

# SPU 12B SERIES

## 15W Wall Mount Switching Power Supplies For I.T.E.

### Description:

The SPU12B series of AC/DC switching mode power supplies provide 15 Watts of continuous output power. All supplies are UL 94V-1 min compliant, include a 3 prong plug-in mains connector for certain applications. All models meet CISPR-22 class B emission Limits and are designed to comply with new CE requirements. All units are 100% burned in and tested.



### Features:

- Wide Input Voltage 90 to 264 VAC, 47 to 63 Hz
- 3 Prong Plug-In Mains Connector
- Output Voltage Available From 3VDC Thru 50VDC
- Optional Output Connector (See appendix)
- Single Output
- Class II Insulation (Double Insulation)
- Two years 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		15	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			0.3	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	60	70	78	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	7	%
OVP	Over Voltage Protection		Nil			%
OCP	Over Current Protection	Nil But, Output protected to short circuit conditions				%
Ttr	Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Thold	Hold-Up Time	Io=Full Load, Vin=110VAC	5			mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC	0.3	1	2	S
Vrn	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC		1	2	%
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

### Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0		70	°C
Tstg	Storage Temperature		-40		85	°C
Hr	Relative Humidity	No-Condensing	5		95	%
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
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
SPU12B-101	3 ~ 5 VDC	3.30 ~ 2.00 A	7%	10W
SPU12B-102	5 ~ 6 VDC	2.00 ~ 1.66 A	5%	10W
SPU12B-103	6 ~ 8 VDC	1.66 ~ 1.25 A	5%	10W
SPU12B-104	8 ~ 11 VDC	1.50 ~ 1.09 A	5%	12W
SPU12B-105	11 ~ 13 VDC	1.36 ~ 1.15 A	5%	15W
SPU12B-106	13 ~ 16 VDC	1.15 ~ 0.93 A	5%	15W
SPU12B-107	16 ~ 21 VDC	0.93 ~ 0.71 A	3%	15W
SPU12B-108	21 ~ 27 VDC	0.71 ~ 0.55 A	3%	15W
SPU12B-109	27 ~ 33 VDC	0.59 ~ 0.48 A	3%	16W
SPU12B-110	33 ~ 40 VDC	0.45 ~ 0.37 A	3%	15W
SPU12B-111	40 ~ 50 VDC	0.37 ~ 0.30 A	3%	15W

### Mechanical Specifications: ( UK Type )

Note:

1. Dimensions are shown in mm.
2. Weight: 115gs approx.
3. Optional output connector: See page Appendix.

