

STDA100 SERIES

100W Desktop Power Supply for I.T. Equipment

- Wide Operating Voltage 90 to 260 VAC, 47 to 63Hz
- IEC-320-C14 input inlet
- Single Output
- Crowbar Mode Over Voltage Protection
- Active Power Factor Correction
- Energy Efficiency DoE VI

3 Year Warranty

Approvals:

Single Output

Product Number	Output Voltage	Max. Output Current	Total Regulation	Max. Output Power
STDA100-S05	11 ~ 13 VDC	9.09 ~ 7.69 A	±5%	100W
STDA100-S06	13 ~ 16 VDC	7.69 ~ 6.25 A	±4%	100W
STDA100-S07	16 ~ 21 VDC	6.25 ~ 4.76 A	±4%	100W
STDA100-S08	21 ~ 27 VDC	4.76 ~ 3.70 A	±4%	100W
STDA100-S09	27 ~ 33 VDC	3.70 ~ 3.03 A	±3%	100W
STDA100-S10	33 ~ 40 VDC	3.03 ~ 2.50 A	±3%	100W
STDA100-S11	40 ~ 48 VDC	2.50 ~ 2.08 A	±3%	100W

This series is required to use AWG#16x5C/4FT output cable.

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

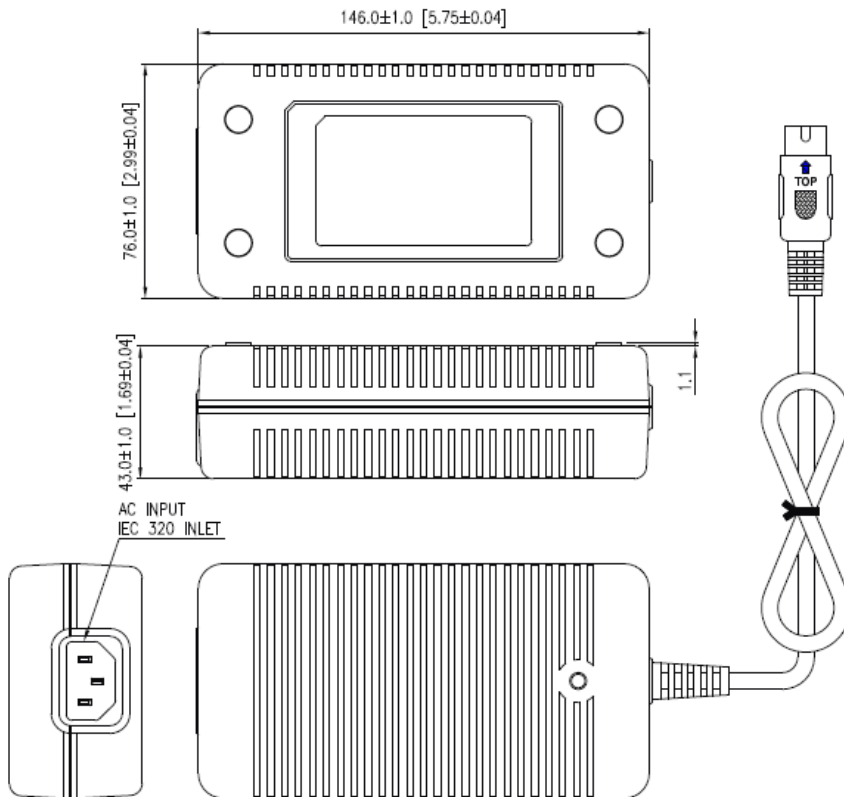
Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Safety Approvals Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC
Operate Voltage Range		90		260	VAC
Input Frequency	Sine wave	47		63	Hz
Power Factor Correction	Lo=Full load, Vin=240VAC	0.95		1	
Output Power Range	See Rating Chart			100	W
Low Line Input Current	Full load, Vin=100VAC		1.2		A
High Line Input Current	Full load, Vin=240VAC		0.5		A
Low Line Input Inrush Current	Full load, 25°C, Cool start, Vin=100VAC			50	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC			120	A
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.75	mA
Efficiency	Full Load, Vin=230VAC	88		89	%
Line Regulation	Full Load, Vin=100~120VAC			1	%
Load Regulation	Vin=230VAC, 10~90% Load Change at Condition	3		5	%
Over Voltage Protection	Over Voltage Protection	112		132	%
Over Load Protection	Recovers automatically after fault conditions is removed	110		150	%
Time of Transient Response	Io=Full Load to Half Load, Vin=110VAC			4	ms
Hold-Up Time	Full Load, Vin=100VAC			16	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

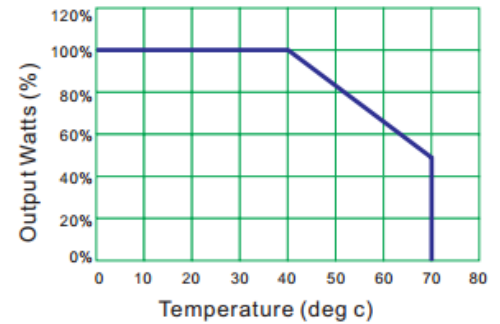
Mechanical Diagram and Technical Chart



Note:

1. Dimensions are shown in mm & inch
2. Weight: approx. 460-670gs (Exclude the input cord)
3. Optional output connector.

Derating Chart:



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