

### 60W (80Wpk) Desk Top Switching Power Supplies For I.T.E.

#### Description:

The SPU68series of AC/DC switching mode power supplies provide 80W Peak output power and is well-suited for a variety of applications. With the delay buffer duration of over current protection, the large number of current can be acquired and also the LPS safety requirement can be met, which is very useful for motor driver / device ( peak load). 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), 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
- Single output
- Optional Output Connector (See appendix)
- Over Voltage Protection (Crowbar Design)
- Power Consumption (No load) < 0.5
- Class I
- CEC and Energy Star compliance
- 2 year warranty

#### Patent Award

Over load protection circuit for a power supply and apparatus.



#### 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
Po	Output Power Range	Vin=90 to 264VAC	0		60	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			1	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC			0.5	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	84			%
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	16			mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC	0.3		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
Pno	No-Load Power Consumption	No load, Vin=240VAC		0.3	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		0.13M			Hrs
Pd	Derate linearly from 100% load at 50 °C to 50% load at 70 °C					

# SPU68 SERIES

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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

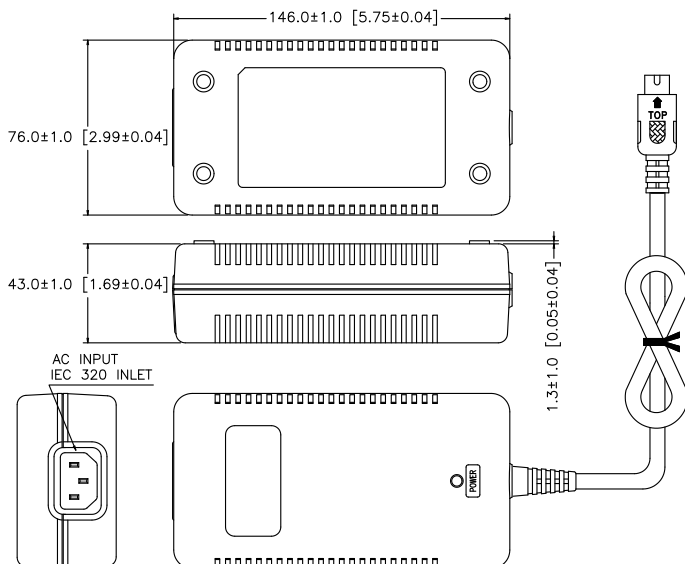
### Output Voltage And Current Rating Chart ( Single Output ) :

Model Number	Output Voltage	Max. Output Current	Output Peak Current	Total Regulation <sup>Ⓞ</sup>	Maximum Output Power
SPU68-105	11 ~ 13 VDC	5.00 A	6.66A	3%	80Wpk
SPU68-108	21 ~ 27 VDC	2.50 A	3.33A	2%	80Wpk

\* The output voltage  $\geq 12$ VDC can meet CEC approval\*.

Ⓞ The total regulation on each model is required to use AWG#18/4FT output cable. The regulation will be changed by modified output cable.

### Mechanical Specifications :

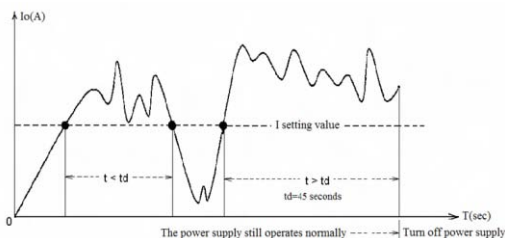


#### Note:

1. Dimensions are shown in mm.
2. Weight: 450gs approx.
3. Optional output connector: See page Appendix.

#### Features:

The over current protection apparatus in accordance with the present invention allows the power supply to output the undulated current.



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