



- Wide Input Voltage 90 to 264VAC, 47~63Hz
- IEC-320-C14 Input Inlet
- Single Output
- Output Voltage Available from 5Volts(DC) thru 48Volts(DC)
- Splash proof
- Class I
- LPS Efficiency Level V (Most Models)



| Model Number | Output Amps | Output Volts | Rated Power | Total Regulation |
|--------------|-------------|--------------|-------------|------------------|
| SPU31-102    | 4.00 Amps   | 5 Volts(DC)  | 20W         | 5%               |
| SPU31-103    | 4.16 Amps   | 6 Volts(DC)  | 25W         | 5%               |
| SPU31-104    | 3.0 Amps    | 10 Volts(DC) | 30W         | 5%               |
| SPU31-105    | 2.5 Amps    | 12 Volts(DC) | 30W         | 5%               |
| SPU31-106    | 2.0 Amps    | 15 Volts(DC) | 30W         | 5%               |
| SPU31-107    | 1.66 Amps   | 18 Volts(DC) | 30W         | 5%               |
| SPU31-108    | 1.25 Amps   | 24 Volts(DC) | 30W         | 3%               |
| SPU31-109    | 1.0 Amps    | 30 Volts(DC) | 30W         | 3%               |
| SPU31-110    | 0.83 Amps   | 36 Volts(DC) | 30W         | 3%               |
| SPU31-111    | 0.62 Amps   | 48 Volts(DC) | 30W         | 3%               |



## 30W Desktop Switching Power Supplies for I.T.E

## SPU31 series

### INPUT SPECIFICATIONS

|                                   |                                                                |
|-----------------------------------|----------------------------------------------------------------|
| Input Voltage Range               | 90-264 VAC                                                     |
| Frequency Range                   | 47-63 Hz                                                       |
| Input Current @ FL                | Low Line 0.8Amps @ 115VAC<br>High Line: 0.5Amps @ 230VAC       |
| Inrush Current, @ FL (Cold Start) | Low Line: 15Amps max.@ 115VAC<br>High Line 30Amps max.@ 230VAC |
| Leakage Current @ FL              | 0.75mAmps max @ 240VAC<br>0.5mAmps typ. @ 240VAC               |

### OUTPUT SPECIFICATIONS

|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| Voltage and Current     | See Selection Charts                                     |
| Load Regulation         | ± 7% max.@ 230VAC                                        |
| Line Regulation @ FL    | ± 1%, max.<br>±0.5% typ.                                 |
| Transient Response      | 4mS @ 100VAC @ FL load to 1/2 load                       |
| Ripple/Noise @ FL       | 1% Pk-Pk,max @ 90VAC                                     |
| Over Current Protection | 110-150%                                                 |
| Start Up @ FL           | 2S @ 100VAC max<br>1S @ 100VAC typ.<br>0.3 @ 100VAC min. |
| Hold Up Time @ FL(min)  | 12 mS min.@ 110VAC                                       |

### GENERAL SPECIFICATIONS

|                           |                                                           |
|---------------------------|-----------------------------------------------------------|
| Isolation                 | 4242 Volts(DC) Input-Output<br>2121Volts(DC) Input-Ground |
| Isolation Resistance      | 50 MΩ min. /500Volts(DC)                                  |
| Efficiency @ FL           | 81%, typ                                                  |
| No-Load Power Consumption | 0.5W max @ 240VAC<br>0.3W typ. @ 240VAC                   |
| EMI                       | CISPR-22B @ 220VAC<br>FCC PART-15B @ 110VAC               |

