

FEATURES

- Single Output
- 2 Year Warranty
- Class II Insulation
- Internal EMI Filter
- Dimensions: 4 x 1.5 x 0.83 Inches
- Output Voltages Available from 5VDC thru 40VDC
- Wide Input Voltage Range: 90 to 264VAC, 47 to 63Hz
- Input Surge Current, Over Voltage, and Over Load Protection



DESCRIPTION

The PSMBU31 series of AC/DC medical power supplies provides 30 Watts of continuous output power in a compact, open frame constructed design. All models have a single output and a universal input. These power supplies meet FCC Part-18 class B and CISPR-11 EN55011 class B emission limits. They are also designed to comply with UL/cUL (UL60601-1), TUV/T-mark (EN60601-1) and new CE requirements. This series is best suited for use in Home health care applications. All models are 100% burn in tested.

SPECIFICATIONS: PSMBU31 Series						
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. We reserve the right to change specifications based on technological advances.						
SPECIFICATION	TEST CONDITIONS	Min	Nom	Max	Unit	
INPUT (V_{in})						
Operating Voltage Range		90		264	VAC	
Input Frequency		47		63	Hz	
Input Current (Low Line)	I _o = Full Load, V _{in} = 115VAC			0.8	A	
Input Current (High Line)	I _o = Full Load, V _{in} = 230VAC	0.3		0.4	A	
Inrush Current (Low Line)	I _o = Full Load, 25°C, Cool Start, V _{in} = 115VAC		15	18	A	
Inrush Current (High Line)	I _o = Full Load, 25°C, Cool Start, V _{in} = 230VAC		25	40	A	
Safety Ground Leakage Current	I _o = Full Load, V _{in} = 240VAC		0.1	0.3	mA	
Start-Up Time	I _o = Full Load, V _{in} = 100VAC		0.25	0.5	s	
OUTPUT (V_o)						
Output Voltage		See Table				
Load Regulation	V _{in} = 230VAC		3	5	%	
Line Regulation	I _o = Full Load		0.5	1	%	
Output Power	V _{in} = 90 to 264VAC	0		30	W	
Output Current		See Table				
Ripple & Noise (peak to peak)	Full Load, V _{in} = 90VAC		0.5	1	%	
Transient Response Time	I _o = Full Load to Half Load, V _{in} = 100VAC			4	ms	
Hold-Up Time	I _o = Full Load, V _{in} = 110VAC	12	18		ms	
PROTECTION						
Over Current Protection		110		150	%	
GENERAL						
Efficiency	I _o = Full Load, V _{in} = 230VAC	75	85	89	%	
Dielectric Withstanding Voltage For Primary to Secondary	Primary to Secondary	5600			VDC	
ENVIRONMENTAL						
Operating Temperature	Derate linearly from 100% Load at 40°C to 50% load at 70°C	0	40	+70	°C	
Storage Temperature		-40		+85	°C	
Relative Humidity		5		95	%	
Temperature Coefficient		-0.04		+0.04	%/°C	
MTBF	Operating temperature at 25°C, Calculated per MIL-HDBK-217F	100,000 hours				
PHYSICAL						
Weight		Approximately 7oz (200g)				
Dimensions (L x W x H)		4.02 x 1.50 x 0.83 inches 102.0 x 38.1 x 21.0 mm				
Warranty		2 years				
SAFETY						
EMI Requirements for CISPR-11	V _{in} = 220VAC	B			Class	
EMI Requirements for FCC PART-18	V _{in} = 110VAC	B			Class	

