

# H HiTRON

# UNIVERSAL INPUT AC-DC MEDICAL APPLICATION INTERNAL OPEN FRAME SWITCHING POWER SUPPLIES 60 WATTS SINGLE OUTPUT HMI63 SERIES



#### **FEATURES:**

- ACCOMMODATE UNIVERSAL AC INPUT
- **COMPACT 4"x2"x1"PCB FORMAT**
- **MEET MEDICAL STANDARD IEC 60601-1**
- EMI MEET EN 55011 / FCC CLASS B
- **CE MARKING COMPLIANCE**

### **SPECIFICATION**

#### INPUT SPECIFICATION

Input Voltage: Range typical 90-264Vac.

Rating 100 to 240Vac.

**Input Connector:** Molex connector or equivalent.

**Input Frequency:** 47-63Hz.

**Inrush Current:** ≤12.0A rms cold start at 230Vac.

Input Current: Typical 0.9A at 115Vac, 0.435 at 230Vac.

Dielectric Withstand: Meet IEC 60601-1. EMI: Meet EN 55011 / FCC Class B. Hold-up Time: Typical 11.2mS at 115Vac, Typical 72mS at 230Vac.

Leakage Current: Less than 0.1mA at 230Vac.

#### OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart. Output Current: See Ratings Chart.

Output Connector: Molex connector or equivalent.

Output Wattage: Typical 60 watts. Line Regulation: Typical 0.1%. **Load Regulation:** Typical  $\pm 1.0\%$ .

Noise & Ripple: Typical 1.0% peak to peak. **OVP:** Built-in at main output (Latch).

Adjustability: Factory Set. **Overload Protection (OLP):** 

Fully protected against outputs overload and short circuit. Typical OLP set at 105-120% of rating output power.

Consult the factory for OLP setting.

## GENERAL SPECIFICATION

Efficiency: Typical 80-89.5 %. (various with output voltage). Operating Temperature: 0 to +50 °C under forced air flow

Switching Frequency: 85KHz.

Circuit Topology: Fixed frequency flyback circuit. **Transient Response:** Output voltage returns in less than

0.5mS following a 50% load change.

Safety Standard: Meet Medical standards UL 60601-1/

EN 60601-1 Class I.

Power Density: 7.5Watts / Cubic Inch.

for full load. Derate by 1.3W/°C

from 40°C to 50°C.

Storage Temperature: -20 to +85°C.

**Temperature Coefficient:** Typical 0.04%/°C.

Cooling: At least 5 CFM direct forward air flow is required to

achieve full rating power.

Construction: 4 x2 x1 inch PCB format.

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

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





For the details of safety approval, please consult the factory.

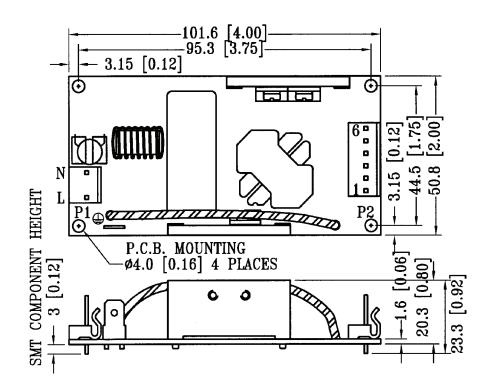
# **OUTPUT VOLTAGE / CURRENT RATINGS CHART**

## SINGLE OUTPUT

MODEL NO.	MAIN OUTPUT		
	Тур.	Volt.	
HMI63-S120500	5.00A	12.0V	
HMI63-S150400	4.00A	15.0V	
HMI63-S240250	2.50A	24.0V	
HMI63-S480125	1.25A	48.0V	

**Symbol: "★**" OVP built-in.

## **MECHANICAL DIMENSIONS: MM [INCHES]**



**WEIGHT:** 145g (5.12 Oz.)

INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

	AC INPUT			SINGLE OUTPUT	
ASSIGNMENT	AC-L	AC-N	AC-G	VO1	DC COM
CNTR/PIN#	P1-L	P1-N	G	P2-1,2	P2-3,4

Mating connector: P1,2 Molex # 5195 or 5239 series.