

HPU 100 SERIES

100W Desk top type medical power supplies for Home health care applications.

Description:

The HPU100 series of AC/DC switching mode power supplies provide 100 Watts of continuous output power . All supplies are UL94V-1 min compliant, include IEC-320-C14 input for worldwide applications. They are suited for use in Home health care applications. All models meet FCC Part-18 Class B and CISPR-11 EN55011 class B emission Limits and are designed to comply with UL/c-UL(UL 60601-1) ,TUV/T-mark (EN 60601-1) and new CE requirements. All units are 100% burned in and tested.



Features:

- Wide Input Voltage 90 to 260 VAC,47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single Output
- Output Voltage Available From 11VDC Thru 48VDC
- Optional Output Connector (See appendix)
- Input Surge Current, Over Voltage And Over Load protection
- Output Voltage Protection
- Active Power Factor Correction
- Class I
- 2 year warranty

Safety Approvals :



Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V _{in}	Input Voltage	Operating Voltage	90		260	VAC
f _{in}	Input Frequency		47		63	Hz
PF	Power Factor Correction	I _o =Full load, V _{in} =230 VAC	0.95		1	
P _o	Output Power Range	V _{in} =90 to 260 VAC	0		100	W
V _o	Output Voltage Range		See rating chart			V
I _o	Output Current Range		See rating chart			A
I _{il}	Input Current (Low Line)	I _o =Full load, V _{in} =115 VAC			1.35	A
I _{ih}	Input Current (High Line)	I _o =Full load, V _{in} =230 VAC			0.5	A
I _{rl}	Low Line Inrush Current	I _o =Full load, 25°C ,Cool start, V _{in} =115VAC		44	50	A
I _{rh}	High Line Inrush Current	I _o =Full load, 25°C ,Cool start, V _{in} =230VAC		85	100	A
E _{ff}	Efficiency	I _o =Full Load, V _{in} =230VAC	85	87	90	%
REG-i	Line Regulation	I _o =Full Load		0.5	1	%
REG-o	Load Regulation	V _{in} =230VAC		3	5	%
OVP	Over Voltage Protection		112		132	%
OCP	Over Current Protection		110		150	%
T _{tr}	Time of Transient Response	I _o =Full Load to Half Load, V _{in} =100VAC			4	mS
Thold	Hold-Up Time	I _o =Full Load, V _{in} =110VAC	12			mS
T _s	Start Up Time	I _o =Full Load, V _{in} =100VAC	0.3	1.5	2	S
V _{rn}	Ripple & Noise (Peak to Peak)	Full Load, V _{in} =90VAC		0.5	1	%
I _{lk}	Safety Ground Leakage Current	I _o = Full Load, V _{in} =240 VAC/60Hz		0.15	0.25	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
T _{oper}	Operating Temperature		0		70	°C
T _{stg}	Storage Temperature		-40		85	°C
H _r	Relative Humidity		5		95	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
P _d	Derate linearly from 100% load at 40°C to 50% load at 70°C					

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Safety Specifications:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V _{ps}	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	5600			VDC
V _{pg}	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2800			VDC
R _{is}	Isolation Resistance	Test Voltage = 2100VDC	50			MΩ
CISPR	EMI requirements for CISPR-11	Vin=230VAC	B			CLASS
FCC	EMI requirements for FCC PART-18	Vin=120VAC	B			CLASS

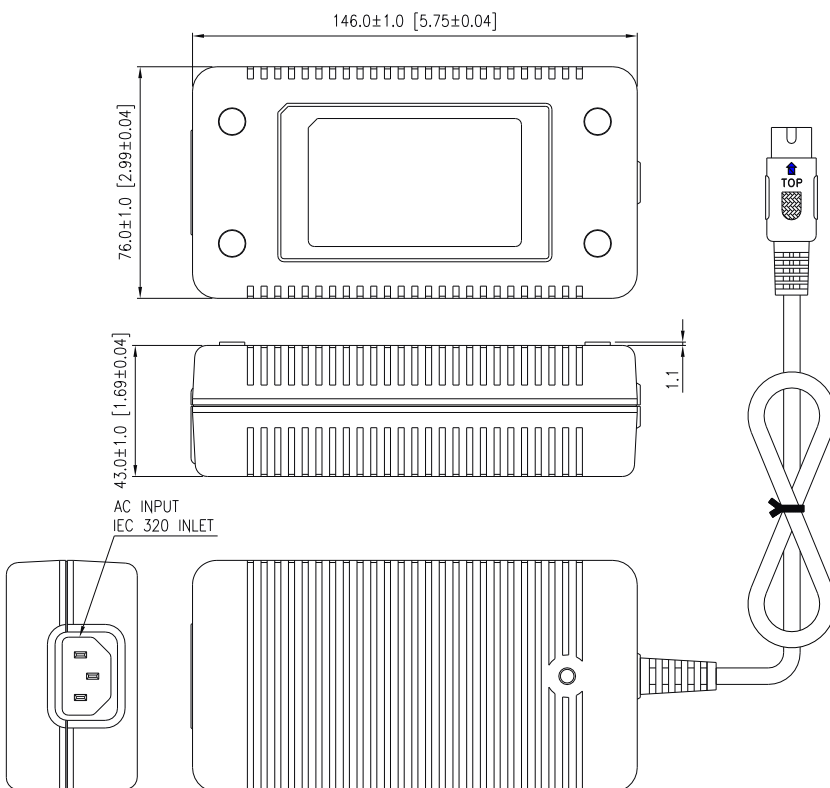
Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation [Ⓢ]	Maximum Output Power
HPU100-105	11 ~ 13 VDC	9.09 ~ 7.69 A	5%	100W
HPU100-106	13 ~ 16 VDC	7.69 ~ 6.25 A	4%	100W
HPU100-107	16 ~ 21 VDC	6.25 ~ 4.76 A	4%	100W
HPU100-108	21 ~ 27 VDC	4.76 ~ 3.70 A	4%	100W
HPU100-109	27 ~ 33 VDC	3.70 ~ 3.03 A	3%	100W
HPU100-111	40 ~ 48 VDC	2.50 ~ 2.08 A	3%	100W

The output voltage under 30V had been approved by TUV/PSE.

[Ⓢ] The total regulation on each model is required to use AWG#18×3C+AWG#16×3C/4FT output cable. The regulation will be changed by modified output cable.

Mechanical Specifications:



Note:

1. Dimensions are shown in inches or mm.
2. Weight: 460-800gs approx.
3. Optional output connector:
See page Appendix.