

APU20B series

20W Desk Top Type
Extreme Temp. Power Supplies

Features:

- Wide Operating Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C8 Input Inlet
- Optional Output Connector (See page appendix)
- Single Output
- Class II
- Operating temperature -40~70°C
- Energy Star 2.0, Efficiency level V
- 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 0.5A (max.)
Iih	Input Current (High Line)	Io=Full load, Vin=240VAC 0.3A (max.)
Ir	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC 25~50A
	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC 50~100A (max.)
Eff	Efficiency	Io=Full Load, Vin=230VAC 76~85%
REG-i	Line Regulation	Io=Full Load 0.5~1%
REG-o	Load Regulation	Vin=230VAC 3~5%
OVP	Over Voltage Protection	Nil
OCP	Over Current Protection	Nil. But, Output protected to short circuit conditions
Ttr	Time of Transient Response	Io=Full Load to Half Load, Vin=100VAC 4mS (max.)
Th	Hold-Up Time	Io=Full Load, Vin=110VAC 8mS (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.)
Ilk	Leakage Current	Vin=240VAC/60Hz 0.25mA (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.)
Ris	Isolation Resistance	Test Voltage=500VDC 50MΩ (min.)

Application:

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

Safety Approvals:



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	



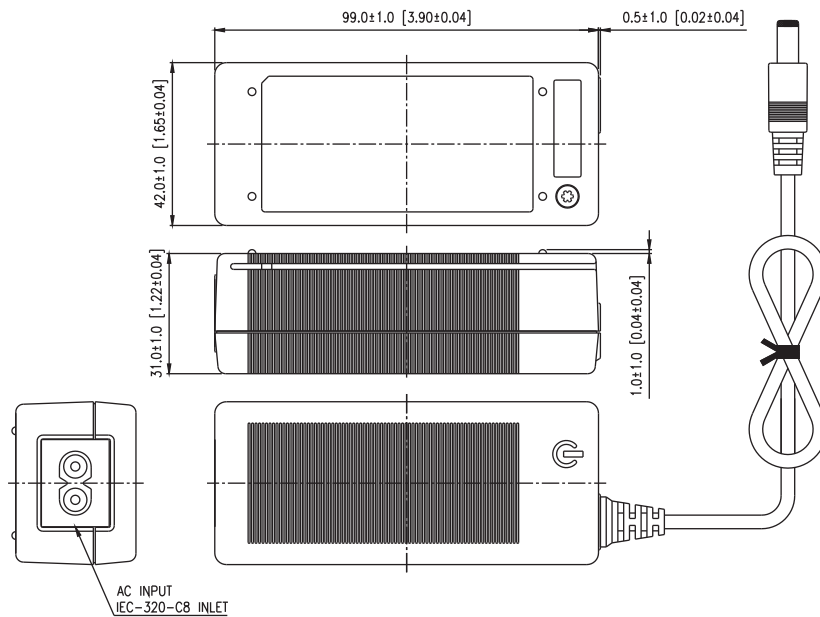
APU20B series

20W Desk Top Type
Extreme Temp. Power Supplies

Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Max. Output Power	Pno (max.)
APU20B-102	5 ~ 6 VDC	3.00 ~ 2.50 A	5%	15W	0.3W
APU20B-103	6 ~ 8 VDC	2.50 ~ 1.87 A	5%	15W	0.3W
APU20B-104	8 ~ 11 VDC	2.50 ~ 1.81 A	5%	20W	0.3W
APU20B-105	11 ~ 13 VDC	1.81 ~ 1.53 A	5%	20W	0.3W
APU20B-106	13 ~ 16 VDC	1.53 ~ 1.25 A	4%	20W	0.3W
APU20B-107	16 ~ 21 VDC	1.25 ~ 0.95 A	4%	20W	0.3W
APU20B-108	21 ~ 27 VDC	0.95 ~ 0.74 A	4%	20W	0.3W
APU20B-109	27 ~ 33 VDC	0.74 ~ 0.60 A	3%	20W	0.3W
APU20B-110	33 ~ 40 VDC	0.60 ~ 0.50 A	3%	20W	0.3W
APU20B-111	40 ~ 50 VDC	0.50 ~ 0.40 A	3%	20W	0.3W

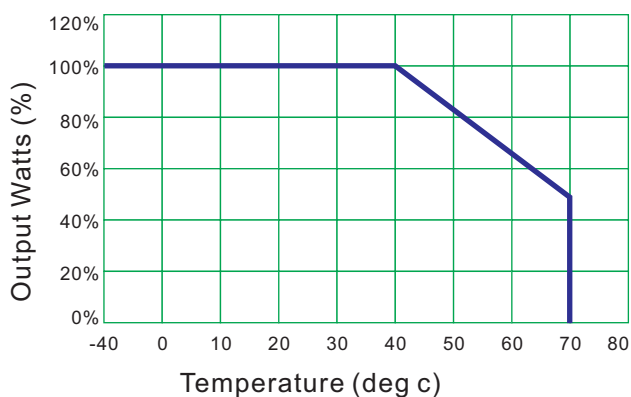
Mechanical Specifications:



Note:

1. Dimensions are shown in mm.
2. Weight: 170gs 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