

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), TUV/GS (EN 60950-1) and new CE requirements. All units are 100% burned in and tested.



Features:

- Wide Input 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 Insulation (Double Insulation)
- CEC and Energy Star compliance
- Approved as Limited Power Source (LPS).
- 3 year warranty

Safety Approvals:



Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Input Voltage	Operating Voltage	90		264	VAC
Fin	Input Frequency		47		63	Hz
Wo	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		12	15	A
Irh	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		26	30	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	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
Vrn	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io=Full Load, Vin=240VAC		0.15	0.25	mA
Tc	Temperature Coefficient	All output	-0.04		0.04	%/°C
Pnlc	Power Consumption (No load)	No load, Vin=240VAC	0	0.4	0.5	W

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0		70	°C
Tstg	Storage Temperature		-40		85	°C
Hr	Relative Humidity		5		95	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.3			MHrs
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
V _{ps}	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242			VDC
R _i	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 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 total regulation on each model is required to use AWG#18/4FT output cable. The regulation will be changed by modified output cable.

Note: The PSE mark is not for each model. Please check website or sales if you need put PSE mark on your products.

Mechanical Specifications :

Note:

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

