

HPU12B SERIES

12W Wall Mount Type Medical Power Supplies For Health Care Applications

Description:

The HPU12B series of AC/DC switching mode power supplies provide 12 watts of continuous output power. This series is suitable for use in Health care and portable applications. All models meet FCC Part-18 class B and CISPR-11 EN55011 class B emission Limits and are designed to comply with TUV/T-mark(EN 60601-1:2nd Edition) and new CE requirements.

Features:

- Wide Operating Voltage 90 to 264 VAC, 47 to 63 Hz
- 3 Prong Plug-In Mains Connector
- Optional Output Connector (See appendix)
- Single Output
- Class II
- Energy Star 2.0, Efficiency level V
- Over Load protection.
- 2 year warranty



Safety Approvals:



Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Safety Approvals		100		240	VAC
	Input Voltage Range					
	Operate Voltage Range		90		264	VAC
f _{in}	Input Frequency		47		63	Hz
P _o	Output Power Range	Vin=90 to 264VAC	0		12	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, Vin=115VAC		0.25	0.35	A
I _{ih}	Input Current (High Line)	I _o =Full load, Vin=230VAC		0.17	0.22	A
I _{rl}	Low Line Inrush Current	I _o =Full load, 25°C, Cool start, Vin=115VAC		14	16	A
I _{rh}	High Line Inrush Current	I _o =Full load, 25°C, Cool start, Vin=230VAC		28	30	A
E _{ff}	Efficiency	I _o =Full Load, Vin=230VAC	77.7			%
REG-i	Line Regulation	I _o =Full Load			1	%
REG-o	Load Regulation	Vin=230VAC			5	%
OCP	Over Current Protection		110		150	%
T _{tr}	Time of Transient Response	I _o =Full Load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	I _o =Full Load, Vin=110VAC	10			mS
T _s	Start Up Time	I _o =Full Load, Vin=100VAC	0.3	1	2	S
V _{p-p}	Ripple & Noise(Peak to Peak)	Full Load, Vin=90VAC			1	%
I _{lk}	Safety Ground Leakage Current	I _o =Full Load, Vin=230VAC			0.1	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C
T _{jsd}	Thermal Shutdown ① by Junction Temperature Controller	The parameter is not subject to production test-verified by design/characterization of integrated controller.	-25		130	°C

① As long as faulty conditions have been removed , the adaptor will automatically power up as usual.

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
T _{oper}	Operating Temperature		0	40	70	°C
T _{stg}	Storage Temperature		-40		85	°C
H _o	Operating Humidity		0		95	%
H _r	Storage Humidity		0		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
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	5656			VDC
CISPR	EMI requirements for CISPR-11	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-18	Vin=110VAC	B			CLASS

Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power
HPU12B-102	5 ~ 6 VDC	2.00 ~ 1.66 A	5%	10W
HPU12B-103	6 ~ 8 VDC	2.00 ~ 1.50 A	5%	12W
* HPU12B-104	8 ~ 11 VDC	1.50 ~ 1.09 A	5%	12W
* HPU12B-105	11 ~ 13 VDC	1.09 ~ 0.92 A	5%	12W
* HPU12B-106	13 ~ 16 VDC	0.92 ~ 0.75 A	5%	12W
* HPU12B-107	16 ~ 21 VDC	0.75 ~ 0.57 A	3%	12W
* HPU12B-108	21 ~ 27 VDC	0.57 ~ 0.45 A	3%	12W

Mark " * " means approved by CEC level V.

HPU12B-102~104 are required to use AWG#18/6FT output cable.

HPU12B-105~108 are required to use AWG#20/6FT output cable.

The regulation and efficiency will be changed by modified output cable.

Mechanical Specifications:(UK Type)

Note:

1. Dimensions are shown in mm.
2. Weight: 150gs approx.
3. Optional output connector: See page Appendix.

