SPU20B SERIES

20W Desk Top Switching Power Supplies For I.T.E.

Description:

The SPU20B series of AC/DC switching mode power supplies provide 20 Watts of continuous output power and is well-suited for a variety of applications. All supplies are UL 94V-1 min compliant. All models meet FCC Part-15 class B and CISPR-22 class B emission Limits and are designed to comply with UL/c-UL(UL 60950-1:2nd Edition), TUV/GS (EN 60950-1:2nd Edition) and new CE requirements. All units are 100% burned in and tested.



Features:

- Wide Operating Voltage 90 to 264 VAC,47 to 63 Hz
- IEC-320-C8 Input Inlet
- Optional Output Connector (See appendix)
- Single Output
- Splash proof
- Class II
- Energy Star 2.0, Efficiency level V
- Approved as Limited Power Source (LPS).
- 3 year warranty

Safety Approvals:

Agree to apply for the PSE if order on hand

Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		264	VAC
fin	Input Frequency		47		63	Hz
Po	Output Power Range	Vin=90 to 264VAC	0		20	W
Vo	Output Voltage Range		See rating chart			V
Io	Output Current Range		See rating chart			A
Iil	Input Current (Low Line)	Io=Full load, Vin=115VAC			0.4	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC			0.25	A
Irl	Low Line Inrush Current	Io=Full load, 25°c, Cool start, Vin=115VAC		16	20	A
Irh	High Line Inrush Current	Io=Full load, 25°c, Cool start, Vin=230VAC		35	40	A
Eff	Efficiency	Io=Full Load, Vin=230VAC	75	85	95	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC	1	3	5	%
OVP	Over Voltage Protection			Nil		%
OCP	Over Current Protection		110		150	%
Ttr	Time of Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full Load, Vin=110VAC	12	14	16	mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC		0.25	0.5	S
Vp-p	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io=Full Load, Vin=240VAC		0.5	0.75	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°c
Pno	No-Load Power Consumption	No load, Vin=240VAC	0		0.3	W

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0	40	70	°C
Tstg	Storage Temperature		-40		85	°C
Ho	Operating Humidity		0		95	%
Hr	Storage Humidity		0		75	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.3M			Hrs
Pd	Derate linearly from 100% load at 40°C to 50% load at 70°C					

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Safety Specifications:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242			VDC
Ris	Isolation Resistance	Test Voltage=500VDC	50			MΩ
CISPR	EMI requirements for CISPR-22	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=110VAC	B			CLASS

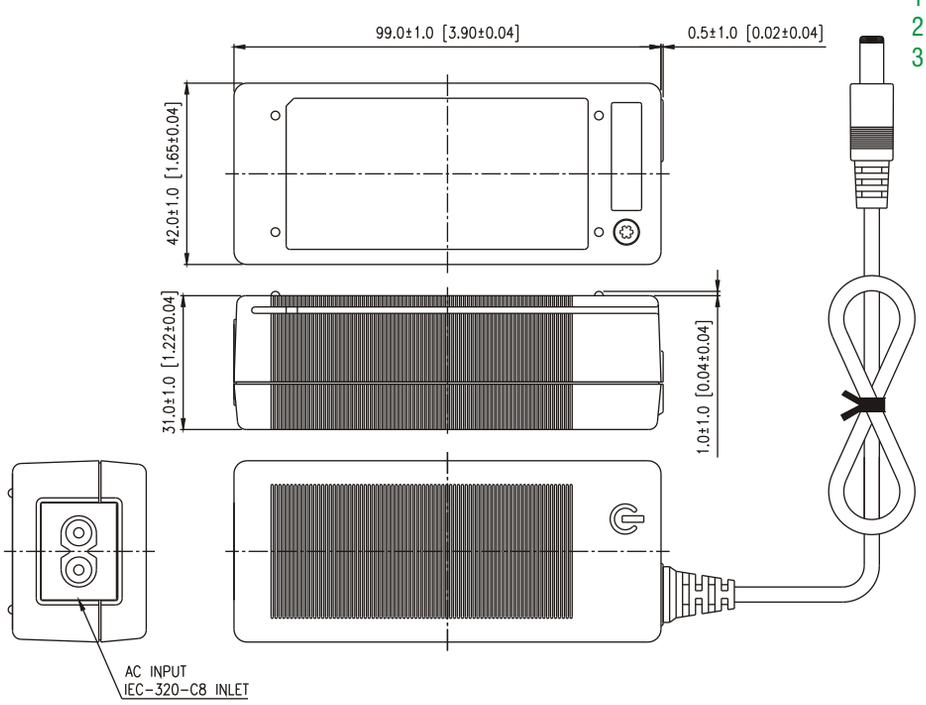
Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total ① Regulation	Max. Output Power
SPU20B-102	5 ~ 6 VDC	3.00 ~ 2.50 A	5%	15W
SPU20B-105	11 ~ 13 VDC	1.81 ~ 1.53 A	4%	20W
SPU20B-106	13 ~ 16 VDC	1.53 ~ 1.25 A	4%	20W
SPU20B-108	21 ~ 27 VDC	0.95 ~ 0.74 A	3%	20W
SPU20B-109	27 ~ 33 VDC	0.74 ~ 0.60 A	3%	20W
SPU20B-111	40 ~ 48 VDC	0.50 ~ 0.41 A	3%	20W

The output voltage under 15V had been approved by TUV/PSE.

① This series is required to use AWG#18/4FT output cable.
The regulation will be changed by modified output cable.

Mechanical Specifications :



Note:
1. Dimensions are shown in mm.
2. Weight: 170gs approx.
3. Optional output connector:
See page Appendix.