

SPU50A SERIES

50W Desk Top Switching Power Supplies For I.T.E.

Description:

The SPU50A series of AC/DC switching mode power supplies provide 50 Watts of continuous output power. All supplies are UL 94V-1 min compliant, include IEC-320-C14 input for worldwide applications. 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 1950), TUV/GS(EN 60950) 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-C14 Input Inlet
- Output Voltage Available From 5VDC Thru 50VDC
- Optional Output Connector (See appendix)
- Input Surge Current, Over Voltage And Over Load protection
- Single Output
- Splash proof
- Class I Insulation
- Two Years Warranty



Safety Approvals :



Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V _{in}	Input Voltage	Operating Voltage	90		264	VAC
F _{in}	Input Frequency		47		63	Hz
W _o	Output Power Range	V _{in} =90 to 264VAC	0		50	W
V _o	Output Voltage Range		See rating chart			V
I _o	Output Current Range		See rating chart			A
I _{il}	Input Current (Low Line)	I _o =Full load, V _{in} =115VAC			1.6	A
I _{ih}	Input Current (High Line)	I _o =Full load, V _{in} =230VAC			1.0	A
I _{rl}	Low Line Inrush Current	I _o =Full load, 25 c, Cool start, V _{in} =115VAC		12	15	A
I _{rh}	High Line Inrush Current	I _o =Full load, 25 c, Cool start, V _{in} =230VAC		26	30	A
Eff	Efficiency	I _o =Full Load, V _{in} =230VAC	75	83	88	%
REG-i	Line Regulation	I _o =Full Load		0.5	1	%
REG-o	Load Regulation	V _{in} =230VAC		3	5	%
OVP	Over Voltage Protection		112		132	%
OCp	Over Current Protection		110		150	%
T _{tr}	Transient Response	I _o =Full Load to Half Load, V _{in} =100VAC			4	mS
Thold	Hold-Up Time	I _o =Full Load, V _{in} =110VAC	16			mS
T _s	Start Up Time	I _o =Full Load, V _{in} =100VAC	0.3	1	2	S
V _{rn}	Ripple & Noise (Peak to Peak)	Full Load, V _{in} =90VAC		0.5	1	%
I _{lk}	Safety Ground Leakage Current	I _o =Full Load, V _{in} =240VAC		0.5	0.75	mA
T _c	Temperature Coefficient	All output	-0.04		0.04	%/ °C

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
T _{oper}	Operating Temperature		0		70	°C
T _{stg}	Storage Temperature		-40		85	°C
H _r	Relative Humidity		5		95	%
P _d	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
Vpg	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2121			VDC
Ri	Isolation Resistance	Test Voltage=500VDC	50			M Ω
CISPR	EMI requirements for CISPR-22	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=110VAC	B			CLASS

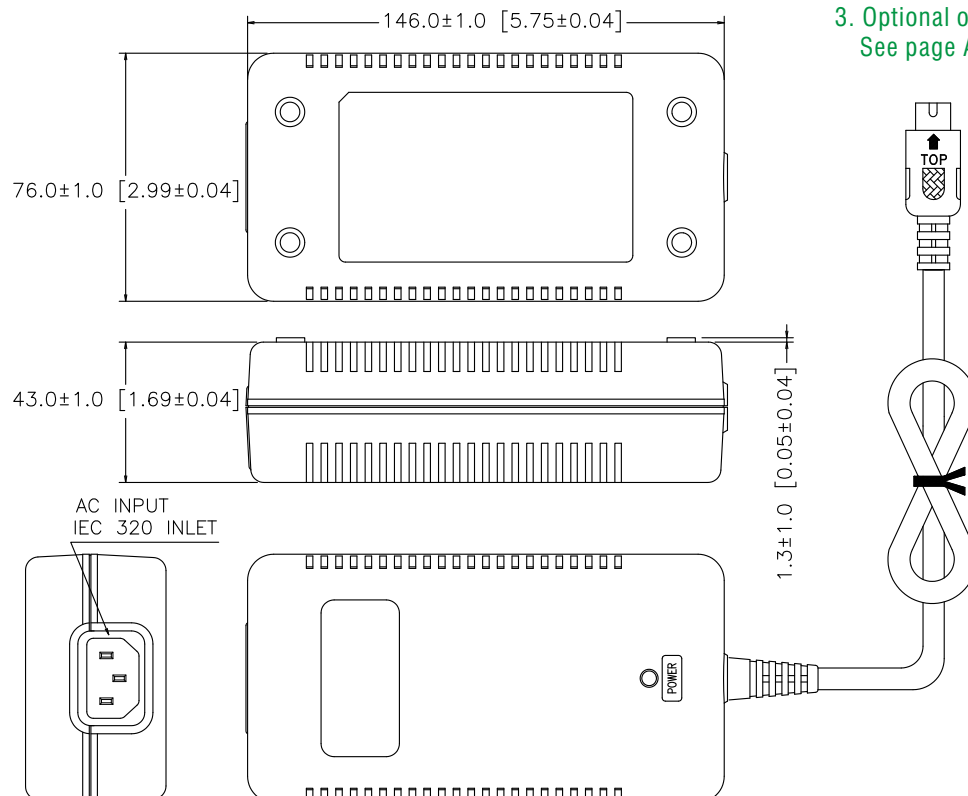
Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power
☆ SPU50A-1	5 ~ 6 VDC	8.00 ~ 6.60 A	5%	40W
☆ SPU50A-1-1	6 ~ 9 VDC	7.50 ~ 5.00 A	5%	45W
☆ SPU50A-2	9 ~ 11 VDC	5.38 ~ 4.40 A	5%	48.5W
☆ SPU50A-3	11 ~ 13 VDC	4.54 ~ 3.85 A	5%	50W
☆ SPU50A-4	13 ~ 16 VDC	3.85 ~ 3.13 A	5%	50W
SPU50A-5	16 ~ 21 VDC	3.13 ~ 2.38 A	5%	50W
SPU50A-6	21 ~ 27 VDC	2.38 ~ 1.85 A	5%	50W
SPU50A-7	27 ~ 33 VDC	1.85 ~ 1.51 A	5%	50W
SPU50A-8	33 ~ 40 VDC	1.51 ~ 1.25 A	5%	50W
SPU50A-9	40 ~ 50 VDC	1.25 ~ 1.00 A	5%	50W

Mark " ☆ " means " PSE approval "

Model SPU50A-4 has PSE approval which is below 15V

Mechanical Specifications :



Note:

1. Dimensions are shown in inches or mm.
2. Weight: 520gs approx.
3. Optional output connector: See page Appendix.