

HPU63C series

The HPU63C series of AC/DC switching mode power supplies provide 63 Watts of continuous output power . All supplies are UL94V-1 min compliant. All models meet FCC Part-18, CISPR-11 and EN55011 class B emission Limits, IEC 60601-1-2:2014 and are designed to comply with UL/cUL, TUV T-mark and conformity assessment in CE marking. All units are 100% burned in and tested.







63W External Medical Grade Power Supply

FEATURES:

<代理店>

- * Wide Operating Voltage, 80 to 275 VAC, 47 to 63 Hz
- * IEC-320-C6 Input Inlet
- * Single Output
- * Crowbar Mode Over Voltage Protection
- * Input to Output : 2MOPP
- * High ESD immunity
- * Suitable professional healthcare facility
- * 3 year warranty



052-752-1404

APPLICATIONS:

- * Patient Monitor
- * Ultrasound system
- * Portable medical device
- * Blood chemistry analyzer
- * Medical Image

GENERAL SPECIFICATION:

- * Short Circuit Protection: Auto Recovery
- * Cooling: Free Air Convection
- * Flammability Rating: UL94V-1
- * Protection Classes: Class I
- * Safety: IEC60601-1 Edition3.1, ES60601-1:2005(R2012), CSAC22.2 NO.60601-1:14,





APPROVALS:



Electr	ical Characteristics:	EN60601-1:2006/A1:2013	13						
Symbol	Characteristic	Characteristic Condition		Тур.	Max.	Unit			
Vins	Safety Approval Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC			
Vin	Input Operate Voltage Range	Detail to see Fig.1 (Derate linearly from 100% load at 90VAC to 80% load at 80VAC)	80		275	VAC			
Fi	Input Frequency	Sine wave	47		63	Hz			
Po	Output Power Range	See Rating Chart			63	W			
Iil	Low Line Input Current	Full Load, Vin=100VAC		1.62		Α			
Iih	High Line Input Current	Full Load, Vin=240VAC		0.72		Α			
Irl	Low Line Input Inrush Current	Full Load, 25°C, Cool start, Vin=115VAC			42	Α			
Irh	High Line Input Inrush Current	Full Load, 25°C, Cool start, Vin=230VAC			85	Α			
Ik	Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.25	mA			
η	Efficiency	Full Load, Vin=230VAC, Detail to see Rating Chart	S	t					
△Voi	Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC			1	%			
OVP	Over Voltage Protection		112		132	%			
OLP	Over Load Protection	Recovers automatically after fault condition is removed	110		150	%			
ttr	Time of Transient Response	Full Load, Vin=110VAC			4	ms			
thu	Hold-Up Time	Full Load, Vin=110VAC	See Rating Cha			t			
ts	Start-up time	Full Load, Vin=100~240VAC			2	S			
Ris	Insulation Resistance		50			МΩ			
Tc	Temperature Coefficient	All Condition			±0.04	%/°C			
HV	Dielectric Withstanding Voltage (P-S)	Primary to Secondary, limit current <10mA			4000	VAC			
Vpg	Dielectric Withstanding Voltage (P-G)	Primary to PE, limit current <10mA			1500	VAC			
EMI	EMC Emission	Compliance to EN55011 (CISPR11), EN60601-1-2	В			Class			

Environmental:

Symbol	Characteristic	Condition		Тур.	Max.	Unit
То	Operating Temperature	Detail to see Fig.2 (Derate linearly from 100% load at 40°C to 50% load at 70°C)	-10		70	°C
Ts	Storage Temperature	10 ~ 95% RH	-40		85	°C
Но	Operating Humidity	non-condensing	0		95%	RH
Hs	Storage Humidity		0		95%	RH
ESDa	Electro Static Discharge	Air Discharge, IEC61000-4-2			15	kV
ESDc	Electro Static Discharge	Contact Discharge, IEC61000-4-2			8	kV
MTBF	Mean Time Between Failure	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	100k			h
ELEV	Operating Altitude (Elevation)	All condition			3000	m
VBR	Vibration	10 ~ 500Hz, 10min./1cycle, 60min. each along X, Y, Z axes			5	G
Vsl	Surge Voltage	Line-Neutral			1	kV
Vsg	Surge Voltage	Line-PE & Neutral-PE			2	kV

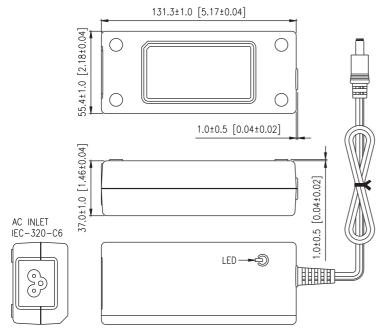
HPU63C series

V1.2

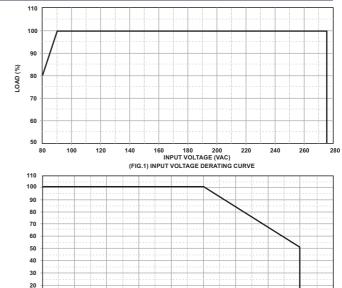
SPECIFICATION NOTE:

- Output can provide up to peak load when the power supply starts up.
 Continuous staying in more than rated load is not allowed.
- 2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- 3. Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
- 4. Load regulation is defined by changing ±40% of measured output load from 60% rated load.
- Ripple & noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
- Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.
- 7. Efficiency is measured at rated load, and nominal line.

MECHANICAL DIMENSIONS: (UNIT: mm)



63W External Medical Grade Power Supply



OUTPUT CABLE RECOMMEND:

- 1. Selected output connectors and wire, please refer to Appendix.
- 2. HPU63C-105~107 are required to use AWG#16 / 4FT output cable.
- 3. HPU63C-108~111 are required to use AWG#18/6FT output cable.
- 4. The regulation and efficiency will be changed by modified output cable.

20 30 40 50 TEMPERATURE (°C) (FIG.2) TEMPERATURE DERATING CURVE

PACKING

10 -10

- 1. Net weight: 330~380g approx.
- 2. Optional output connectors available contact sales for details.

Rating Chart:

MODEL NO.	Setting Voltage Range (Factory setting, can't be adjusted)	Output Current (Based on the output volt.)	Maximum Output Power	Ripple & Noise	Total Regulation	Typ. Efficiency	Typ. No Load Consumption	Hold-Up Time	Protection Mode
	(VDC)	(A)	(W)	(mVp-p)	(%)	(%)	(W)	(ms)	r D
HPU63C-105	12.0	5.25	63	100	±5	87	0.5	12	Hiccup
HPU63C-106	15.0	4.20	63	100	±5	87	0.5	12	Hiccup
HPU63C-107	18.0	3.50	63	100	±5	87	0.5	12	Hiccup
HPU63C-108	24.0	2.62	63	100	±3	87	0.5	12	Hiccup
HPU63C-109	30.0	2.10	63	110	±3	87	0.5	12	Hiccup
HPU63C-110	36.0	1.75	63	130	±3	87	0.5	12	Hiccup
HPU63C-111	48.0	1.31	63	150	±3	87	0.5	12	Hiccup