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**

CE

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 ±1%
Total Regulation	Typical ±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/IEC60950-1Class 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.

Output voltage & current rating chart

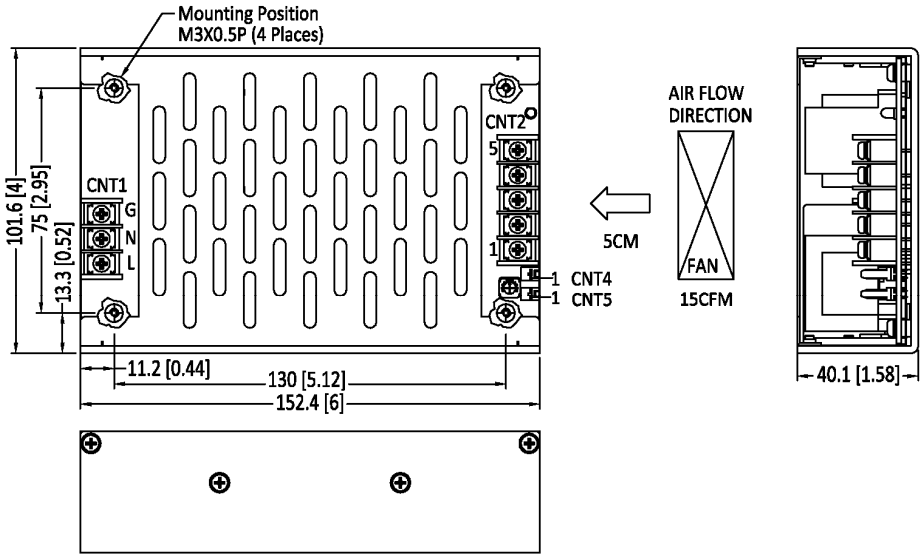
Single Output

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

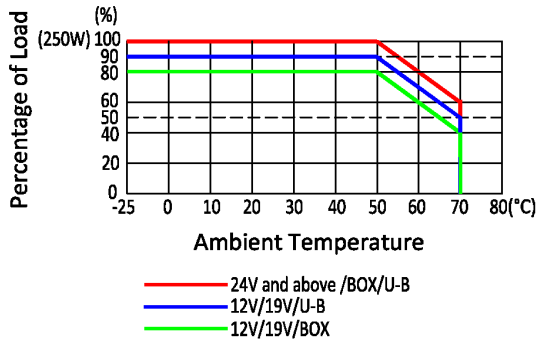
Symbol: ★ "OVP" built-in "@" Adjustable

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.