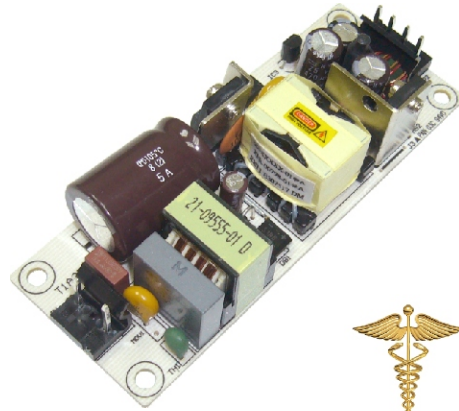


# HBU31 SERIES

## 30W Open Frame Type Medical Power Supplies For Health Care Applications

### Description:

The HBU31 series of compact, open frame constructed, AC/DC switching mode power supplies provide 30 Watts of continuous output power .They are suited for use in 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 60601-1:2<sup>nd</sup>Edition) ,TUV/T-mark(EN 60601-1:2<sup>nd</sup>Edition) and new CE requirements. All units are 100% burned in and tested.



### Features:

- Wide Operating Voltage 90 to 264 VAC,47 to 63 Hz
- Internal EMI filter
- Single Output
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3041 and Molex 2478 series crimp terminal
- Input Surge Current, Over Voltage and Over Load protection
- Size: 1.5"x4"x0.83"
- Class II
- 2 year warranty

### Safety Approvals :



### Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		264	VAC
fin	Input Frequency		47		63	Hz
Po	Output Power Range	Vin=90 to 264 VAC	0		30	W
Vo	Output Voltage Range		See rating Chart			V
Io	Output Current Range		See rating Chart			A
Iil	Input Current (Low Line)	Io=Full load, Vin=115VAC			0.8	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC	0.3		0.4	A
Irl	Low Line Inrush Current	Io=Full load, 25°C,Cool start, Vin=115VAC		15	18	A
Irh	High Line Inrush Current	Io=Full load, 25°C,Cool start, Vin=230VAC		25	40	A
Eff	Efficiency	Io=Full load, Vin=230VAC	75	85	89	%
REG-i	Line Regulation	Io=Full load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	5	%
OCP	Over Current Protection		110		150	%
Ttr	Time of Transient Response	Io=Full load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full load, Vin=110VAC	12	18		mS
Ts	Start Up Time	Io=Full load, Vin=100VAC		0.25	0.5	S
Vp-p	Ripple & Noise (Peak to Peak)	Full load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io=Full load, Vin=240VAC		0.1	0.3	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C

### Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0	40	70	°C
Tstg	Storage Temperature		-40		85	°C
Ho	Operating Humidity		0		95	%
Hr	Storage Humidity		0		75	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
Pd	Derate linearly from 100% load at 40°C to 50% load at 70°C					

# HBU31 SERIES

## 30W Open Frame Type Medical Power Supplies For Health Care Applications

### 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
HBU31-102	5 ~ 6 VDC	4.00 ~ 3.33 A	5%	20W
HBU31-103	6 ~ 8 VDC	3.83 ~ 2.87 A	5%	23W
HBU31-104	8 ~ 11 VDC	3.37 ~ 2.45 A	5%	27W
HBU31-105	11 ~ 13 VDC	2.72 ~ 2.31 A	5%	30W
HBU31-106	13 ~ 16 VDC	2.31 ~ 1.88 A	5%	30W
HBU31-107	16 ~ 21 VDC	1.88 ~ 1.43 A	5%	30W
HBU31-108	21 ~ 27 VDC	1.43 ~ 1.12 A	3%	30W
HBU31-109	27 ~ 33 VDC	1.12 ~ 0.91 A	3%	30W
HBU31-110	33 ~ 40 VDC	0.91 ~ 0.76 A	3%	30W

### Mechanical Specifications :

#### Note:

1. Dimensions are shown in inches or mm.
2. Weight: 85gs approx.
3. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3041 and Molex 2478 series crimp terminal.

