

TPMPU101 SERIES

100W Desk Top Type
Medical Power Supplies

Features:

- Wide Operating Voltage 90 to 260 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single to Triple Output
- Ultra-low leakage current (under 0.1mA)
- Active Power Factor Correction
- ON/OFF SWITCH (Optional)
- Class I
- ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd Edition)
EN 60601-1:2006 (TUV/T-mark 3rd Edition)
- Input to Output : 2MOPP
- 3 year warranty



Electrical Characteristics:

Vin	Safety Approvals Input Voltage Range	100~240VAC
	Operate Voltage Range	90~260VAC
fin	Input Frequency	47~63Hz
PF	Power Factor Correction	Io=Full load, Vin=230 VAC
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
Iih	Input Current (High Line)	Io=Full load, Vin=240VAC
Ir	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC
	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC
Eff	Efficiency	Io=Full Load, Vin=230VAC
REG-i	Line Regulation	Io=Full Load
REG-o	Load Regulation	Vin=230VAC
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
Th	Hold-Up Time	Io=Full Load, Vin=110VAC
Ts	Start Up Time	Io=Full Load, Vin=100VAC
Vp-p	Ripple & Noise(Peak to Peak)	Io=Full Load, Vin=90VAC
Ilk	Safety Ground Leakage Current	Vin=240VAC/60Hz
TC	Temperature Coefficient	All output
OA	Operating Altitude	Up to 3000m
Pno	No-Load Power Consumption	No load, Vin=230VAC
Vps	Dielectric Withstanding Voltage	Primary to secondary
Vpg	Dielectric Withstanding Voltage for Primary to PE	Primary to PE
Ris	Isolation Resistance	Test Voltage=500VDC

Note: The Ripple & Noise which is under 3.3VDC at 2% max.

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:



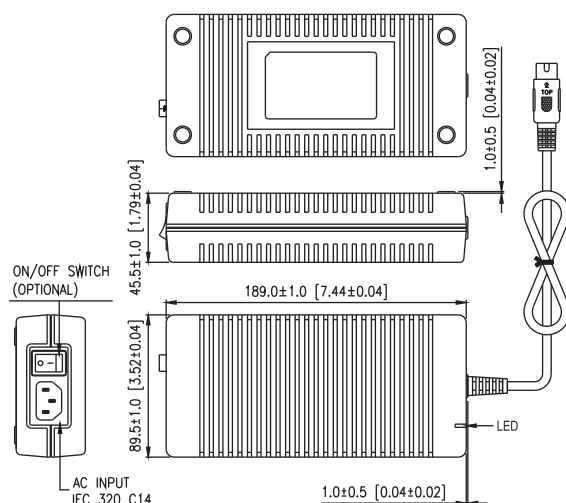
Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Max. Output Power	Pno (max.)
TPMPU101-102	5 ~ 6 VDC	14.00 ~ 11.66 A	5%	70W	3W
TPMPU101-103	6 ~ 8 VDC	13.33 ~ 10.00 A	5%	80W	3W
TPMPU101-104	8 ~ 11 VDC	11.25 ~ 8.20 A	4%	90W	3W
TPMPU101-105	11 ~ 13 VDC	8.33 ~ 7.70 A	3%	100W	3W
TPMPU101-106	13 ~ 16 VDC	7.70 ~ 6.30 A	3%	100W	3W
TPMPU101-107	16 ~ 21 VDC	6.30 ~ 4.80 A	3%	100W	3W
TPMPU101-108	21 ~ 27 VDC	4.80 ~ 3.70 A	2%	100W	3W
TPMPU101-109	27 ~ 33 VDC	3.70 ~ 3.00 A	2%	100W	3W
TPMPU101-110	33 ~ 40 VDC	3.00 ~ 2.50 A	2%	100W	3W

Output Voltage And Current Rating Chart (Multi Output) :

Model Number	Output #1				Output #2				Output #3				Max. Output Power	Pno(max.)
	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax		
TPMPU101-200	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%					69W	3W
TPMPU101-201	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%					80W	3W
TPMPU101-202	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%					80W	3W
TPMPU101-203	+5V	1.0A	10A	5%	+24V	0.2A	2A	7%					80W	3W
TPMPU101-204	+3.3V	1.0A	10A	7%	+5V	0.5A	5A	5%					55W	3W
TPMPU101-209	+12V	0.7A	7A	5%					-12V	0A	1A	5%	80W	3W
TPMPU101-210	+15V	0.6A	6A	5%					-15V	0A	1A	5%	80W	3W
TPMPU101-212	+24V	0.3A	3A	5%					-24V	0A	1A	5%	80W	4W
TPMPU101-215	+5V	1.0A	10A	5%					-24V	0A	1A	5%	74W	3W
TPMPU101-300	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	-12V	0A	1A	5%	74W	3W
TPMPU101-300-1	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	+12V	0A	1A	5%	74W	3W
TPMPU101-301	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	-5V	0A	1A	5%	80W	4W
TPMPU101-301-1	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	+5V	0A	1A	5%	80W	4W
TPMPU101-302	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	-12V	0A	1A	5%	80W	4W
TPMPU101-302-1	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	+12V	0A	1A	5%	80W	4W
TPMPU101-303	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%	-15V	0A	1A	5%	80W	4W
TPMPU101-303-1	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%	+15V	0A	1A	5%	80W	4W
TPMPU101-304	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	-24V	0A	1A	5%	80W	3W
TPMPU101-304-1	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	+24V	0A	1A	5%	80W	3W
TPMPU101-305	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	-12V	0A	1A	5%	80W	4W
TPMPU101-305-1	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	+12V	0A	1A	5%	80W	4W
TPMPU101-306	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	-5V	0A	1A	5%	74W	3W
TPMPU101-306-1	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	+5V	0A	1A	5%	74W	3W
TPMPU101-308	+3.3V	1.0A	10A	7%	+5V	0.3A	3A	5%	-12V	0A	1A	5%	60W	3W
TPMPU101-308-1	+3.3V	1.0A	10A	7%	+5V	0.3A	3A	5%	+12V	0A	1A	5%	60W	3W

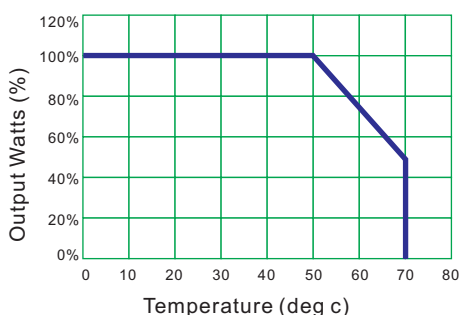
Mechanical Specifications:



Note:

1. Dimensions are shown in mm.
2. Weight: 778~800gs approx.
3. Optional output connector:
See page Appendix.

Derating Curve :



1. Operating Temperature: 0 to 70°C
2. Derate linearly from 100% load at 50°C to 50% load at 70°C
3. For dual & triple output series, derate linearly from 100% load at 45°C to 50% load at 70°C

