# **H** HITRON

## UNIVERSAL INPUT AC-DC MEDICAL APPLICATION OPEN FRAME INTERNAL SWITCHING POWER SUPPLIES 65WATTS GREEN POWER TRIPLE OUTPUT HICM65 SERIES



#### **FEATURES:**

- COMPACT 4"x 2" PACKAGE
- FREE AIR CONVECTION
- UP TO 83% HIGH EFFICIENCY
- -20°C TO +70°C WIDE OPERATING TEMP.
- MEET MEDICAL STANDARDS IEC60601-1
- PCB & ENCLOSURE FORMAT OPTIONAL
- CE MARKING COMPLIANCE

#### **SPECIFICATION**

#### INPUT SPECIFICATION

Input Voltage: Typical 90-264Vac. Input Connector: V-H connector. Input Frequency: 47-63Hz.

**Inrush Current:** Typical 16A rms at 230Vac.

**Input Current:** Typ. 1.1A at 115Vac, 0.55A at 230Vac.

**Dielectric Withstand:** Meet IEC60601-1. **EMI:** Meet CISPR EN55022 Class B.

Hold-up Time: Typ. 16mS at 115Vac,76mS at 230Vac. Earth Leakage Current: Less than 0.24mA at 230Vac. Enclosure Leakage Current: 0.01mA at 230Vac. No Load Power: Less than 1.5W at 230Vac.

#### **OUTPUT SPECIFICATION**

Output Voltage: See Ratings Chart. Output Current: See Ratings Chart. Output Connector: V-H connector. Output Wattage: Typical 65 watts. Line Regulation: Typical 0.5-2%.

**Load Regulation:** VO1/2 typ. ±2.0%, VO3 typ. ±3.0% **Total Regulation:** VO1 typ. ±4.0%, VO2/3 typ. ±8.0%.

**Noise & Ripple:** Typical 1.0% peak to peak. **OVP:** Built-in VO1 (Auto-recovery).

**Adjustability:** Not available.

Overload Protection (OLP):

Fully protected against outputs overload and short circuit. Typ. OLP set at 130-150% of rating output power.

Consult the factory for OLP setting.

#### GENERAL SPECIFICATION

**Efficiency:** Typ. 83% at 230Vac(various with the o/p volt.)

Switching Frequency: 65K Hz.

Circuit Topology: Fix-flyback Circuit.

Transient Response: Output voltage returns in less than

0.01mS following a 25% load change.

Safety Standard: IEC60601-1 Class I.

**Operating Temperature:** -20°C to +70 °C with derating.

(please refer to the derating chart).

**Storage Temperature:** -25 to +85°C.

Cooling: Free air convection.

Construction: PCB and Enclosure optional.

Power Density: 6.5Watts / Cubic Inch.

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

<sup>(2)</sup> Load regulation is measured at 115Vac or 230Vac in percentage to indicate the change in output voltage as the load varied from half load to full load (±%).

<sup>(3)</sup> Due to requests in market and advances in technology, specifications subject to change without notice.

#### **OUTPUT VOLTAGE / CURRENT RATINGS CHART**

#### SINGLE OUTPUT

MODEL NO. (note 1)	MAIN VO1 ★				AUX. VO2				AUX. VO3			
	Min.	Тур.	Volt.	Max.	Min.	Тур.	Volt.	Max.	Min.	Тур.	Volt.	Max.
HICM65-T050II	1.2A	6.0A	+5V	8.0A	0.50A	2.50A	+12V	3.0A	0.1A	0.5A	-12V	0.5A
HICM65-T050KK	1.2A	6.0A	+5V	8.0A	0.40A	2.00A	+15V	2.5A	0.1A	0.5A	-15V	0.5A
HICM65-T050MI	1.2A	6.0A	+5V	8.0A	0.25A	1.25A	+24V	1.5A	0.1A	0.5A	-12V	0.5A

Remark: "★" OVP built-in

Note: 1.Please add suffix to model number to define type: add "-C" for enclosure (metal box) version, otherwise will be PCB version. For example: HICM65-T050II is for PCB version, HICM65-T050II-C is for enclosure (metal box) version.

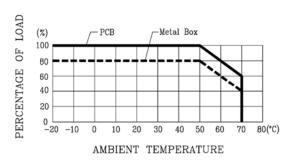
2. Derate output power by 20% for enclosure version.

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

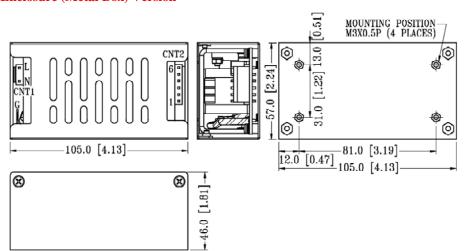
#### **PCB Version**

# -P.C.B. MOUNTING ø3.5 [ø0.14] 4 PLACES 3.15 [0.12] $\frac{1}{95.3} \begin{bmatrix} 3.75 \\ 101.6 \end{bmatrix}$

#### **DERATING CHART**



#### **Enclosure (Metal Box) Version**



#### **INPUT & OUTPUT CONNECTORS** PIN ASSIGNMENT

ASSIGNMENT	CNTR/PIN#				
AC-LINE	CNT1-L				
AC-NEUTRAL	CNT1-N				
AC-GROUND	GND				
VO1	CNT2-5,6				
VO2	CNT2-2				
VO3	CNT2-1				
DC COM	CNT2-3,4				