

# SPU25A SERIES

## 25W Desk Top Switching Power Supplies For I.T.E.

### Description:

The SPU25A series of AC/DC switching mode power supplies provide 25 Watts of continuous output power and is well-suited for a variety of applications. All supplies are UL 94V-1 min compliant. All model 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-C14 Input Inlet
- Output Voltage Available From 5VDC Thru 48VDC
- Optional Output Connector (See appendix)
- Single Output
- Splash proof
- Class I Insulation
- CEC and Energy Star compliance
- Approved as Limited Power Source (LPS).
- 2 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		25	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		0.5	0.75	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
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
SPU25A-102	5 ~ 6 VDC	3.00 ~ 2.75 A	5%	16.5W
SPU25A-103	6 ~ 8 VDC	3.30 ~ 2.50 A	5%	20W
SPU25A-104	8 ~ 11 VDC	2.75 ~ 2.00 A	5%	22W
SPU25A-105	11 ~ 13 VDC	2.27 ~ 1.92 A	5%	25W
SPU25A-106	13 ~ 16 VDC	1.92 ~ 1.56 A	5%	25W
SPU25A-107	16 ~ 21 VDC	1.56 ~ 1.19 A	5%	25W
SPU25A-108	21 ~ 27 VDC	1.19 ~ 0.92 A	3%	25W
SPU25A-109	27 ~ 33 VDC	0.92 ~ 0.75 A	3%	25W
SPU25A-110	33 ~ 40 VDC	0.75 ~ 0.62 A	3%	25W
SPU25A-111	40 ~ 48 VDC	0.62 ~ 0.52 A	3%	25W

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.

