

# SPU21B series

20W Desk Top Type  
I.T.E. Power Supplies

## Features:

- Wide Operating Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C8 Input Inlet
- Optional Output Connector (See page appendix)
- Single Output
- Class II
- Energy Star 2.0, Efficiency level V
- 2 year warranty



## Electrical Characteristics:

Vin	Safety Approvals	Input Voltage Range	100~240VAC
		Operate Voltage Range	90~264VAC
fin		Input Frequency	47~63Hz
Po		Output Power Range	See rating chart
Vo		Output Voltage Range	See rating chart
Io		Output Current Range	See rating chart
Iil		Input Current (Low Line)	Io=Full load, Vin=100VAC 0.5A (max.)
Iih		Input Current (High Line)	Io=Full load, Vin=240VAC 0.25A (max.)
Ir		Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC 25~50A
		High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC 50~100A (max.)
Eff		Efficiency	Io=Full Load, Vin=230VAC 76~85%
REG-i		Line Regulation	Io=Full Load 0.5~1%
REG-o		Load Regulation	Vin=230VAC 3~5%
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 4mS (max.)
Th		Hold-Up Time	Io=Full Load, Vin=110VAC 8mS (min.)
Ts		Start Up Time	Io=Full Load, Vin=100VAC 2S (max.)
Vp-p		Ripple & Noise(Peak to Peak)	Full Load, Vin=90VAC 2% (max.)
Iik		Safety Ground Leakage Current	Vin=240VAC/60Hz 0.75mA (max.)
TC		Temperature Coefficient	All output ±0.04%/°C
Pno		No-Load Power Consumption	No load, Vin=230VAC See rating chart
Vps		Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary 4242VDC (min.)
Ris		Isolation Resistance	Test Voltage=500VDC 50MΩ (min.)

## Application:

### Safety Approvals:



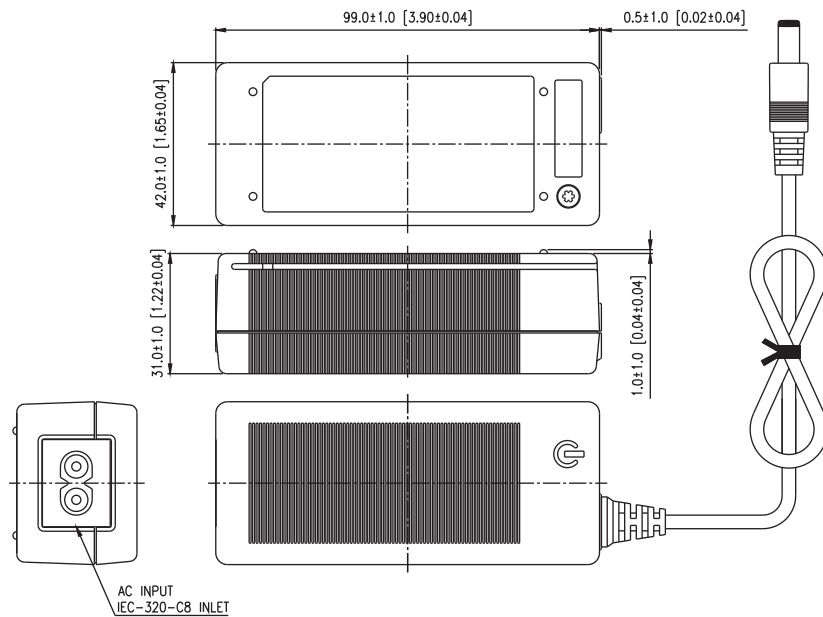
## Environmental

To	Operating Temperature	See derating curve
Ts	Storage Temperature	-40~85°C
Ho	Operating Humidity	0~95%
Hr	Storage Humidity	0~95%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	0.1M Hrs (min.)
Pd	Derate linearly from 100% load at 40°C to 50% load at 70°C	

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

Model Number	Output Voltage	Output Current	Total Regulation	Max. Output Power	Pno (max.)
SPU21B-102	5 ~ 6 VDC	3.00 ~ 2.50 A	5%	15W	0.3W
SPU21B-103	6 ~ 8 VDC	2.50 ~ 1.87 A	5%	15W	0.3W
SPU21B-104	8 ~ 11 VDC	2.50 ~ 1.81 A	5%	20W	0.3W
SPU21B-105	11 ~ 13 VDC	1.81 ~ 1.53 A	5%	20W	0.3W
SPU21B-106	13 ~ 16 VDC	1.53 ~ 1.25 A	4%	20W	0.3W
SPU21B-107	16 ~ 21 VDC	1.25 ~ 0.95 A	4%	20W	0.3W
SPU21B-108	21 ~ 27 VDC	0.95 ~ 0.74 A	4%	20W	0.3W
SPU21B-109	27 ~ 33 VDC	0.74 ~ 0.60 A	3%	20W	0.3W
SPU21B-110	33 ~ 40 VDC	0.60 ~ 0.50 A	3%	20W	0.3W
SPU21B-111	40 ~ 50 VDC	0.50 ~ 0.40 A	3%	20W	0.3W

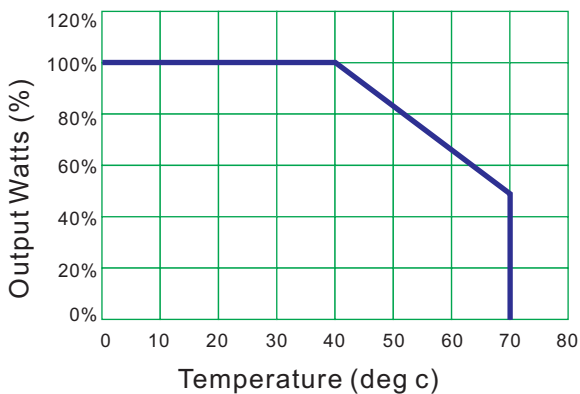
## Mechanical Specifications:



### Note:

1. Dimensions are shown in mm.
2. Weight: 170gs approx.
3. Optional output connector:  
See page Appendix.

## Derating Curve :



1. Operating Temperature: 0 to 70°C
2. Derate linearly from 100% load at 40°C to 50% load at 70°C