



E-Star Power Development Co., Ltd. (E-STAR)

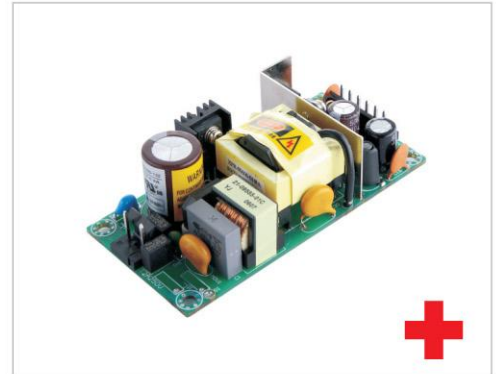
1F., No.40, Juren Ln., Sec. 2, Sanmin Rd., Banciao Dist., New Taipei City 22069, Taiwan (R.O.C.)

Phone : 886-2-2957 5580 Fax : 886-2-2957 7473

30W Open Frame type Medical power supply < MBU30

Features:

- Wide Operating Voltage 90 to 264 VAC, 47 to 63 Hz
- Internal EMI filter
- Single Output
- Over Voltage and Over Load protection
- Output Voltage Protection (Crowbar Design)
- Size: 2"x4"
- Class I
- 3 year warranty



Electrical Characteristics:

Vin	Safety Approvals Input Voltage Range		100~240VAC
	Operate Voltage Range		90~264VAC
fin	Input Frequency		47~63Hz
Po	Output Power Range		See rating chart
Vo	Output Voltage Range		See rating chart
Io	Output Current Range		See rating chart
Iil	Input Current (Low Line)	Io=Full load, Vin=100VAC	0.7A
Iih	Input Current (High Line)	Io=Full load, Vin=240VAC	0.3A
Ir	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC	15A (max.)
	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC	30A (max.)
Eff	Efficiency	Io=Full Load, Vin=230VAC	76.4~85%
REG-i	Line Regulation	Io=Full Load	1% (max.)
REG-o	Load Regulation	Vin=230VAC	5% (max.)
OVP	Over Voltage Protection		112~132%
OCP	Over Current Protection		110~150%
Ttr	Time of Transient Response	Io=Full Load to Half Load, Vin=100VAC	4mS (max.)
Th	Hold-Up Time	Io=Full Load, Vin=110VAC	10mS (min.)
Ts	Start Up Time	Io=Full Load, Vin=100VAC	0.3~2S
Vp-p	Ripple & Noise(Peak to Peak)	Full Load, Vin=90VAC	1% (max.)
Iik	Safety Ground Leakage Current	Vin=240VAC/60Hz	0.1mA (max.)
TC	Temperature Coefficient	All output	±0.04%/°C
OA	Operating Altitude		Up to 3000m
Pno	No-Load Power Consumption	No load, Vin=230VAC	See rating chart
Vps	Dielectric Withstanding Voltage	Primary to secondary	5831VDC (min.)
Vpg	Dielectric Withstanding Voltage for Primary to PE	Primary to PE	2121VDC (min.)
Ris	Isolation Resistance	Test Voltage=500VDC	50MΩ (min.)

Recommend to be used on the metal chassis.

Environmental

To	Operating Temperature	See derating curve
Ts	Storage Temperature	-40~85°C
Ho	Operating Humidity	0~95%
Hr	Storage Humidity	0~95%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	0.1M Hrs (min.)
Pd	Derate linearly from 100% load at 50°C to 50% load at 70°C	

Application:

- Blood Pressure system
- Portable medical devices
- ECG machine

Safety Approvals:

UL US CB CE





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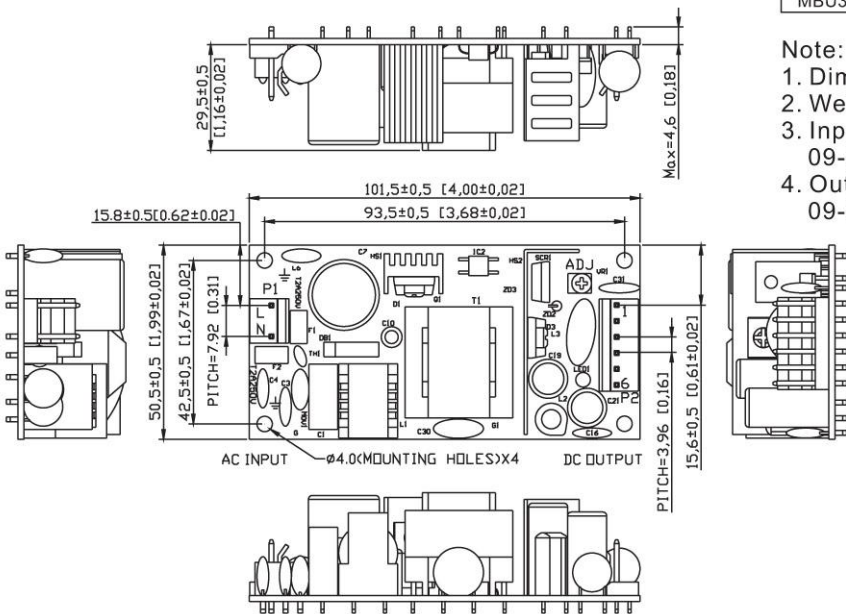
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30W Open Frame type Medical power supply < MBU30

Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Max. Output Power	Pno (max.)
MBU30-102	5 VDC	6.00 A	5%	30W	0.5W
MBU30-103	7 VDC	4.28 A	5%	30W	0.5W
MBU30-104	9 VDC	3.33 A	5%	30W	0.5W
MBU30-105	12 VDC	2.50 A	5%	30W	0.5W
MBU30-106	15 VDC	2.00 A	5%	30W	0.5W
MBU30-107	18 VDC	1.66 A	5%	30W	0.5W
MBU30-108	24 VDC	1.25 A	3%	30W	0.5W
MBU30-109	30 VDC	1.00 A	3%	30W	0.5W
MBU30-110	36 VDC	0.83 A	3%	30W	0.5W

Mechanical Specifications:



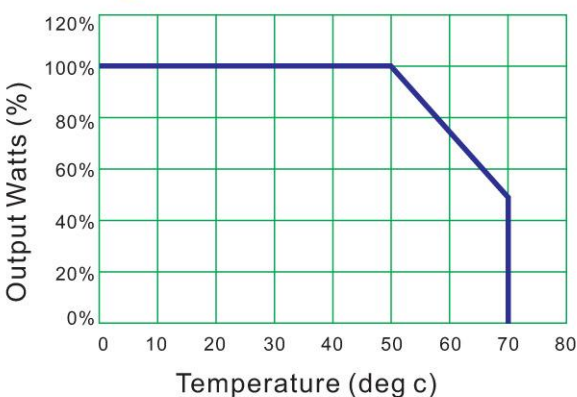
PIN CHART

PIN MODEL	1	2	3	4	5	6
MBU30-1XX	RTN	RTN	RTN	Vout	Vout	Vout

Note:

1. Dimensions are shown in inches or mm.
2. Weight: 200gs approx.
3. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3061 and Molex 2478 series crimp terminal.

Derating Curve :



1. Operating Temperature: 0 to 70°C
2. Derate linearly from 100% load at 50°C to 50% load at 70°C