SPU60 SERIES

60W Desk Top Switching Power Supplies For I.T.E.

Description:

The SPU60 series of AC/DC switching mode power supplies provide 60 Watts of continuous output power. 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), Intertek/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-C14 Input Inlet
- Single output
- Optional Output Connector (See appendix)
- Over Voltage Protection (Crowbar Design)
- Splash proof
- Class I
- 2 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		60	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			1.6	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC			1.0	A
Irl	Low Line Inrush Current	Io=Full load, 25°c, Cool start, Vin=115VAC		40	43	A
Irh	High Line Inrush Current	Io=Full load, 25°c, Cool start, Vin=230VAC		80	85	A
Eff	Efficiency	Io=Full Load, Vin=230VAC	75	87	90	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	7	%
OVP	Over Voltage Protection		112		132	%
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	16			mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC	0.3	1	2	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

* **Note:** The Ripple & Noise which is under 3.3VDC at 2% max

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		0.1M			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
Vpg	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2121			VDC
Ris	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) :

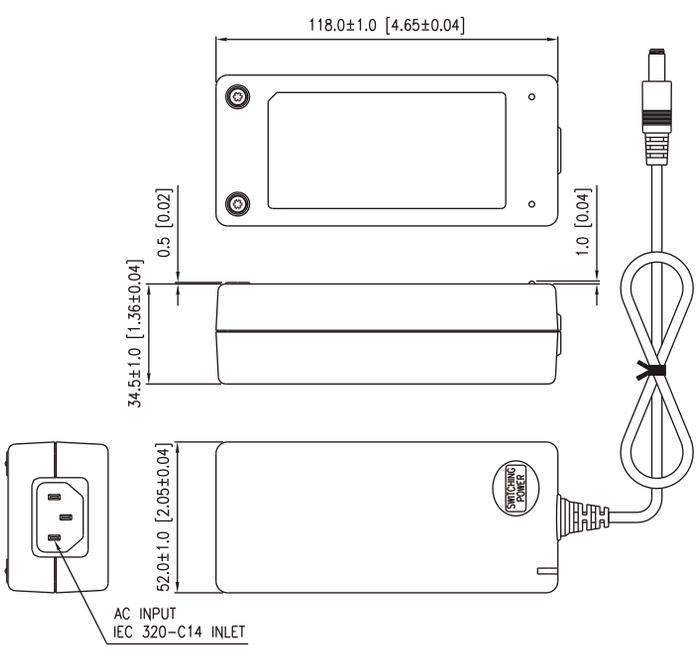
	Model Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power
	SPU60-101	3 ~ 5 VDC	6.60 ~ 4.00 A	7%	20W
	SPU60-102	5 ~ 6 VDC	6.00 ~ 5.00 A	5%	30W
	SPU60-103	6 ~ 8 VDC	5.83 ~ 4.37 A	5%	35W
	SPU60-104	8 ~ 11 VDC	5.00 ~ 3.63 A	5%	40W
*	SPU60-105	11 ~ 13 VDC	4.54 ~ 3.84 A	5%	50W
*	SPU60-105-1	11 ~ 13 VDC	5.45 ~ 4.61 A	5%	60W
*	SPU60-106	13 ~ 16 VDC	4.23 ~ 3.43 A	5%	55W
*	SPU60-107	16 ~ 21 VDC	3.75 ~ 2.85 A	5%	60W
*	SPU60-108	21 ~ 27 VDC	2.85 ~ 2.22 A	5%	60W
*	SPU60-109	27 ~ 33 VDC	2.22 ~ 1.81 A	5%	60W
	SPU60-110	33 ~ 40 VDC	1.81 ~ 1.50 A	3%	60W
	SPU60-111	40 ~ 50 VDC	1.50 ~ 1.20 A	3%	60W

Mark " * " means " PSE approval "

SPU60-108 had been approved by KC.

The output voltage above 12V had been approved by CEC Level V.

Mechanical Specifications :



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