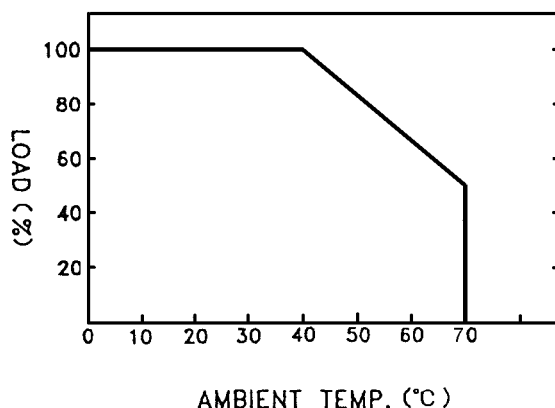
### PHYSICAL SPECIFICATIONS

|        |                                    |
|--------|------------------------------------|
| Size   | 107x47x29.6 mm (4.21"x1.85"x1.17") |
| Weight | 9.35~8.87oz (265~280g)             |

### ENVIRONMENTAL SPECIFICATIONS

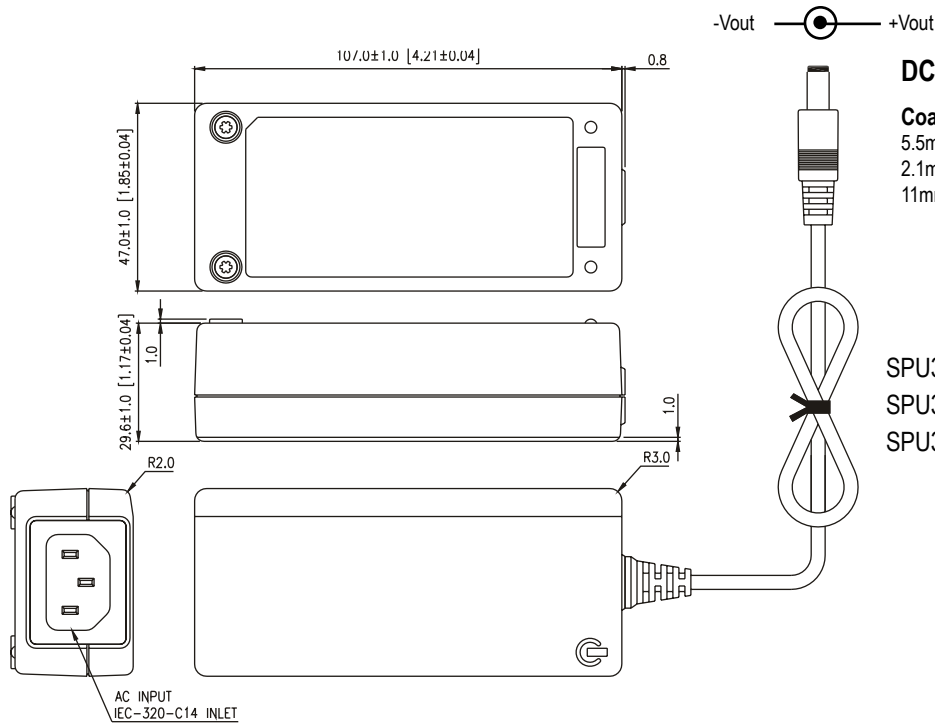
|                         |                               |
|-------------------------|-------------------------------|
| Oper. Temperature @ FL  | 0 to +70°C (See Derate Curve) |
| Storage Temperature     | -40 to +85°C                  |
| Relative Humidity       | 5% to 95%, non-cond           |
| MTBF                    | 0.1 MHrs MIL-HDBK-217F(25°C)  |
| Temperature Coefficient | ±0.04%/°C, typ                |
| Efficiency Level        | Models SPU31-104~111: Level V |

### DERATE CURVE



All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

### MECHANICAL DIMENSIONS



### DC OUTPUT CONNECTIONS

#### Coaxial Plug

5.5mm outer diameter  
2.1mm inner diameter, female  
11mm length, center "+"

SPU31-102~105 Output Cord Length 48"16AWG

SPU31-106~108 Output Cord Length 48"18AWG

SPU31-109~111 Output Cord Length 72"18AWG