

TPSPU100 SERIES

100W Desk Top Type
I.T.E. Power Supplies

Features:

- Wide Operating Voltage 90 to 260 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Over Voltage Protection
- Active Power Factor Correction
- Single Output
- Energy Star 2.0, Efficiency level V
- Class I
- 2 year warranty



Electrical Characteristics:

| | | | |
|-------|--|--|------------------|
| Vin | Safety Approvals Input Voltage Range | | 100~240VAC |
| | Operate Voltage Range | | 90~260VAC |
| fin | Input Frequency | | 47~63Hz |
| PF | Power Factor Correction | Io=Full load, Vin=240VAC | 0.95~1 |
| 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 | 1.2A |
| | Input Current (High Line) | Io=Full load, Vin=240VAC | 0.5A |
| Ir | Low Line Inrush Current | Io=Full load, 25°C, Cool start, Vin=115VAC | 50A (max.) |
| | High Line Inrush Current | Io=Full load, 25°C, Cool start, Vin=230VAC | 100A (max.) |
| Eff | Efficiency | Io=Full Load, Vin=230VAC | 87~90% |
| 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 | 4mS (max.) |
| Th | Hold-Up Time | Io=Full Load, Vin=110VAC | 16mS (min.) |
| Ts | Start Up Time | Io=Full Load, Vin=100VAC | 2S (max.) |
| Vp-p | Ripple & Noise(Peak to Peak) | Full Load, Vin=90VAC | 1% (max.) |
| Ilk | Safety Ground Leakage Current | Vin=240VAC/60Hz | 0.25mA (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.) |
| Vpg | Dielectric Withstanding Voltage for Primary to PE | Primary to PE | 2652VDC (min.) |
| Ris | Isolation Resistance | Test Voltage=500VDC | 50MΩ (min.) |

Application:

- Printer
- Industrial PC
- Power Tools
- DC Motor
- AV Equipment
- LED Lighting

Safety Approvals:



UL/c-UL(UL 60950-1:2nd Edition)
TUV/GS(EN 60950-1:2nd Edition)

The TPSPU100-108 is available on KC mark (Korea Certification).

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 | |



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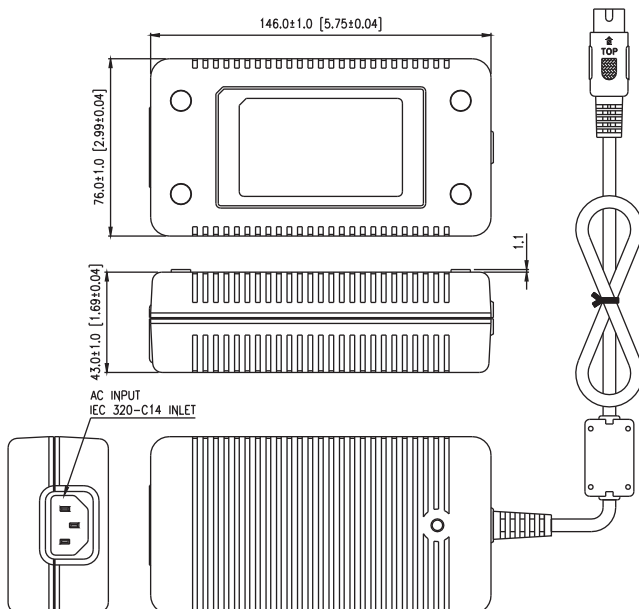
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Output Voltage And Current Rating Chart (Single Output) :

| Model Number | Output Voltage | Output Current | Total Regulation | Max. Output Power | Pno (max.) |
|--------------|----------------|----------------|------------------|-------------------|------------|
| TPSPU100-105 | 11 ~ 13 VDC | 9.09~7.69 A | 5% | 100W | 0.5W |
| TPSPU100-106 | 13 ~ 16 VDC | 7.69~6.25 A | 4% | 100W | 0.5W |
| TPSPU100-107 | 16 ~ 21 VDC | 6.25~4.76 A | 4% | 100W | 0.5W |
| TPSPU100-108 | 21 ~ 27 VDC | 4.76~3.70 A | 4% | 100W | 0.5W |
| TPSPU100-109 | 27 ~ 33 VDC | 3.70~3.03 A | 3% | 100W | 0.5W |
| TPSPU100-110 | 33 ~ 40 VDC | 3.03~2.50 A | 3% | 100W | 0.5W |
| TPSPU100-111 | 40 ~ 48 VDC | 2.50~2.08 A | 3% | 100W | 0.5W |

This series is required to use AWG#18×3C+ AWG#16×3C/4FT output cable.
The regulation will be changed by modified output cable.

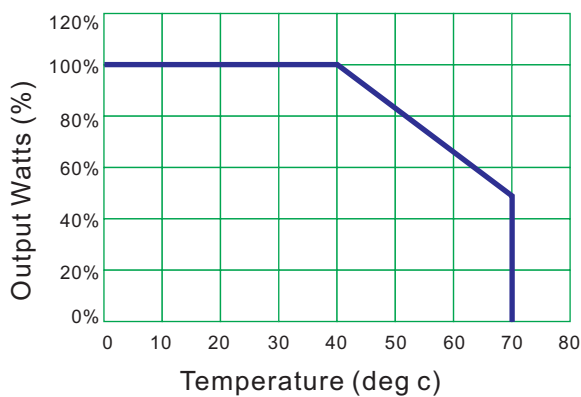
Mechanical Specifications:



Note:

1. Dimensions are shown in mm.
2. Weight: 490~670gs 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

