



- Wide Input Voltage 90 to 260 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single Output
- Class I
- Over Voltage and Over Load Protection
- DoE 6
- Active Power Factor Correction
- Optional ON/OFF Switch



Model Number	Output Voltage	Output Amps	Output Connector	Total Regulation
SPU131-105(S)	12 Volts(DC)	10.84 Amps	5 Pin DIN	±5%
SPU131-106(S)	15 Volts(DC)	8.66 Amps	5 Pin DIN	±5%
SPU131-107(S)	18 Volts(DC)	7.22 Amps	5 Pin DIN	±5%
SPU131-108(S)	24 Volts(DC)	5.42 Amps	5 Pin DIN	±3%
SPU131-109(S)	30 Volts(DC)	4.33 Amps	2.1mm Coax.	±3%
SPU131-110(S)	36 Volts(DC)	3.61 Amps	2.1mm Coax.	±3%
SPU131-111(S)	48 Volts(DC)	2.70 Amps	2.1mm Coax.	±3%
SPU131-112(S)	55 Volts(DC)	2.36 Amps	2.1mm Coax.	±3%

Note: "(S)" Denotes that there is an ON/OFF Switch option available for the SPU131 family of products. To order an SPU131 product with the optional ON/OFF Switch, simply add an "S" to the end of the standard Part Number. For example SPU131-105S.

130 Watt Desktop Switching Power Supplies

SPU131 series

INPUT SPECIFICATIONS

Input Voltage Range	90-260 VAC (100-240 VAC nom.)
Frequency Range	47-63 Hz
Input Current @ FL	Low Line 1.58 Amps @ 100VAC High Line 0.64 Amps @ 240VAC
Inrush Current @ FL (Cold Start)	Low Line 30 Amps max @ 100VAC High Line 50 Amps max @ 240VAC
Leakage Current @ FL	0.75 mA max. @ 240VAC/60 Hz
Power Factor @ FL	0.95 min. @ 240VAC
No Load Power Consumption	0.21W @ 230VAC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Charts
Load Regulation (Note 4, p3)	± 5%, max. @ 230VAC 10~90% Load Change
Line Regulation @ FL	± 1% max. (Note 3, p3)
Transient Response	4mS @ 110VAC
Ripple/Noise @ FL	100mV pk-pk (Note 5, p3)
Start Up @ FL	2S max. @ 100~240VAC
Hold Up Time @ FL	16mS min @ 100VAC
Over Current Protection	110~150% Auto-Recovery
Over Voltage Protection	112~132%
Short Circuit	Auto-Recovery

GENERAL SPECIFICATIONS

Isolation	4242 Volts(DC) Input-Output 3232 Volts(DC) Input-Ground
Efficiency @ FL @230VAC	88% typ.
Safety	UL/c-UL(UL 60950-1:2nd Edition)

PHYSICAL SPECIFICATIONS

Size	189 x 89.5 x 45.5 mm 7.44" x 3.52" x 1.79"
Weight	27.44-28.22 oz (778-800g)
Flammability Rating	UL94V-1

ENVIRONMENTAL SPECIFICATIONS

Cooling	Free Air Convection
Oper. Temperature	0 to +70°C (See derate curve p3)
Storage Temperature	-40 to +85°C
Operating/Storage Humidity	0% to 95% RH
MTBF	0.1 Mhrs MIL-HDBK-217F (25°C)
Temperature Coefficient	±0.04%/°C, 100~240VAC
Isolation Resistance	50 MΩ / 500VDC Test Voltage
Efficiency Level	VI
EMC	Compliance to EN55022 (CISPR22), EN61000-3-2, -3 Class B
Surge Voltage	2kV
ESD IEC61000-4-2	Air: 8kV, Contact: 6kV
Operating Altitude (Elevation)	3000m
Vibration	5G, 10~500Hz, 10 min./cycle, 60 min. along each axis, X, Y, Z

