

STDA16A SERIES
15W Desktop Power Supply for IT Equipment


- Wide Operating Voltage 90 to 264 VAC, 47 to 63Hz
- IEC-320-C14 input inlet
- Optional Output Connector (See appendix)
- Single Output
- Class I system
- DoE VI, CoC v5 (tier 2) (except STDA16A-S01)

3 Year Warranty

Approvals:

Single Output

| Part Number | Range of Fixed Voltage | Max. Output Current | Total Regulation | Max Output |
|---------------|------------------------|---------------------|------------------|------------|
| * STDA16A-S01 | 3 ~ 5 VDC | 2.50 A max | ±5% | 12W |
| STDA16A-S02 | 5 ~ 5.99 VDC | 2.50 ~ 2.00 A | ±5% | 12W |
| STDA16A-S03 | 6 ~ 8 VDC | 2.00 ~ 1.50 A | ±5% | 12W |
| STDA16A-S04 | 8 ~ 11 VDC | 1.87 ~ 1.36 A | ±5% | 15W |
| STDA16A-S05 | 11 ~ 13 VDC | 1.36 ~ 1.15 A | ±5% | 15W |
| STDA16A-S06 | 13 ~ 16 VDC | 1.15 ~ 0.94 A | ±5% | 15W |
| STDA16A-S07 | 16 ~ 21 VDC | 0.94 ~ 0.72 A | ±5% | 15W |
| STDA16A-S08 | 21 ~ 27 VDC | 0.72 ~ 0.55 A | ±5% | 15W |
| STDA16A-S09 | 27 ~ 33 VDC | 0.55 ~ 0.45 A | ±5% | 15W |
| STDA16A-S10 | 33 ~ 40 VDC | 0.45 ~ 0.37 A | ±3% | 15W |
| STDA16A-S11 | 40 ~ 48 VDC | 0.37 ~ 0.31 A | ±3% | 15W |

STDA16A-S01 is required to use AWG#16/4FT output cable.

STDA16A-S02~S07 are required to use AWG#18/4FT output cable.

STDA16A-S08~S11 are required to use AWG#20/4FT output cable.

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

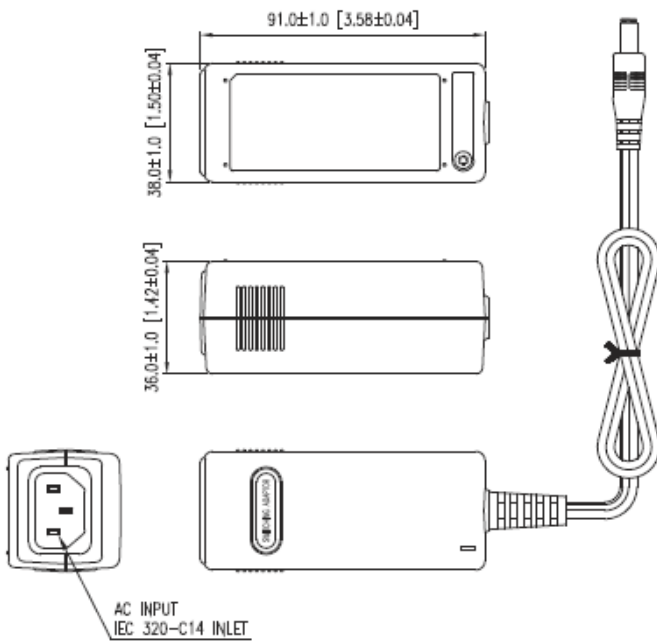
Electrical Characteristics

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|---------------------------------------|--|------|------|-------|-------|
| Safety Approvals Input Voltage Range | Safety Approval & Specification in Label | 100 | | 240 | VAC |
| Operate Voltage Range | | 90 | | 264 | VAC |
| Input Frequency | Sine wave | 47 | | 63 | Hz |
| Output Power Range | See Rating Chart | | | 15 | W |
| Low Line Input Current | Full load, Vin=100VAC | | 0.4 | | A |
| High Line Input Current | Full load, Vin=240VAC | | 0.16 | | A |
| Low Line Input Inrush Current | Full load, 25°C, Cool start, Vin=100VAC | 35 | | 45 | A |
| High Line Input Inrush Current | Full load, 25°C, Cool start, Vin=240VAC | 70 | | 90 | A |
| Safety Ground Leakage Current | Vin=240VAC, Fi=60Hz | | | 0.75 | mA |
| Efficiency | Full Load, Vin=230VAC | 69 | | 86 | % |
| Line Regulation | Full Load, Vin=100~120VAC | 0.5 | | 1 | % |
| Load Regulation | Vin=230VAC, 10~90% Load Change at Condition | 3 | | 7 | % |
| Over Load Protection | Nil. But, Output protected to short circuit conditions | | | | |
| Time of Transient Response | Io=Full Load to Half Load, Vin=110VAC | | | 4 | ms |
| Hold-Up Time | Full Load, Vin=100VAC | | | 8 | ms |
| Start Up Time | Full Load, Vin=100~240VAC | | | 2 | s |
| Ripple & Noise (Peak to Peak) | | | | 1 | % |
| Temperature Coefficient | Full Load, Vin=100~240VAC | | | ±0.04 | %/°C |
| Dielectric Withstanding Voltage(P-S) | Primary to Secondary | | | 4242 | VDC |
| Dielectric Withstanding Voltage (P-G) | Primary to PE | | | 2121 | VDC |
| EMC Emission | Compliance to EN55022(CISPR22) | | | B | Class |

Environmental

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|--------------------------------|--|------|------|------|------|
| Operating Temperature | Derate linearly from 100% load at 40 to 50% load at 70 | 0 | | 70 | °C |
| Storage Temperature | 10~95% RH | -40 | | 85 | °C |
| Operating Humidity | non-condensing | 0 | | 95% | RH |
| Storage Humidity | | 0 | | 95% | RH |
| Electro Static Discharge | Air Discharge, IEC61000-4-2 | | | 8 | KV |
| Electro Static Discharge | Contact Discharge, IEC61000-4-2 | | | 4 | KV |
| Mean Time Between Failure | Operation Temperature at 25 , Calculated per MIL-HDBK-217F | 100K | | | h |
| Operating Altitude (Elevation) | All Condition | | | 2000 | m |
| Vibration | 10~500Hz,10min./1cycle, 60min.each along X, Y, Z axes | | | 5 | G |
| Surge Voltage | Line-Neutral | | | 1 | KV |
| Surge Voltage | Line-PE & Neutral-PE | | | 2 | KV |

Mechanical Diagram and Derating Chart



Note:

1. Dimensions are shown in mm & inch
2. Weight: 165gs approx.
(Exclude the input cord)
3. Optional output connector.

Derating Chart:

