted.  
Meet CISPR EN 55011 & FCC Class B conducted.  
**Hold-up Time:** Typical 10 mS at 115Vac & 230Vac.  
**Power Factor & Harmonic Correction:**  
Meet IEC 61000-3-2, PF typical 0.93 at full load.  
**Over Temperature Protection:** Installed.  
**Leakage Current:** Typical 0.3mA at 230Vac.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Connector:** Molex connector or equivalent.  
**Output Wattage:** Max. 150 watts.  
**Line Regulation:** Typical 0.1%.  
**Load Regulation:** VO1 typ.  $\pm 0.4\%$ , VO2 typ.  $\pm 2\%$  (for fan).  
**Total Regulation:** Typical 2-3%.  
**Noise & Ripple:** Typical 1.0-2.0% peak to peak.  
**OVP:** Built-in, Latch.  
**Adjustability:** Available.  
**Overload Protection (OLP):**  
Fully protected against output overload and short circuit.  
OLP set at about 110-140% rating output wattage.  
Consult the factory for OLP setting.

#### GENERAL SPECIFICATION

**Efficiency:** Typical 87-90 %. (various with output voltage)  
**Switching Frequency:** 65K Hz.  
**Circuit Topology:** Half-bridge ZVS circuit.  
**Transient Response:** Peak deviation 116mV, Output voltage returns in less than 0 mS following a 25% load change.  
**Safety Standard:** IEC 60950-1 Class I for ITE use.  
IEC 60601-1 Class I for Medical use.  
**Operating Temperature:** 0 to +70°C range.  
0 to +50°C under 500 LFM forced air cooling for full load.  
From +50°C, derating linearly to 60% load at +70°C.  
**Storage Temperature:** -20 to +85°C.  
**Cooling:** Requested 500 LFM forced air flow for full load.  
**Construction:** PCB format.  
**Power Density:** 14 Watts / 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

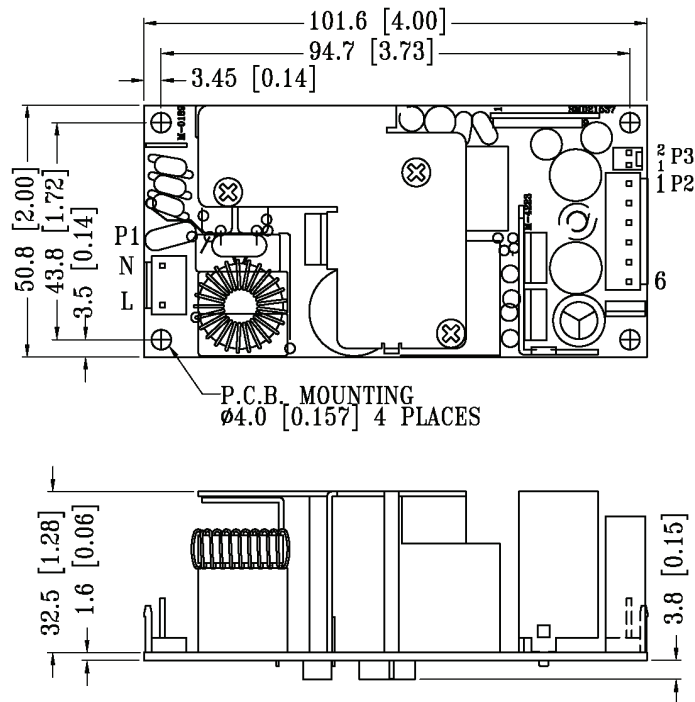
### SINGLE OUTPUT (Under 500LFM air cooling)

MODEL NO.	MAIN VO1 ★@※			AUX. VO2 ★		
	Typ.	Volt.	Max.	Typ.	Volt.	Max.
<b>HIRM150P-D120I</b>	12.5A	<b>+12V</b>	12.5A	0.3A	<b>+12V</b>	0.5A
<b>HIRM150P-D150I</b>	10.0A	<b>+15V</b>	10.0A	0.3A	<b>+12V</b>	0.5A
<b>HIRM150P-D240I</b>	6.3A	<b>+24V</b>	6.3A	0.3A	<b>+12V</b>	0.5A
<b>HIRM150P-D480I</b>	3.1A	<b>+48V</b>	3.1A	0.3A	<b>+12V</b>	0.5A

Symbol: "★" OVP built-in. "@Adjustable. "※"Synchronous Rectifier.

### MECHANICAL DIMENSIONS: MM [INCHES]

**WEIGHT: 215.55g (7.60z)**



### INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT CNTR & PIN #	AC INPUT			DUAL O/P		
	AC-L	AC-N	AC-G	VO1	VO2/STANDBY	DC-COM
	P1-L	P1-N	P1-G	P2-1,2,3	P3-1	P2-4,5,6/P3-2