

### 130W Desk Top Switching Power Supplies For I.T.E.

#### Description:

The SPU131 series of AC/DC switching mode power supplies provide 130 Watts of continuous output power . All supplies are UL94V-1 min compliant, include IEC-320-C14 input for worldwide applications. They are suited for use in hospital instrument and many other applications. All models meet FCC Part-15 class B and CISPR-22 EN55011 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
- Optional Output Connector (See appendix)
- Input Surge Current, Over Voltage And Over Load protection
- Output Voltage Protection
- Active Power Factor Correction
- Class I
- CEC level V and Energy Star 2.0 Compliance
- ON/OFF SWITCH (Optional)
- 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		130	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			1.32	A
Iih	Input Current (High Line)	Io=Full load, Vin=230 VAC			0.66	A
Irl	Low Line Inrush Current	Io=Full load, 25°C ,Cool start, Vin=115VAC			30	A
Irh	High Line Inrush Current	Io=Full load, 25°C ,Cool start, Vin= 230VAC			50	A
Eff	Efficiency	Io=Full Load, Vin=230VAC		88		%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC		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			2	S
Vrn	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC			1	%
Ilk	Safety Ground Leakage Current	Io= Full Load, Vin= 240 VAC/60Hz			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	40	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					

# SPU131 SERIES

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### Safety Specifications:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V <sub>ps</sub>	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242			VDC
V <sub>pg</sub>	Dielectric Withstanding Voltage for Primary to secondary	Primary to ground	2121			VDC
R <sub>is</sub>	Isolation Resistance	I <sub>o</sub> =Full load, V <sub>in</sub> =230VAC	50			MΩ
CISPR	EMI requirements for CISPR-22	V <sub>in</sub> =220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	V <sub>in</sub> =110VAC	B			CLASS

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

Model Number	Output Voltage	Output Current	Total Regulation ①	Maximum Output Power
* SPU131-105	12 ~ 13 VDC	10.84~10.00 A	5%	130W
SPU131-106	13 ~ 16 VDC	10.00~8.12 A	5%	130W
SPU131-107	16 ~ 21 VDC	8.12~6.19 A	5%	130W
* SPU131-108	21 ~ 27 VDC	6.19~4.81 A	3%	130W
SPU131-109	27 ~ 33 VDC	4.81~3.93 A	3%	130W
SPU131-110	33 ~ 40 VDC	3.93~3.25 A	3%	130W
SPU131-111	40 ~ 50 VDC	3.25~2.60 A	3%	130W
SPU131-112	50 ~ 55 VDC	2.60~2.36 A	3%	130W

Mark " \* " means approved by CCC.

① The total regulation on 105~106 required to use AWG#16\*5C/4FT output cable.

The total regulation on 107 required to use AWG#16\*4C/4FT output cable.

The total regulation on 108~110 required to use AWG#16\*2C/4FT output cable.

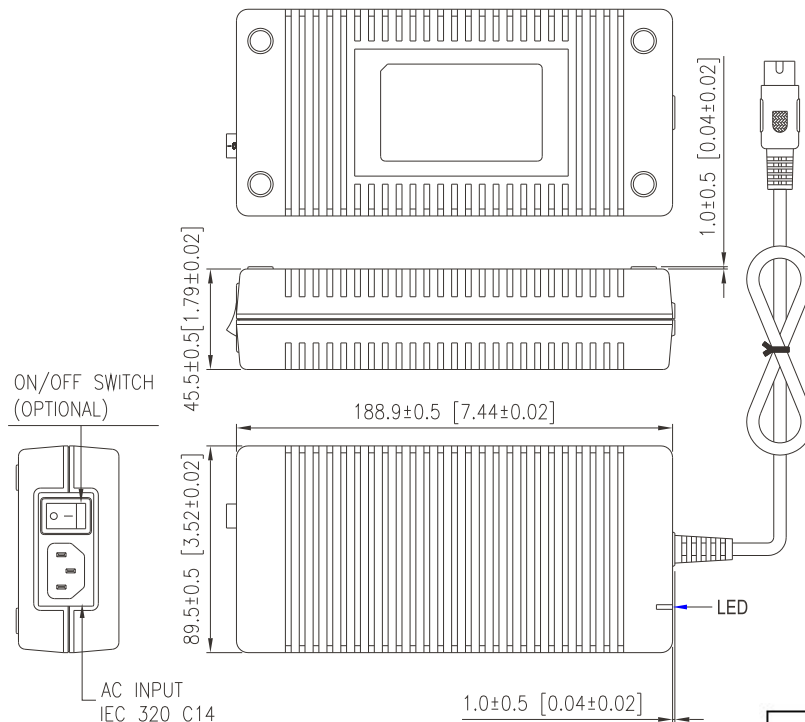
The total regulation on 111~112 required to use AWG#18\*2C/4FT output cable.

The regulation and efficiency will be changed by modified output cable.

### Mechanical Specifications:

Note:

1. Dimensions are shown in inches or mm.
2. Weight: 778-800gs approx.
3. Optional output connector:  
See page Appendix.



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