

APU60A series

60W Desk Top Type
Extreme Temp. Power Supplies

Features:

- Wide Operating Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Optional Output Connector (See page appendix)
- Single Output
- Class I
- Energy Star 2.0, Efficiency level V
- Operating temperature -40~70°C
- 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	1.45A
Iih	Input Current (High Line)	Io=Full load, Vin=240VAC	1.45A
Ir	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC	105A (max.)
Eff	Efficiency	Io=Full Load, Vin=230VAC	87% (min.)
REG-i	Line Regulation	Io=Full Load	0.5~1%
REG-o	Load Regulation	Vin=230VAC	3~5%
OCP	Over Current Protection	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	3S (max.)
Vp-p	Ripple & Noise(Peak to Peak)	Full Load, Vin=90VAC	1% (max.)
Iik	Safety Ground Leakage Current	Vin=240VAC/60Hz	0.75mA (max.)
TC	Temperature Coefficient	All output	±0.04%/°C
Pno	No-Load Power Consumption	No load, Vin=230VAC	See rating chart
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242VDC (min.)
Vpg	Dielectric Withstanding Voltage for Primary to PE	Primary to PE	2652VDC (min.)
Ris	Isolation Resistance	Test Voltage=500VDC	50MΩ (min.)

Application:

- POS System
- AV Equipment
- Industrial PC
- Note PC
- Charger
- LED Lighting

Safety Approvals:



RoHS2
2011/65/EU

UL/c-UL(UL 60950-1:2nd Edition)
TUV/GS(EN 60950-1:2nd Edition)

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	



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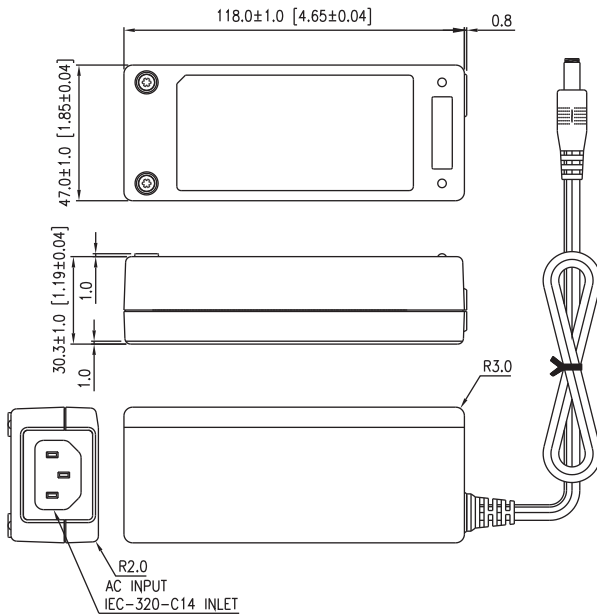
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Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Max. Output Power	Pno (max.)
APU60A-105	12 ~ 13 VDC	5.00 ~ 4.61 A	5%	60W	0.5W
APU60A-106	13 ~ 16 VDC	4.61 ~ 3.75 A	5%	60W	0.5W
APU60A-107	16 ~ 21 VDC	3.75 ~ 2.85 A	5%	60W	0.5W
APU60A-108	21 ~ 27 VDC	2.85 ~ 2.22 A	3%	60W	0.5W
APU60A-109	27 ~ 33 VDC	2.22 ~ 1.81 A	3%	60W	0.5W
APU60A-110	33 ~ 40 VDC	1.81 ~ 1.50 A	3%	60W	0.5W
APU60A-111	40 ~ 48 VDC	1.50 ~ 1.25 A	3%	60W	0.5W

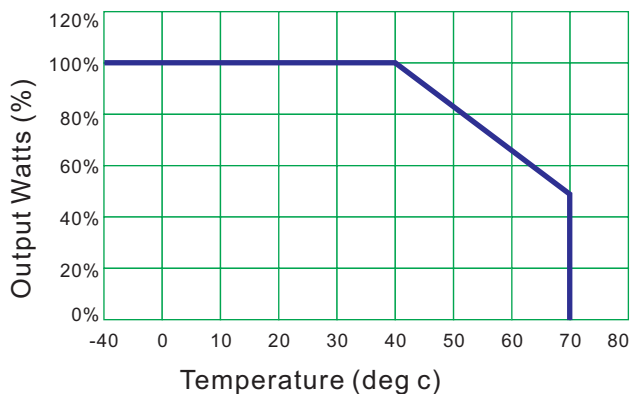
APU60A-105~107 are required to use AWG#16 / 4FT output cable.
 APU60A-108~109 are required to use AWG#18 / 4FT output cable.
 APU60A-110~111 are required to use AWG#20 / 4FT output cable
 The electrical characteristics will be changed by modified output cable

Mechanical Specifications:



Note:
 1. Dimensions are shown in mm.
 2. Weight: 340gs approx.
 3. Optional output connector:
 See page Appendix.

Derating Curve :



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