A brand for **Quality** and **Reliability** products

SPU100 SERIES

100W Desk Top Switching Power Supplies For I.T.E.

Description:

The SPU100 series of AC/DC switching mode power supplies provide 100 Watts of continuous output power . All supplies are UL94V-1 min compliant, include IEC-320-C14 input for worldwide applications. All models meet FCC Part-15 Calss B and CISPR-11 EN55022 class B emission Limits and are designed to comply with UL/c-UL(UL 60950-1) ,TUV/T-mark (EN 60950-1) and new CE requirements. All units are 100% burned in and tested.

Features:

- Wide Input Voltage 90 to 260 VAC,47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single Output
- Output Voltage Available From 11VDC Thru 48VDC
- Optional Output Connector (See appendix)
- Input Surge Current, Over Voltage And Over Load protection
- Over Voltage Protection
- Active Power Factor Correction
- Class I
- CEC level V and Energy Star 2.0 Compliance
- 2 year warranty

Safety Approvals :

Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Input Voltage	Operating Voltage	90		260	VAC
fin	Input Frequency		47		63	Hz
PF	Power Factor Correction	Io=Full load, Vin=230 VAC	0.95		1	
Po	Output Power Range	Vin=90 to 260 VAC	0		100	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=115 VAC			1.35	A
Iih	Input Current (High Line)	Io=Full load, Vin=230 VAC			0.5	A
Irl	Low Line Inrush Current	Io=Full load, 25°C ,Cool start, Vin=115VAC		44	50	A
Irh	High Line Inrush Current	Io=Full load, 25°C ,Cool start, Vin=230VAC		85	100	A
Eff	Efficiency	Io=Full Load, Vin=230VAC	85	87	90	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	5	%
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	12			mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC	0.3	1.5	2	S
Vrn	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io= Full Load, Vin=240VAC/60Hz		0.5	0.75	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C

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		0.1M			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 = 2100VDC	50			MΩ
CISPR	EMI requirements for CISPR-11	Vin=230VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=120VAC	B			CLASS

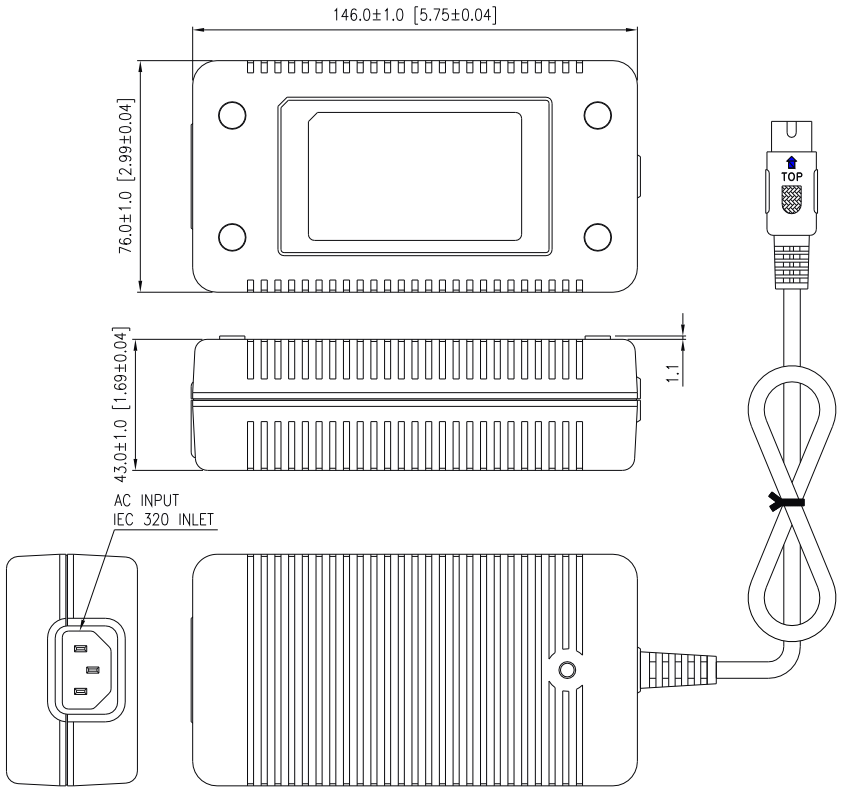
Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation ①	Maximum Output Power
SPU100-105	11 ~ 13 VDC	9.09 ~ 7.69 A	5%	100W
SPU100-106	13 ~ 16 VDC	7.69 ~ 6.25 A	4%	100W
SPU100-107	16 ~ 21 VDC	6.25 ~ 4.76 A	4%	100W
SPU100-108	21 ~ 27 VDC	4.76 ~ 3.70 A	4%	100W
SPU100-109	27 ~ 33 VDC	3.70 ~ 3.03 A	3%	100W
SPU100-111	40 ~ 48 VDC	2.50 ~ 2.08 A	3%	100W

The output voltage under 30V had been approved by TUV/PSE.

① The total regulation on each model is required to use AWG#18×3C+ AWG#16×3C / 4FT output cable.
The regulation will be changed by modified output cable.

Mechanical Specifications:



Note:
1. Dimensions are shown in inches or mm.
2. Weight: 490-670gs approx.
3. Optional output connector:
See page Appendix.

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