

# SPU15 SERIES

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

### Description:

The SPU15 series of AC/DC switching mode power supplies provide 15 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 60950-1:2<sup>nd</sup>Edition), TUV/GS(EN 60950-1:2<sup>nd</sup>Edition) and new CE requirements. All units are 100% burned-in and tested.



### Features:

- Wide Operating Voltage 90 to 264VAC, 47 to 63 Hz
- Interchangeable Plug
- Optional Output Connector (See appendix)
- Single Output
- Energy Star 2.0, Efficiency level V
- Class II
- 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		264	VAC
fin	Input Frequency		47		63	Hz
Po	Output Power Range	Vin=90 to 264VAC			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			0.26	A
Irl	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		40	45	A
Irh	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		80	90	A
Eff	Efficiency	Io=Full Load, Vin=230VAC	74.7	79	85	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		3	10	%
OVP	Over Voltage Protection		Nil			%
OCP	Over Current Protection	Nil.But,Output protected to short circuit conditions				%
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		2	3	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			0.25	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°c
Pno	No-Load Power Consumption	No load, Vin=240VAC		0.25	0.3	W

### Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0		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
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	Max. Output Current	Total Regulation ①	Max. Output Watts
SPU15-102	5 ~ 5.99 VDC	2.40 ~ 2.00 A	5%	12W
SPU15-103	6.5 ~ 8 VDC	1.85 ~ 1.50 A	5%	12W
SPU15-104	8 ~ 11 VDC	1.68 ~ 1.22 A	5%	13.5W
SPU15-105	11 ~ 13 VDC	1.36 ~ 1.15 A	5%	15W
SPU15-106	13 ~ 16 VDC	1.15 ~ 0.94 A	5%	15W
SPU15-107	16 ~ 21 VDC	0.94 ~ 0.72 A	5%	15W
SPU15-108	21 ~ 27 VDC	0.72 ~ 0.55 A	3%	15W
SPU15-109	27 ~ 33 VDC	0.55 ~ 0.45 A	3%	15W
SPU15-110	33 ~ 40 VDC	0.45 ~ 0.37 A	3%	15W
SPU15-111	40 ~ 48 VDC	0.37 ~ 0.32 A	3%	15W

- ① SPU15-102~104 are required to use AWG#18/4FT output cable.  
 SPU15-105~109 are required to use AWG#20/4FT output cable.  
 SPU15-110~111 are required to use AWG#22/4FT output cable.  
 The regulation and efficiency will be changed by modified output cable.

### Mechanical Specifications :

- Note:  
 1. Dimensions are shown in mm.  
 2. Weight: 165gs approx.  
 3. Optional output connector:  
 See page Appendix.

