

SHDA180A SERIES

180W Desktop Power Supply for Medical Equipment



- Wide Operating Voltage 90 to 260 VAC, 47 to 63Hz
- IEC-320-C14 input inlet
- Single Output
- Crowbar Mode Over Voltage Protection
- Support Risk Management Process
- Input to Output : 2MOPP
- ON/OFF SWITCH (Optional)
- Active Power Factor Correction
- High ESD immunity
- Suitable professional healthcare facility
- Low earth leakage current<0.25mA

3 Year Warranty

Approvals: RoHS2

Single Output

Model Number	Output Voltage	Max. Output Current	Total Regulation	Maximum Output Power
SHDA180A -S05	12 VDC	14 A	±5%	168W
SHDA180A -S07	19 VDC	9.47 A	±5%	180W
SHDA180A -S08	24 VDC	7.50 A	±4%	180W
SHDA180A -S09	30 VDC	6.00 A	±3%	180W
SHDA180A -S10	33 VDC	5.455 A	±3%	180W
SHDA180A -S11	48 VDC	3.75 A	±3%	180W

Selected output connectors and wire, please refer to Appendix.
 This series is required to use AWG#16/5C/4FT output cable.
 The regulation and efficiency will be changed by modified output cable.

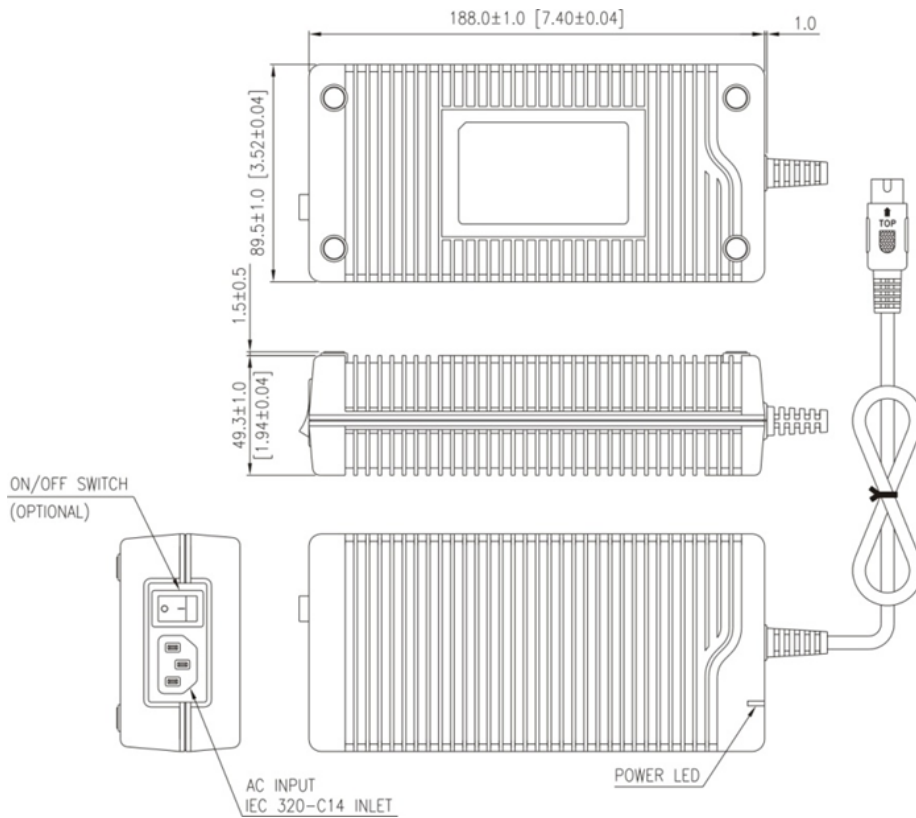
Electrical Characteristics

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		0.95		1	
Output Power Range	See Rating Chart			180	W
Low Line Input Current	Full load, Vin=100VAC			2.2	A
High Line Input Current	Full load, Vin=240VAC			0.9	A
Low Line Input Inrush Current	Full load, 25°C, Cool start, Vin=100VAC			60	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC			120	A
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.25	mA
Efficiency	Full Load, Vin=230VAC	89		93	%
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=110VAC			20	ms
Start Up Time	Full Load, Vin=100~240VAC			2	s
Insulation Resistance	Primary to Secondary, 500 VDC, 25°C/ 70%RH	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 40 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

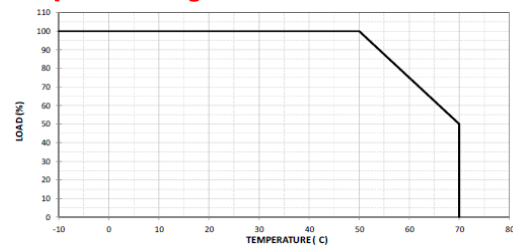
Mechanical Diagram and Technical Chart



Note:

1. Dimensions are shown in mm.
2. Weight: 894~952g approx.
3. This series is required to use AWG#16/5C/4FT output cable.
4. The regulation and efficiency will be changed by modified output cable.

Output Derating Curve



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