

SADA20A SERIES
20W Desktop Power Supply for Industrial Equipment


- Wide Operating Voltage 80 to 275 VAC, 47 to 63Hz
- IEC-320-C14 Input Inlet
- Optional Output Connector (See appendix)
- Single Output
- Energy Efficiency DoE VI
- **Operating Temperature: -40 ~ +70°C**

5 Year Warranty

Approvals:

Single Output

Part Number	Output Voltage	Max. Output Current	Total Regulation	Maximum Output Power
SADA20A -S02	5 ~ 5.99 VDC	3.00 ~ 2.50 A	±5%	15W
SADA20A -S03	6.5 ~ 8 VDC	2.30 ~ 1.87 A	±5%	15W
SADA20A -S04	8 ~ 11 VDC	2.50 ~ 1.81 A	±5%	20W
SADA20A -S05	11 ~ 13 VDC	1.81 ~ 1.53 A	±5%	20W
SADA20A -S06	13 ~ 16 VDC	1.53 ~ 1.25 A	±5%	20W
SADA20A -S07	16 ~ 21 VDC	1.25 ~ 0.95 A	±4%	20W
SADA20A -S08	21 ~ 27 VDC	0.95 ~ 0.74 A	±4%	20W
SADA20A -S09	27 ~ 33 VDC	0.74 ~ 0.60 A	±4%	20W
SADA20A -S10	33 ~ 40 VDC	0.60 ~ 0.50 A	±4%	20W
SADA20A -S11	40 ~ 50 VDC	0.50 ~ 0.40A	±3%	20W

SADA20A-S02~S07 are required to use AWG#18/4FT output cable.
 SADA20A-S08~S11 are required to use AWG#20/4FT output cable.
 The regulation will be changed by modified output cable.

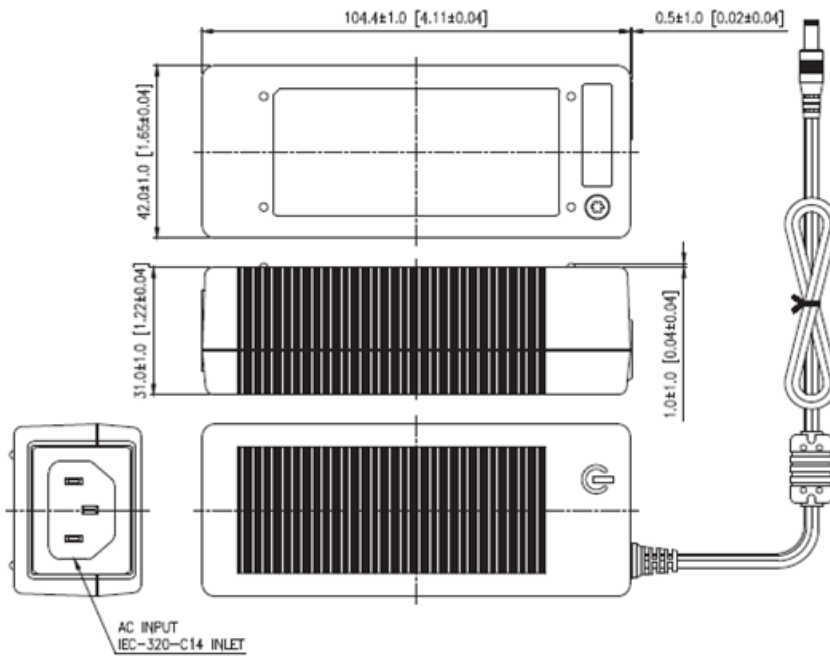
Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Safety Approvals Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC
Operate Voltage Range	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			20	W
Low Line Input Current	Full load, Vin=100VAC		0.5		A
High Line Input Current	Full load, Vin=240VAC		0.2		A
Low Line Input Inrush Current	Full load, 25°C, Cool start, Vin=100VAC	25		50	A
High Line Input Inrush Current	Full load, 25°C, Cool start, Vin=240VAC	50		120	A
Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.75	mA
Efficiency	Full Load, Vin=230VAC	81.4		87	%
Line Regulation	Full Load, Vin=100~120VAC	0.5		1	%
Load Regulation	Vin=230VAC, 10~90% Load Change at Condition	3		5	%
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			3	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	-20		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

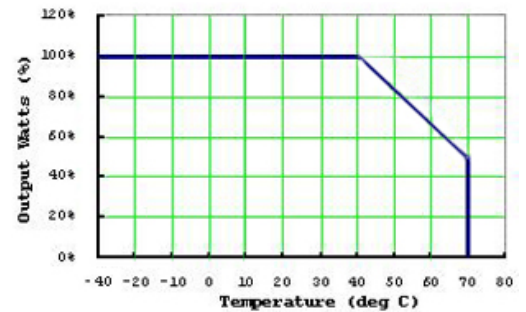
Mechanical Diagram and Technical Chart



Note:

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

Derating Chart:



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