

HiTRON

**Universal input AC-DC Medical and ITE application open frame
internal switching power supplies convection-cooled
150 Watts green power single output HICM150G series**



Features

- 5x3 inch Compact size
- No load power consumption <0.5 W
- Very High Efficiency up to 94%
- 150 W Convection/200 W Forced-cooled
- U-Bracket or Box format optional
- Medical and ITE application
- Class I and Class II construction



Specification

Input

Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	Typical 1.5A at 115VAC Typical 0.8A at 230VAC
Inrush Current	Typical 14.5A rms at 230VAC
Power Factor	Typical 0.92 at 230VAC
Input Connector	V-H connector or equivalent
Earth Leakage Current	Less than 0.1mA
No-load Power	Less than 0.5W

Output

Output Connector	V-H connector or equivalent
Line Regulation	Typical 0.1%
Load Regulation	Typical $\pm 1.5\%$
Total Regulation	Typical $\pm 3\%$
Noise & Ripple	Typical 1% peak to peak
Adjustability	Available
Hold-up Time	20mS min. at 230VAC
Protection	
Over Voltage	Built-in (Latch)
Over Load	Typical set about 185-200% of rating output wattage
Over Temperature	Installed by NTC

General

Efficiency	Typical 94% (depending on model)
Switching Frequency	85KHz
Dielectric Withstand	IEC60601-1 and IEC60950-1
Circuit Topology	LLC circuit
Transient Response	Output voltage returns in less than 0.01mS for a 25% load change
Power Fail	Available
Remote ON/OFF	Available
Power Density	6.9W / Cubic Inch
Construction	U-Bracket and Box format optional

Environmental

Operating Temperature	-20°C to +70°C derate from 100% load at +50°C to 60% at +70°C (Refer to the derating chart)
Storage Temperature	-25°C to +85°C
Cooling	Convection-cooled: 150W Forced-cooled: 200W with 10CFM
Operating Humidity	10-95% RH, non-condensing
Storage Humidity	5-95% RH

Safety/EMC

Emissions (conducted)	CISPR EN55011 & EN55022 Class B
Harmonic Current	IEC61000-3-2
Safety Standard	IEC60601-1 Class I and Class II IEC60950-1 Class I and Class II

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. <small>(Model no. for example Please refer to note 1 & 2)</small>	V1 ★ @				Fan Output	
	Min.	Typ. (Convection-cooled)	Volt.	Max. (Forced-cooled)	Typ.	Volt.
HICM150G-S120125-C1U	0A	12.50A	12V	16.70A	0.5A	12V
HICM150G-S120125-C1B	0A	12.50A	12V	16.70A	0.5A	12V
HICM150G-S120125-C2U	0A	12.50A	12V	16.70A	0.5A	12V
HICM150G-S120125-C2B	0A	12.50A	12V	16.70A	0.5A	12V
HICM150G-S240625-C1B	0A	6.25A	24V	8.35A	0.5A	12V
HICM150G-S240625-C2U	0A	6.25A	24V	8.35A	0.5A	12V
HICM150G-S280536-C1B	0A	5.36A	28V	7.15A	0.5A	12V
HICM150G-S360417-C1B	0A	4.17A	36V	5.56A	0.5A	12V
HICM150G-S360417-C2U	0A	4.17A	36V	5.56A	0.5A	12V
HICM150G-S480314-C1U	0A	3.14A	48V	4.17A	0.5A	12V
HICM150G-S480314-C2B	0A	3.14A	48V	4.17A	0.5A	12V

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

Notes: (1) Please add suffix to model number to define IEC protection classes: add "-C1" for Class I version (with AC-GND), and "-C2" for Class II version (without AC GND).

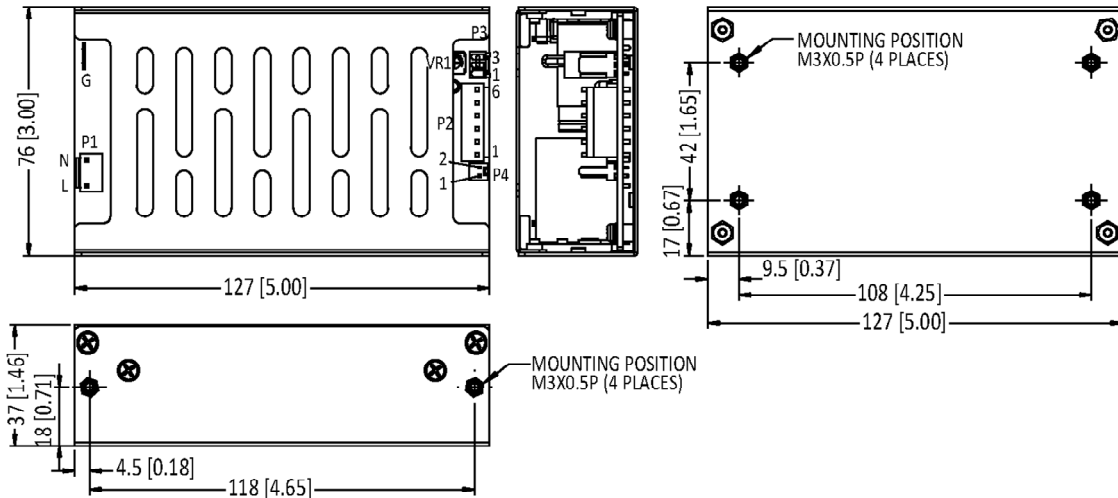
Please add suffix to model number to define type: add "-B" for enclosure (metal box) version, and "-U" for U-Bracket version.

For example: HICM150G-S120125-C1B is for Class I and Metal Box version; HICM150G-S120125-C2U is for Class II and U-bracket version.

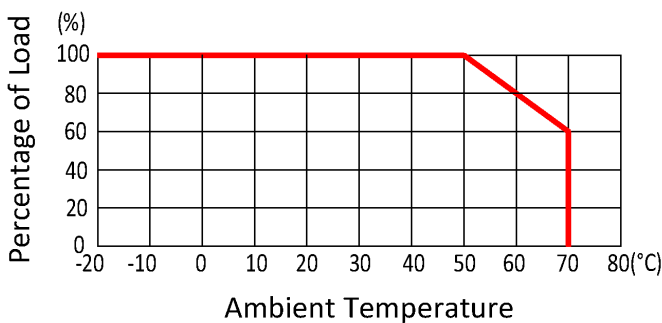
(2) Other output voltages are available. Please contact sales for details.

(3) 10CFM fan-cooling is required if the output wattage is 200Watt.

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



Derating Chart



Note: 10 CFM fan cooling is required if total output power is 200W.

Pin assignment

Assignment	Pin No. (Class I)	Pin No. (Class II)
AC-Line	P1-L	P1-L
AC-Neutral	P1-N	P1-N
AC-Ground	GND	N/A
V1	P2-4,5,6	P2-4,5,6
DC COM	P2-1,2,3	P2-1,2,3
Power Fail	P3-1	P3-1
Remote ON/OFF	P3-2	P3-2
RTN	P3-3	P3-3
FAN +	P4-1	P4-1
FAN -	P4-2	P4-2

Notes: (1) Remote ON/OFF: P3-2 & P3-3 must be shorted to switch on the output.

(2) Mating connector: P1: CIVILUX CI5203S0000/P2: JST B6P-VH