

**SMDA16A SERIES**

**15W Desktop Power Supply for Medical Equipment**

- Wide Operating Voltage, 80 to 275 VAC, 47 to 63 Hz
- IEC-320-C14 Input Inlet
- Single Output
- Crowbar Mode Over Voltage Protection
- Input to Output : 2MOPP
- High ESD immunity
- Suitable professional healthcare facility

**5 Year Warranty**

Approvals:

**Single Output**

Model Number	Output Voltage	Max. Output Current	Total Regulation	Maximum Output Power
SMDA16A-S02	5 ~ 5.99 VDC	2.60 ~ 2.16 A	±5%	13W
SMDA16A-S03	6 ~ 8 VDC	2.16 ~ 1.62 A	±5%	13W
SMDA16A-S04	8 ~ 11 VDC	1.87 ~ 1.36 A	±5%	15W
SMDA16A-S05	11 ~ 13 VDC	1.36 ~ 1.15 A	±5%	15W
SMDA16A-S06	13 ~ 16 VDC	1.15 ~ 0.93 A	±5%	15W
SMDA16A-S07	16 ~ 21 VDC	0.93 ~ 0.71 A	±5%	15W
SMDA16A-S08	21 ~ 27 VDC	0.71 ~ 0.55 A	±3%	15W
SMDA16A-S09	27 ~ 33 VDC	0.55 ~ 0.45 A	±5%	15W
SMDA16A-S10	33 ~ 36 VDC	0.45 ~ 0.41 A	±5%	15W

SMDA16A- S02, S03 are required to use AWG#16 / 4FT output cable.

SMDA16A- S05~S10 are required to use AWG#18 / 4FT output cable.

The regulation and efficiency are not guaranteed if changes the output cable

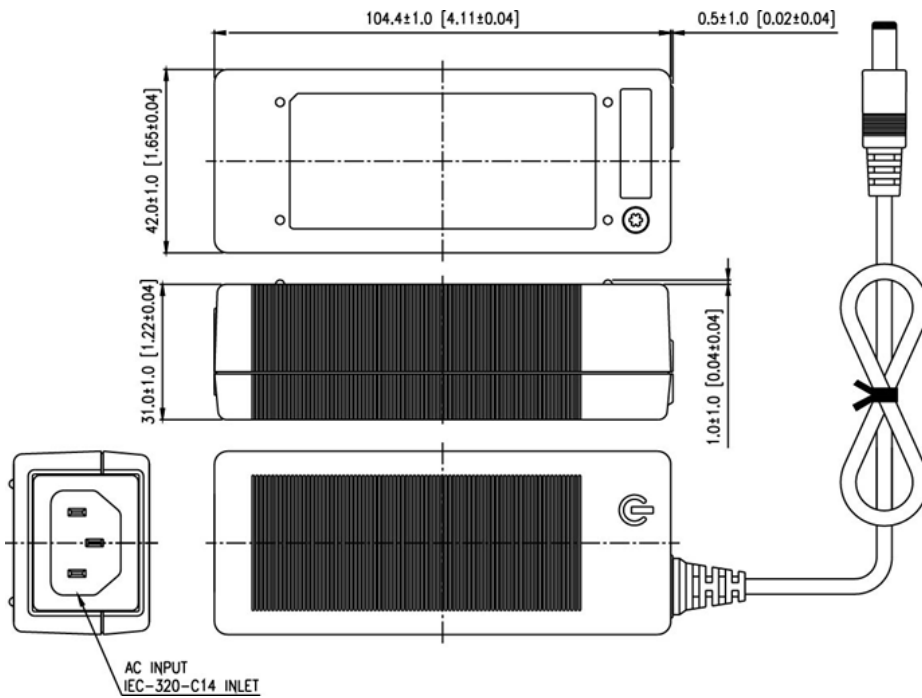
**Electrical Characteristics**

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Safety Approvals Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC
Operate Voltage Range	Derate linearly from 100% load at 90VAC to 80% load at 80VAC	80		275	VAC
Input Frequency	Sine wave	47		63	Hz
Output Power Range	See Rating Chart			15	W
Low Line Input Current	Full load, Vin=100VAC	0.29	0.32		A
High Line Input Current	Full load, Vin=240VAC	0.17	0.19		A
Low Line Input Inrush Current	Full load, 25°C, Cool start, Vin=100VAC			23	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC			55	A
Safety Ground Leakage Current	Vin=264VAC, Fi=63Hz			0.15	mA
Efficiency	Full Load, Vin=230VAC	75		85	%
Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC	0.5		1	%
Over Voltage Protection		112		132	%
Over Load Protection	Recovers automatically after fault condition 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			10	ms
Start Up Time	Full Load, Vin=100~240VAC			2	s
Insulation Resistance		50			MΩ
Ripple & Noise (Peak to Peak)				1	%
Temperature Coefficient	All output			±0.04	%/°C
Dielectric Withstanding Voltage(P-S)	Primary to Secondary, limit current<10mA			4000	VAC
Dielectric Withstanding Voltage(P-G)	Primary to PE, limit current<10mA			1500	VAC
EMC Emission	Compliance to EN55011(CISPR11), EN60601-1-2	B			Class

### Environmental

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Derate linearly from 100% load at 50 to 50% load at 70	-10		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			15	KV
Electro Static Discharge	Contact Discharge, IEC61000-4-2			8	KV
Mean Time Between Failure	Operation Temperature at 25 J, Calculated per MIL-HDBK-217F	200K			h
Operating Altitude (Elevation)	All Condition			3000	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

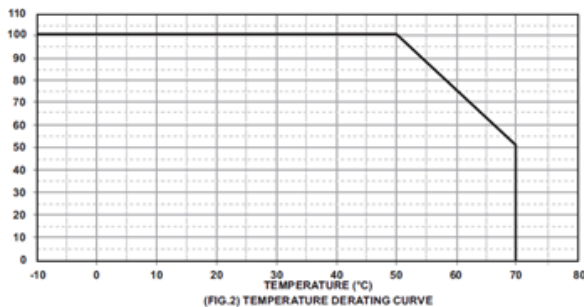
### Mechanical Diagram



**Note:**

1. Dimensions are shown in mm & inch
2. Weight: 170gs approx. (Exclude the input cord)
3. Optional output connector.

### Derating Chart



1. Operating Temperature: -10 to 70°C
2. Derate linearly from 100% load at 50°C to 50% load at 70°C