

TPHPU63A SERIES

63W Desk Top Type
Medical Power Supplies

Features:

- Wide Operating Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single Output
- Over Voltage and Over Load protection
- Class I
- Energy Star 2.0, Efficiency level V
- ANSI/AAMI ES 60601-1: 2005(UL/cUL 3rd Edition)
EN 60601-1:2006 (TUV/T-mark 3rd Edition)
- Input to Output : 2MOPP
- 2 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	1.62A
	Input Current (High Line)	Io=Full load, Vin=240VAC	0.72A
I _r	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC	37A (max.)
	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC	74A (max.)
Eff	Efficiency	Io=Full Load, Vin=230VAC	87~92%
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%
T _{tr}	Time of Transient Response	Io=Full Load to Half Load, Vin=100VAC	4mS (max.)
T _h	Hold-Up Time	Io=Full Load, Vin=110VAC	12mS (min.)
T _s	Start Up Time	Io=Full Load, Vin=100VAC	0.3~2S
V _{p-p}	Ripple & Noise(Peak to Peak)	Full Load, Vin=90VAC	1% (max.)
I _{lk}	Safety Ground Leakage Current	Vin=240VAC/60Hz	0.25mA (max.)
TC	Temperature Coefficient	All output	±0.04%/°C
OA	Operating Altitude		Up to 3000m
P _{no}	No-Load Power Consumption	No load, Vin=230VAC	See rating chart
V _{ps}	Dielectric Withstanding Voltage	Primary to secondary	6115VDC (min.)
V _{pg}	Dielectric Withstanding Voltage for Primary to PE	Primary to PE	2350VDC (min.)
R _{is}	Isolation Resistance	Test Voltage=500VDC	50MΩ (min.)

Note: The specifics for testing the energy efficiency of TPHPU63 Series are outlined in a separate document titled "Test Method for Calculating the Energy Efficiency of Single-Voltage External Ac-Dc and Ac-Ac Power Supplies (August 11, 2004)," which is available on the ENERGY STAR Website.

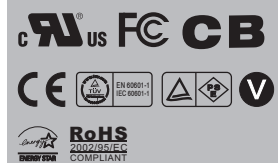
Environmental

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 40°C to 50% load at 70°C	

Application:

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

Safety Approvals:



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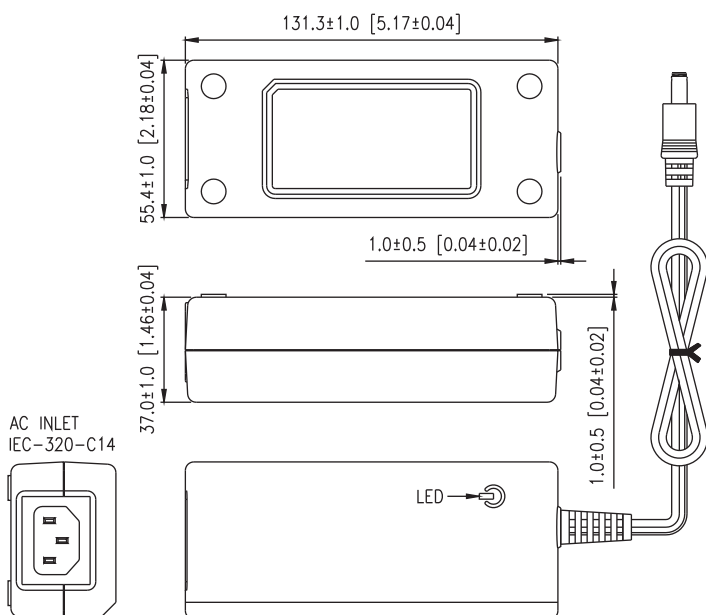
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Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Max. Output Power	Pno (max.)
TPHPU63A-105	12 VDC	5.25 A	5%	63W	0.5W
TPHPU63A-106	15 VDC	4.20 A	5%	63W	0.5W
TPHPU63A-107	18 VDC	3.50 A	5%	63W	0.5W
TPHPU63A-108	24 VDC	2.62 A	3%	63W	0.5W
TPHPU63A-109	30 VDC	2.10 A	3%	63W	0.5W
TPHPU63A-110	36 VDC	1.75 A	3%	63W	0.5W
TPHPU63A-111	48 VDC	1.31 A	3%	63W	0.5W

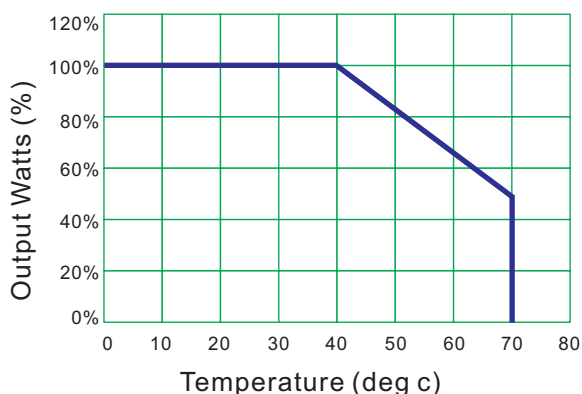
TPHPU63A-105~107 are required to use AWG#16/2C/4FT output cable.
 TPHPU63A-108~110 are required to use AWG#18/2C/6FT output cable.
 The regulation and efficiency will be changed by modified output cable.

Mechanical Specifications:



- Note:
1. Dimensions are shown in mm.
 2. Weight: 330~380gs approx.
 3. Optional output connector: See page Appendix.

Derating Curve :



1. Operating Temperature: 0 to 70°C
2. Derate linearly from 100% load at 40°C to 50% load at 70°C