

HiTRON

**Universal input AC-DC Medical and ITE application open frame
internal switching power supplies convection-cooled
200-250 Watts dual output HICM250 series**



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



Specification

Input

Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	Typical 2-2.45A at 115VAC Typical 1-1.2A at 230VAC
Inrush Current	Typical 18.6A rms at 230VAC
Power Factor	Typical 0.97 at 230VAC
Input Connector	B-S connector
Earth Leakage Current	Less than 0.15mA

Output

Output Connector	B-S connector
Line Regulation	Typical 0.1%
Load Regulation	Typical $\pm 1\%$
Total Regulation	Typical $\pm 2\%$
Noise & Ripple	Typical 1% peak to peak
Adjustability	Available at V1
Hold-up Time	27-30mS min. at 230VAC

Protection

Over Voltage	Built-in (Latch)
Over Load	Typical set about 140-175% of (depending on model) rating output wattage
Over Temperature	Installed by NTC

General

Efficiency	Typical 90-92% (depending on model)
Switching Frequency	90-110KHz (depending on model)
Dielectric Withstand	IEC60601-1 and IEC60950-1
Circuit Topology	LLC circuit
Transient Response	Output voltage returns in less than (depending on model) 0.01-0.2mS for a 25% load change
Power OK	Available
Remote ON/OFF	Available
Power Density	5.3-6.6W / Cubic Inch
Construction	U-Bracket and Box format optional

Environmental

Operating Temperature	-25°C to +70°C derate with (Refer to the derating chart) derating
Storage Temperature	-30°C to +85°C
Cooling	Convection-cooled: 200-250W Forced-cooled: 300W with 15CFM
Operating Humidity	10-95% RH, non-condensing
Storage Humidity	5-95% RH

Safety/EMC

Emissions (conducted)	CISPR EN55011 & EN55032 Class B
Harmonic Current	IEC61000-3-2
Safety Standard	IEC60601-1/IEC60950-1 Class 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 ($\pm\%$).
- (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.

Output voltage & current rating chart

Single Output

Model No. (Model no. for example Please refer to note 1 & 2)	V1 ★ @				Stand-by Output	
	Min.	Typ. (Convection-cooled)	Volt.	Max. (Forced-cooled)	Typ.	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

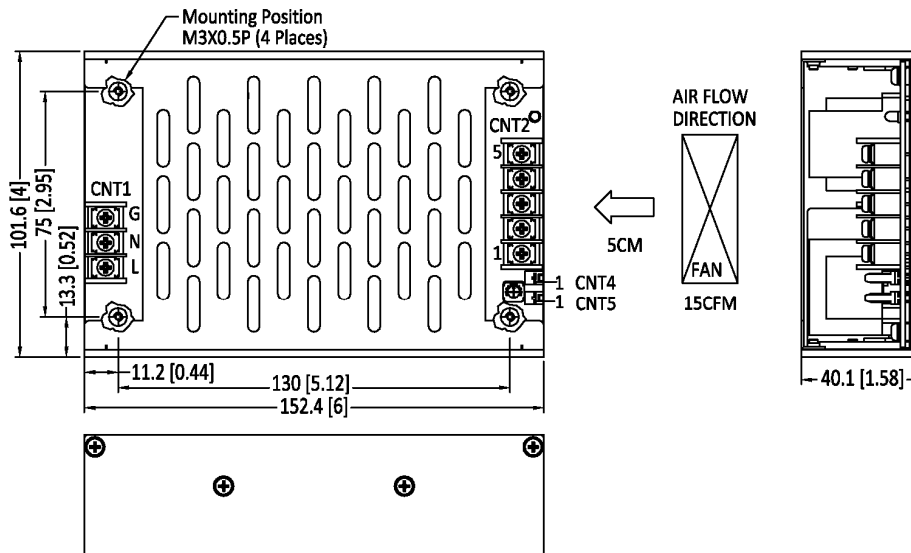
Notes: (1) Please add suffix to model number to define type: add "-B" for enclosure (metal box) version, and "-U" for U-Bracket version.

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

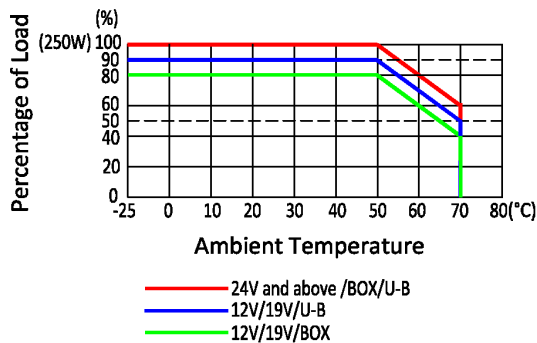
(2) Other output voltages are available. Please contact sales for details.

(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

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.