

TPMBU120 SERIES

120W Open Frame Type
Medical Power Supplies

Features:

- Wide Operating Voltage 90 to 260 VAC, 47 to 63 Hz
- Internal EMI filter
- Single Output
- Active Power Factor Correction
- Over Voltage and Over Load protection
- Output Voltage Protection (Crowbar Design)
- Size: 3"x5"x1.42"
- Class I
- 3 year warranty



Electrical Characteristics:

Vin	Safety Approvals		100~240VAC
	Input Voltage Range		90~260VAC
fin	Input Frequency		47~63Hz
PF	Power Factor Correction	Io=Full load, Vin=260 VAC	0.95~1
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	1.7A
Iih	Input Current (High Line)	Io=Full load, Vin=240VAC	0.8A
Ir	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC	30A (max.)
	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC	60A (max.)
Eff	Efficiency	Io=Full Load, Vin=230VAC	72.5~88%
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	16mS (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	6290VDC (min.)
Vpg	Dielectric Withstanding Voltage for Primary to PE	Primary to PE	2438VDC (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:

- Medical Touch Panel PC
- Patient Monitoring System
- Ultrasound System

Safety Approvals:

c  us  



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Output Voltage And Current Rating Chart (Single Output) :

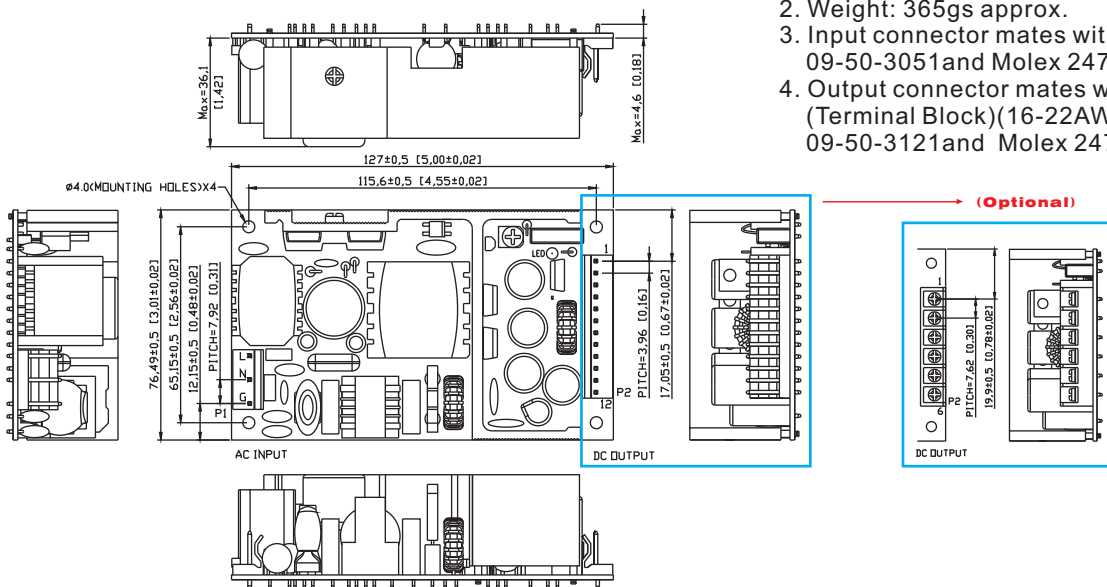
Model Number	Output Voltage	Output Current	Total Regulation	Max. Output Power	Pno (max.)
TPMBU120-102	5~6 VDC	20.00~16.66 A	7%	100W	0.5W
TPMBU120-103	6~9 VDC	18.33~12.22 A	7%	110W	0.5W
TPMBU120-104	9~11 VDC	13.33~10.90 A	5%	120W	0.5W
TPMBU120-105	11~13 VDC	10.90~9.23 A	5%	120W	0.5W
TPMBU120-106	13~16 VDC	9.23~7.50 A	5%	120W	0.5W
TPMBU120-107	16~21 VDC	7.50~5.71 A	3%	120W	0.5W
TPMBU120-108	21~27 VDC	5.71~4.44 A	3%	120W	0.5W
TPMBU120-109	27~33 VDC	4.44~3.63 A	2%	120W	0.5W
TPMBU120-110	33~40 VDC	3.63~3.00 A	2%	120W	0.5W

PIN CHART

PIN MODEL	1	2	3	4	5	6	7	8	9	10	11	12
TPMBU120-1XX-12PIN	OUT	OUT	OUT	OUT	OUT	OUT	RTN	RTN	RTN	RTN	RTN	RTN

PIN MODEL	1	2	3	4	5	6
TPMBU120-1XX-6PIN	OUT	OUT	OUT	RTN	RTN	RTN

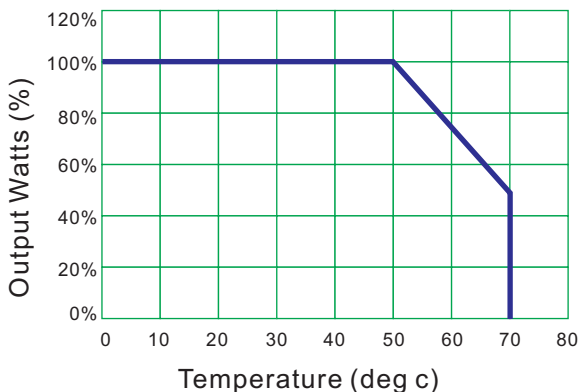
Mechanical Specifications:



Note:

1. Dimensions are shown in inches or mm.
2. Weight: 365gs approx.
3. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
4. Output connector mates with screw terminal (Terminal Block)(16-22AWG) or Molex housing 09-50-3121 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

