

# HiTRON

**Universal input AC-DC Medical and ITE application open frame  
internal switching convection-cooled power supplies  
50 Watts green power single output HICM50G series**



## Features

- 4x 2 inch Compact size
- Energy efficiency Level V
- Convection cooling
- PCB and Box format optional
- Medical and ITE application
- CE marking compliance



## Specification

### Input

<b>Input Voltage</b>	90-264VAC
<b>Input Frequency</b>	47-63Hz
<b>Input Current</b>	Typical 0.7A at 115VAC Typical 0.4A at 230VAC
<b>Inrush Current</b>	10A rms at 230VAC (cold start)
<b>Input Connector</b>	V-M connector or equivalent
<b>Earth Leakage Current</b>	Less than 0.2mA
<b>No-load Power</b>	Less than 0.3 W

### Output

<b>Output Connector</b>	V-M connector or equivalent
<b>Line Regulation</b>	Typical 0.1%
<b>Load Regulation</b>	Typical $\pm 1.5\%$
<b>Total Regulation</b>	Typical $\pm 2\%$
<b>Noise &amp; Ripple</b>	Typical 1% peak to peak
<b>Adjustability</b>	Not available
<b>Hold-up Time</b>	Typical 16mS at 115VAC Typical 90mS at 230VAC

### Protection

<b>Over Voltage</b>	Built-in (Latch)
<b>Over Load</b>	Typical set about 125-150% of rating output wattage

### General

<b>Efficiency</b>	Typical 83-90% (depending on model)
<b>Switching Frequency</b>	65KHz
<b>Dielectric Withstand</b>	IEC60601-1 and IEC60950-1
<b>Circuit Topology</b>	Fix-flyback circuit
<b>Transient Response</b>	Output voltage returns in less than 1mS following a 25% load change
<b>Power Density</b>	6.2W / Cubic Inch
<b>Construction</b>	PCB and Box format optional

### Environmental

<b>Operating Temperature</b>	-20°C to +50°C at full load without forced air flow
<b>Storage Temperature</b>	-25°C to +85°C
<b>Cooling</b>	Convection-Cooled
<b>Operating Humidity</b>	10-95% RH, non-condensing
<b>Storage Humidity</b>	5-95% RH

### Safety/EMC

<b>Emissions</b> (refer to note 3)	CISPR EN55011/32 & FCC Class B
<b>Harmonic Current</b>	IEC61000-3-2
<b>Safety Standard</b>	IEC60601-1 Class I 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) Radiated EMI can pass Class B with external T core input and output added.
- (4) 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.
- (5) Due to requests in market and advances in technology, specifications subject to change without notice.

# Output voltage & current rating chart

## Single Output

Model No. (refer to note 1)	V1 ★			
	Min	Typ.	Volt.	Max.
HICM50G-S033700	0.0A	7.00A	3.3V	7.00A
HICM50G-S050700	0.0A	7.00A	5.0V	7.00A
HICM50G-S120416	0.0A	4.16A	12.0V	4.16A
HICM50G-S150340	0.0A	3.40A	15.0V	3.40A
HICM50G-S240215	0.0A	2.15A	24.0V	2.15A
HICM50G-S360140	0.0A	1.40A	36.0V	1.40A
HICM50G-S480105	0.0A	1.05A	48.0V	1.05A

Symbol: ★ "OVP" built-in

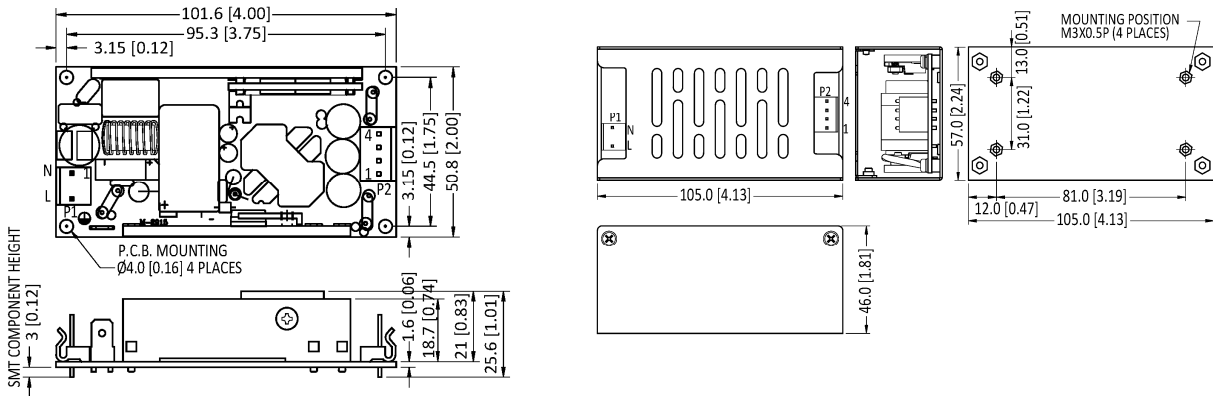
Notes: (1) Please add suffix to model number to define type: add "-B" for enclosure (metal box) version.

For example: HICM50G-S120416 is PCB version; HICM50G-S120416-B is for enclosure (metal box) version.

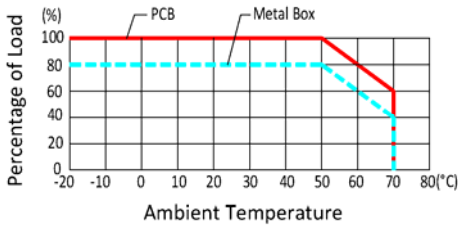
(2) Derate output power by 20% for enclosure (Metal Box) version.

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

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



## Derating Chart



Note: Derate output power by 20% for enclosure (Metal Box) version

## Pin assignment

Assignment	Pin No.
AC-Line	P1-3
AC-Neutral	P1-1
AC-Ground	GND
V1	P2-3,4
DC COM	P2-1,2