

SPU80 SERIES

80W Desk Top Switching Power Supplies For I.T.E.

Description:

The SPU80 series of AC/DC switching mode power supplies provide 80 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), 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 260 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single Output
- Optional Output Connector (See appendix)
- Input Surge Current, Over Voltage And Over Load protection
- Active Power Factor Correction
- Output Voltage Protection(Crowbar Design)
- Energy Star 2.0, Efficiency level V
- Class I
- 2 year warranty

Safety Approvals :



Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Safety Approvals Input Voltage Range		100		240	VAC
	Operate Voltage Range		90		260	VAC
fin	Input Frequency		47		63	Hz
PF	Power Factor Correction	Io=Full load, Vin=90~260VAC	0.95	0.97	1.0	
Po	Output Power Range	Vin=90 to 260 VAC	0		80	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=100VAC			1.07	A
Iih	Input Current (High Line)	Io=Full load, Vin=240VAC			0.5	A
Irl	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		42	45	A
Irh	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		88	92	A
Eff	Efficiency	Io=Full load, Vin=230VAC		87		%
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
Pno	No-Load Power Consumption	No load, Vin=230VAC			0.5	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		0.1M			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 ①	Maximum Out Power
SPU80-105	11 ~ 13 VDC	7.27 ~ 6.15 A	5%	80W
SPU80-106	13 ~ 16 VDC	6.15 ~ 5.00 A	5%	80W
SPU80-107	16 ~ 21 VDC	5.00 ~ 3.80 A	5%	80W
SPU80-108	21 ~ 27 VDC	3.80 ~ 2.96 A	5%	80W
SPU80-109	27 ~ 33 VDC	2.96 ~ 2.42 A	5%	80W
SPU80-110	33 ~ 40 VDC	2.42 ~ 2.00 A	5%	80W
SPU80-111	40 ~ 48 VDC	2.00 ~ 1.66 A	5%	80W

SPU80-110 had been approved by KC.

① SPU80-105 is required to use AWG#18×3C+ AWG#20×2C/ 4FT output cable.

SPU80-106 is required to use AWG#16×2C/ 4FT output cable.

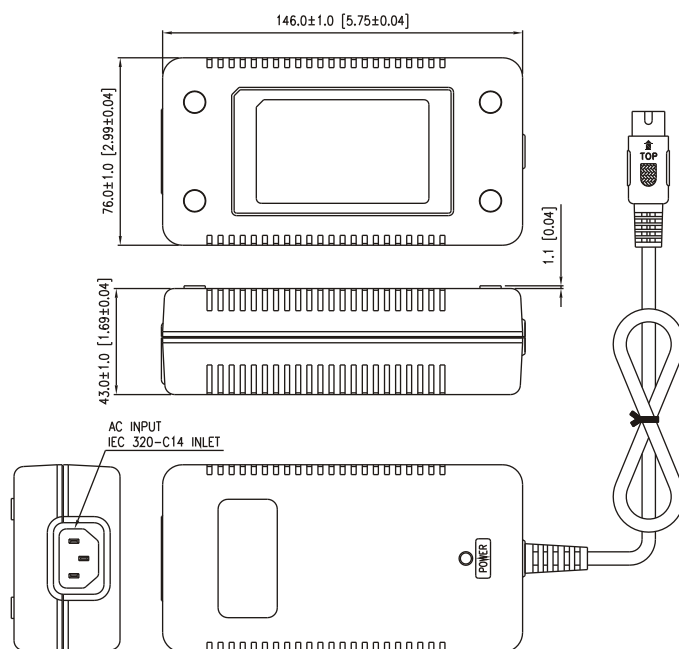
SPU80-107 is required to use AWG#16×2C/ 6FT output cable.

SPU80-108~109 are required to use AWG#18×2C/ 6FT output cable.

SPU80-110~111 are required to use AWG#20×2C/ 6FT output cable.

The regulation and efficiency will be changed by modified output cable.

Mechanical Specifications:



Note:

1. Dimensions are shown in inches or mm.
2. Weight: 600-700gs approx.
3. Optional output connector:
See page Appendix.