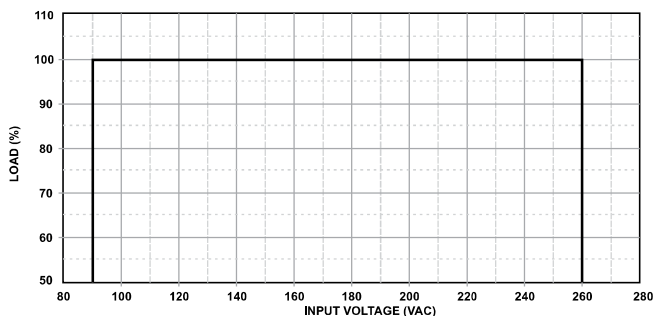
All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

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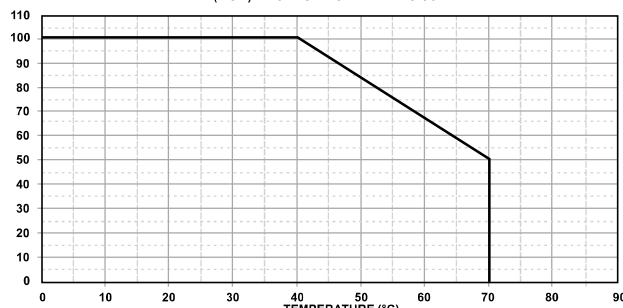
SPU131 series

SPECIFICATION NOTE :

1. Output can provide up to peak load when the power supply starts up. Continuous staying in more than rated load is not allowed.
2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
3. Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
4. Load regulation is defined by changing $\pm 40\%$ of measured output load from 60% rated load.
5. Ripple & noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
6. Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.
7. Efficiency is measured at rated load, and nominal line.
8. The specifics for testing the energy efficiency of this Series are outlined in a separate document titled "Test Method for Calculating the Energy Efficiency of Single-Voltage Interchangeable AC-DC and AC-AC Power Supplies (August 11, 2004)," which is available on the ENERGY STAR Website.

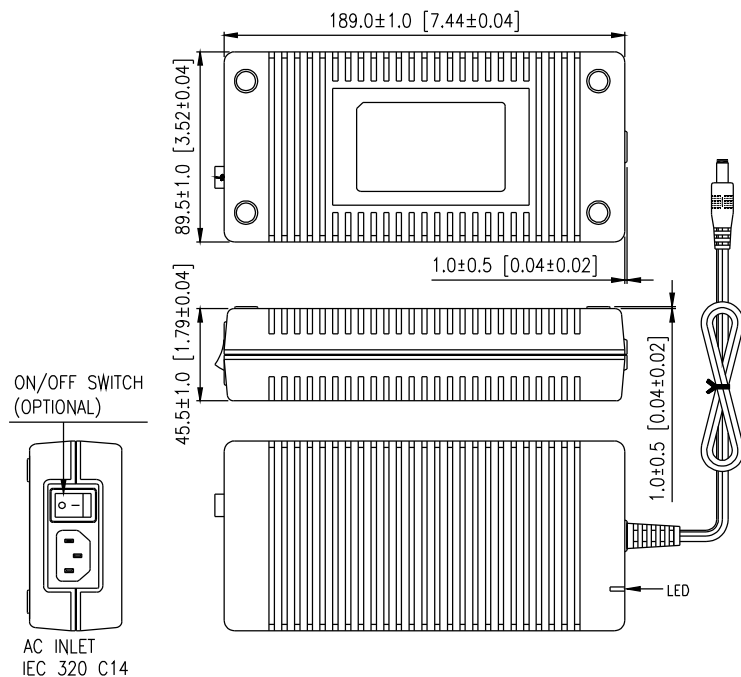


(FIG.1) INPUT VOLTAGE DERATING CURVE



(FIG.2) TEMPERATURE DERATING CURVE

MECHANICAL DIMENSIONS: (UNIT: mm)



5 Pin DIN



1. COM
 2. COM
 3. Vout
 4. COM
 5. Vout
- Shell = GND

COAXIAL PLUG:

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

-Vout  +Vout

Output cord construction:

- SPU131-105~106 Output Cord 16AWG*5C, 4'
- SPU131-107~108 Output Cord 16AWG*4C, 4'
- SPU131-109~110 Output Cord 16AWG*2C, 4'
- SPU131-111~112 Output Cord 18AWG*2C, 4'

Modifying the output cord construction will change efficiency and regulation specifications.