

**SMDA51 SERIES**



**50W Desktop Power Supply for Medical Equipment**

- Wide Operating Voltage 80 to 275 VAC, 47 to 63Hz
- IEC-320-C14 input inlet
- Single to Triple Output
- Crowbar Mode Over Voltage Protection
- Input to Output : 2MOPP
- High ESD immunity
- Suitable professional healthcare facility
- Ultra low earth leakage current<0.15mA

**5 Year Warranty**

Approvals:

**Single Output**

Model Number	Output Voltage	Max. Output Current	Total Regulation	Max. Output Power
SMDA51-S01	3 ~ 5 VDC	10.0 ~ 8.00 A	±5%	40W
SMDA51-S02	5 ~ 6 VDC	8.00 ~ 6.66 A	±5%	40W
SMDA51-S03	6 ~ 8 VDC	7.00 ~ 5.25 A	±5%	42W
SMDA51-S04	8 ~ 11 VDC	5.63 ~ 4.09 A	±4%	45W
SMDA51-S05	11 ~ 13 VDC	4.09 ~ 3.46 A	±3%	45W
SMDA51-S06	13 ~ 16 VDC	3.46 ~ 2.81 A	±3%	45W
SMDA51-S07	16 ~ 21 VDC	3.12 ~ 2.38 A	±3%	50W
SMDA51-S08	21 ~ 27 VDC	2.38 ~ 1.85 A	±2%	50W
SMDA51-S09	27 ~ 33 VDC	1.85 ~ 1.51 A	±2%	50W
SMDA51-S10	33 ~ 40 VDC	1.51 ~ 1.25 A	±2%	50W
SMDA51-S11	40 ~ 50 VDC	1.25 ~ 1.00 A	±2%	50W

**Multi Output**

Part Number	Output 1				Output 2				Output 3				Max. Output Power
	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	
SMDA51-D00	+3.3V	0.5A	5A	7%	+12V	0.2A	2A	5%					40W
SMDA51-D01	+5V	0.5A	5A	5%	+12V	0.2A	2A	5%					42W
SMDA51-D02	+5V	0.5A	5A	5%	+15V	0.15A	1.5A	5%					42W
SMDA51-D03	+5V	0.5A	5A	5%	+24V	0.1A	1A	5%					42W
SMDA51-D04	+3.3V	0.5A	5A	7%	+5V	0.2A	2A	5%					26.5W
SMDA51-D09	+12V	0.3A	3A	5%					-12V	0A	1A	5%	42W
SMDA51-D10	+15V	0.2A	2A	5%					-15V	0.1A	1A	5%	42W
SMDA51-D15	+5V	0.5A	5A	5%					-24V	0.1A	1A	5%	42W
SMDA51-D16	+5.1V	0.5A	5A	5%	+7.2V	0.3A	2.6A	5%					42W
SMDA51-D17	+10.5V	0.2A	2A	5%					-10.5V	0A	2A	5%	42W
SMDA51-D18	+5V	0.5A	5A	5%					-5V	0A	2A	5%	35W
SMDA51-T00	+3.3V	0.5A	5A	7%	+12V	0.4A	2A	5%	-12V	0.1A	0.8A	5%	42W
SMDA51-T01	+5V	0.5A	5A	5%	+12V	0.2A	2A	5%	-5V	0A	0.8A	5%	42W
SMDA51-T02	+5V	0.5A	5A	5%	+12V	0.2A	2A	5%	-12V	0.1A	0.8A	5%	42W
SMDA51-T03	+5V	0.5A	5A	5%	+15V	0.4A	2A	6%	-15V	0.1A	0.8A	5%	42W
SMDA51-T04	+5V	0.5A	5A	5%	+24V	0.2A	1A	5%	-24V	0A	0.5A	5%	42W
SMDA51-T05	+5V	0.5A	5A	5%	+24V	0.1A	1A	5%	-12V	0A	0.8A	5%	42W
SMDA51-T06	+3.3V	0.5A	5A	7%	+12V	0.4A	2A	5%	-5V	0.1A	0.8A	5%	42W