MODEL SELECTION GUIDE

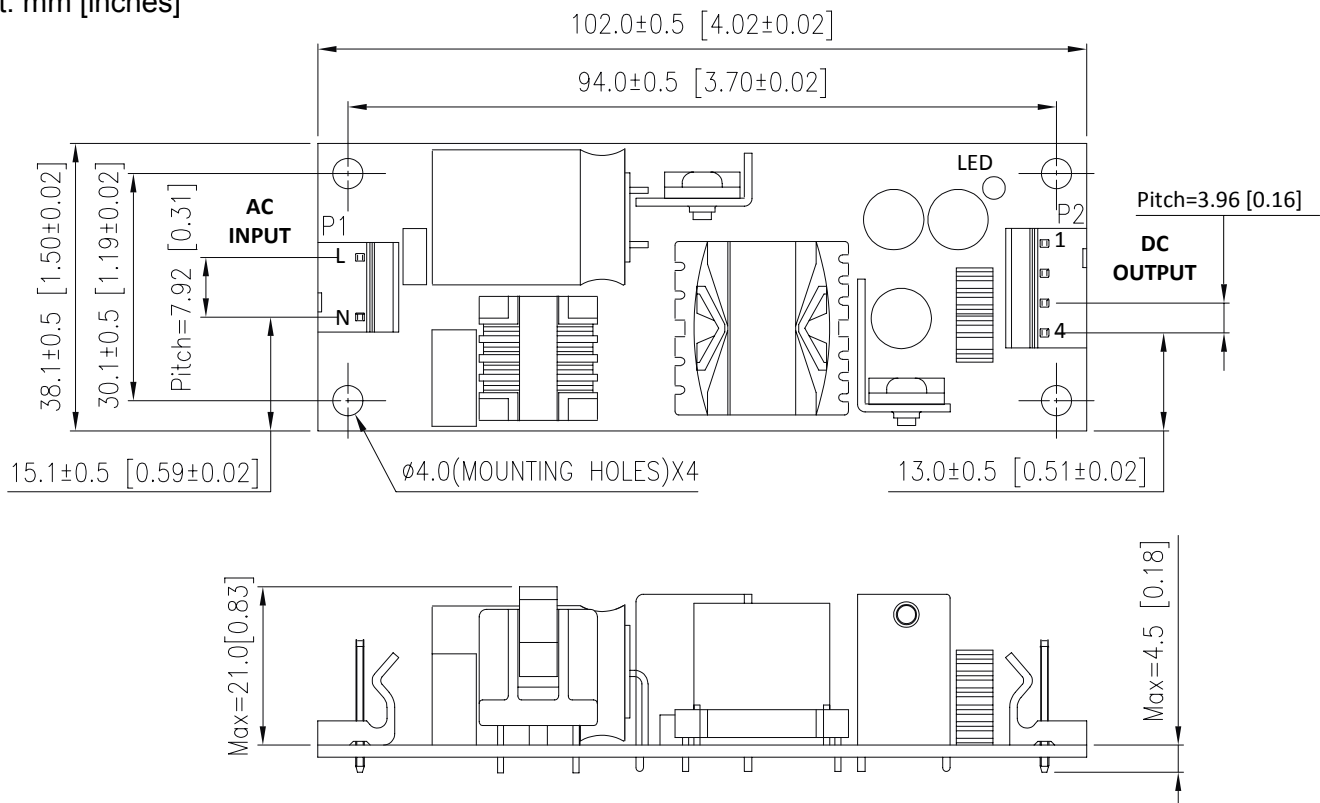
Model Number	Preset Voltage	Output Voltage Range	Output Current	Total Regulation	Maximum Output Power
PSMBU31-102	5 VDC	5 ~ 6VDC	4.00 ~ 3.33A	5%	20W
PSMBU31-103	6 VDC	6 ~ 8VDC	3.83 ~ 2.87A	5%	23W
PSMBU31-104	8 VDC	8 ~ 11VDC	3.37 ~ 2.45A	5%	27W
PSMBU31-105	11 VDC	11 ~ 13VDC	2.72 ~ 2.31A	5%	30W
PSMBU31-106	13 VDC	13 ~ 16VDC	2.31 ~ 1.88A	5%	30W
PSMBU31-107	16 VDC	16 ~ 21VDC	1.88 ~ 1.43A	5%	30W
PSMBU31-108	21 VDC	21 ~ 27VDC	1.43 ~ 1.12A	5%	30W
PSMBU31-109	27 VDC	27 ~ 33VDC	1.12 ~ 0.91A	5%	30W
PSMBU31-110	33 VDC	33 ~ 40VDC	0.91 ~ 0.76A	5%	30W

NOTES

1. The output voltage is specified as a range (Ex: 33 ~ 40VDC); the preset voltage will be set as standard models if nothing different is requested. Please contact factory for ordering details.
2. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
3. Output connector mates with Molex housing 09-50-3041 and Molex 2478 series crimp terminal.

MECHANICAL DRAWING

Unit: mm [inches]



NOTES:

1. Weight: Approximately 7 oz (200g)
2. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
3. Output connector mates with Molex housing 09-50-3041 and Molex 2478 series crimp terminal.

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