

# Hitron Electronics HICM250 Series

300 Watt U-Frame Power Supply for Medical & ITE Applications



### **Features**

- 6x4 inch Compact size
- Very High Efficiency up to 90%
- 200-250W Convection/300W Forced-cooled
- U-Bracket or Box format optional
- Medical and ITE application
- Class I construction

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## **Specification**

Input		General	
Input Voltage	90-264VAC	Efficiency	Typical 90-92% (depending on model)
Input Frequency	47-63Hz	Switching Frequency	90-110KHz (depending on model)
Input Current	Typical 2-2.45A at 115VAC	<b>Dielectric Withstand</b>	IEC60601-1 and IEC60950-1
	Typical 1-1.2A at 230VAC	Circuit Topology	LLC circuit
Inrush Current	Typical 18.6A rms at 230VAC	<b>Transient Response</b>	Output voltage returns in less than
Power Factor	Typical 0.97 at 230VAC	(depending on model)	0.01-0.2mS for a 25% load change
Input Connector	B-S connector	Power OK	Available
Earth Leakage Current	Less than 0.15mA	Remote ON/OFF	Available
Output		<b>Power Density</b>	5.3-6.6W / Cubic Inch
<b>Output Connector</b>	B-S connector	Construction	U-Bracket and Box format optional
Line Regulation	Typical 0.1%	Environmental	
<b>Load Regulation</b>	Typical ±1%	<b>Operating Temperature</b>	-25°C to +70°C derate with
<b>Total Regulation</b>	Typical ±2%	(Refer to the derating chart)	derating
Noise & Ripple	Typical 1% peak to peak	Storage Temperature	-30°C to +85°C
Adjustability	Available at V1	Cooling	Convection-cooled: 200-250W
Hold-up Time	27-30mS min. at 230VAC		Forced-cooled: 300W with 15CFM
Protection		<b>Operating Humidity</b>	10-95% RH, non-condensing
Over Voltage	Built-in (Latch)	Storage Humidity	5-95% RH
Over Load	Typical set about 140-175% of	Safety/EMC	
(depending on model)	rating output wattage	Emissions (conducted)	CISPR EN55011 & EN55032 Class B
Over Temperature	Installed by NTC	<b>Harmonic Current</b>	IEC61000-3-2
		Safety Standard	IEC60601-1/IEC60950-1Class I

### Notes

- (1) All measurements are at nominal input, full load, and +25°C unless otherwise specified.
- (2) 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 (±%).
- (3) The power supply is considered a component installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
- (4) Due to requests in market and advances in technology, specifications subject to change without notice.



# **HICM250 Series**

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Model No.	V1 ★ @				Stand-by Output	
(Model no. for example Please refer to note 1 & 2)	Min.	Typ. (Convection-cooled)	Volt.	Max. (Forced-cooled)	Тур.	Volt.
HICM250-D120E-C1B	0A	16.5A	12V	24.6A	1A	5V
HICM250-D120E-C1U	0A	18.5A	12V	24.6A	1A	5V
HICM250-D190E-C1B	0A	10.3A	19V	15.5A	1A	5V
HICM250-D190E-C1U	0A	11.6A	19V	15.5A	1A	5V
HICM250-D240E-C1B	0A	10.2A	24V	12.3A	1A	5V
HICM250-D240E-C1U	0A	10.2A	24V	12.3A	1A	5V
HICM250-D560E-C1B	0A	4.4A	56V	5.3A	1A	5V
HICM250-D560E-C1U	0A	4.4A	56V	5.3A	1A	5V

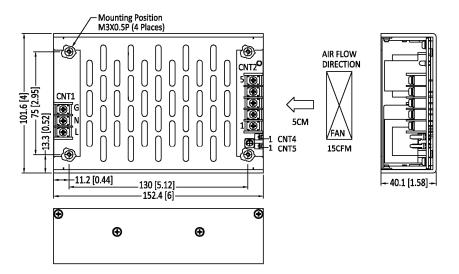
Symbol: ★ "OVP" built-in "@" Adjustable

Notes: (1) Please add suffix to model number to define type: add "-B" for enclosure (metal box) version, and "-U" for U-Bracket version.

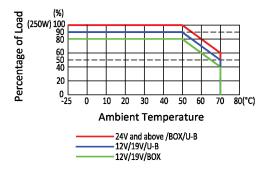
For example: HICM250-D120E-C1B is for Class I and Metal Box version; HICM250-D120E-C1U is for Class I and U-bracket version.

- (2) Other output voltages are available. Please contact sales for details.
- (3) 15CFM fan-cooling is required if the output wattage is 300Watt.

### Mechanical Dimensions (Note: All dimensions are in mm[inch])



### **Derating Chart**



### NoteS:

- (1) 15 CFM fan cooling is required if total output power is 300W.
- (2) The 100% load is 250W at convection-cooled.

Derate output power by 20% for Metal Box version at 12V & 19V. Derate output power by 10% for U-Bracket version at 12V & 19V.

### Pin assignment

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Assignment	Pin No.		
AC-Line	CNT1-L		
AC-Neutral	CNT1-N		
AC-Ground	CNT1-G		
V1	CNT2-3,4		
DC COM	CNT2-1,2, CNT4-2, CNT5-2		
V2	CNT2-5		
Power OK	CNT4-1		
Remote ON/OFF	CNT5-1		

Notes:

Remote ON/OFF: CNT5-1 &CNT5-2 must be shorted to switch on the output.