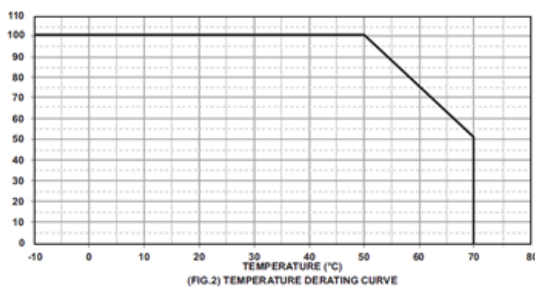
### Electrical Characteristics

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			50	W
Low Line Input Current	Full load, Vin=100VAC			1.04	A
High Line Input Current	Full load, Vin=240VAC			0.53	A
Low Line Input Inrush Current	Full load, 25°C, Cool start, Vin=100VAC			35	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC			70	A
Safety Ground Leakage Current	Vin=264VAC, Fi=63Hz			0.15	mA
Efficiency	Full Load, Vin=230VAC	68		83	%
Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC			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			16	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

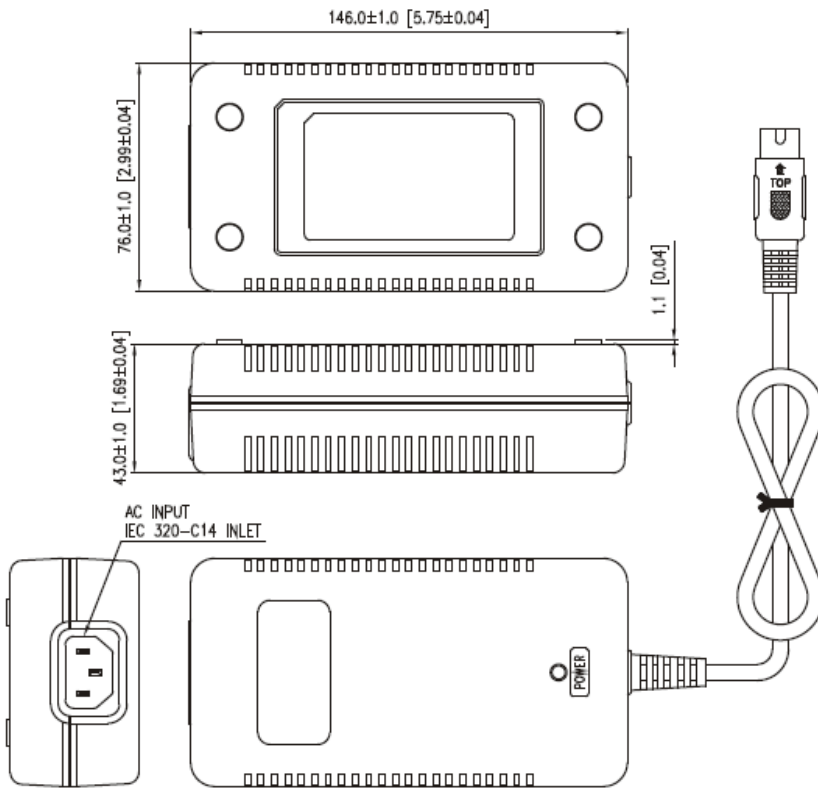
Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Derate linearly from 100% load at 50 to 50% load at 70	-10		70	°C
Storage Temperature	10~95% RH	-40		85	°C
Operating Humidity	non-condensing	0		95%	RH
Storage Humidity		0		95%	RH
Electro Static Discharge	Air Discharge, IEC61000-4-2			15	KV
Electro Static Discharge	Contact Discharge, IEC61000-4-2			8	KV
Mean Time Between Failure	Operation Temperature at 25 °C, 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

### Derating Chart



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

### Mechanical Drawing



1. Dimensions are shown in inches or mm.
2. Weight: 510-560gs approx.
3. Optional output connector