SMDA100 SERIES

100W Desktop Power Supply for Medical Equipment



- Wide Input Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C14 input inlet
- Single to Triple Output, Output Voltage Available from 5VDC thru 40VDC
- Input Surge Current, Over Voltage , Output Voltage And Over Load protection
- Ultra-Low Leakage Current (under 0.1 mA)
- Active Power Factor Correction
- ON/OFF SWITCH (optional)
- Class I Insulation

3 Year Warranty

Approvals:

Single Output

Part Number	Output Voltage	Max. Output Current	Total Regulation	Max. Output Power
SMDA100-S02	5 ~ 6 VDC	14.00 ~ 11.66 A	5%	70W
SMDA100-S03	6 ~ 8 VDC	13.33 ~ 10.00 A	5%	80W
SMDA100-S04	8 ~ 11 VDC	11.25 ~ 8.20 A	4%	90W
SMDA100-S05	12 ~ 13 VDC	8.33 ~ 7.70 A	3%	100W
SMDA100-S06	13 ~ 16 VDC	7.70 ~ 6.30 A	3%	100W
SMDA100-S07	16 ~ 21 VDC	6.30 ~ 4.80 A	3%	100W
SMDA100-S08	21 ~ 27 VDC	4.80 ~ 3.70 A	2%	100W
SMDA100-S09	27 ~ 33 VDC	3.70 ~ 3.00 A	2%	100W
SMDA100-S10	33 ~ 40 VDC	3.00 ~ 2.50 A	2%	100W

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	
SMDA100-D00	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%					69W
SMDA100-D01	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%					80W
SMDA100-D02	+5V	1.0A	10A	5%	+15V	0.3A	3A	5%					80W
SMDA100-D03	+5V	1.0A	10A	5%	+24V	0.2A	2A	5%					80W
SMDA100-D04	+3.3V	1.0A	10A	7%	+5V	0.5A	5A	5%					55W
SMDA100-D09	+12V	0.7A	7A	5%					-12V	0A	1A	5%	80W
SMDA100-D10	+15V	0.6A	6A	5%					-15V	0A	1A	5%	80W
SMDA100-D12	+24V	0.3A	3A	5%					-24V	0A	1A	5%	80W
SMDA100-D15	+5V	1.0A	10A	5%					-24V	0A	1A	5%	74W
SMDA100-T00	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	-12V	0A	1A	5%	74W
SMDA100-T00-1	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	+12V	0A	1A	5%	74W
SMDA100-T01	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	-5V	0A	1A	5%	80W
SMDA100-T01-1	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	+5V	0A	1A	5%	80W
SMDA100-T02	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	-12V	0A	1A	5%	80W
SMDA100-T02-1	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	+12V	0A	1A	5%	80W
SMDA100-T03	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%	-15V	0A	1A	5%	80W
SMDA100-T03-1	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%	+15V	0A	1A	5%	80W
SMDA100-T04	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	-24V	0A	1A	5%	80W
SMDA100-T04-1	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	+24V	0A	1A	5%	80W
SMDA100-T05	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	-12V	0A	1A	5%	80W
SMDA100-T05-1	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	+12V	0A	1A	5%	80W
SMDA100-T06	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	-5V	0A	1A	5%	74W
SMDA100-T06-1	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	+5V	0A	1A	5%	74W
SMDA100-T08	+3.3V	1.0A	10A	7%	+5V	0.3A	3A	5%	-12V	0A	1A	5%	60W
SMDA100-T08-1	+3.3V	1.0A	10A	7%	+5V	0.3A	3A	5%	+12V	0A	1A	5%	60W

S11,D00 doesn't have PSE approvals.

The model number of 105 had been approved by BSMI, KC, FCC.

Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Input Voltage	Operating Voltage	90		260	VAC
Input Frequency		47		63	Hz
Power Factor Correction	Io=Full load, Vin=230 VAC	0.95		1	
Output Power Range	Vin= 90 to 264 VA C	0		100	W
Input Current (Low Line)	Io=Full load, Vin=115 VAC			1.25	A
Input Current (High Line)	Io=Full load, Vin= 230 VAC			0.5	A
Low Line Inrush Current	Io=Full load, 25℃, Cool start, Vin=115VAC		12	15	A
High Line Inrush Current	Io=Full load, 25℃, Cool start, Vin=230VAC		26	30	A
Efficiency	Io=Full Load, Vin=230VAC	75	83	88	%
Line Regulation	Io=Full Load		0.5	1	%
Load Regulation	Vin=230VAC		3	7	%
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
Transient Response	Io=Full Load to Half Load, Vin=100VAC			4	mS
Hold-Up Time	Io=Full Load, Vin=110VAC	16			mS
Start Up Time	Io=Full Load, Vin=100VAC	0.3	1.5	2	S
Ripple & Noise (Peak to Peak) *	Full Load, Vin=90VAC		0.5	1	%
Safety Ground Leakage Current	Io= Full Load, Vin=240VAC/60Hz			0.1	mA
Temperature Coefficient	All output	-0.04		0.04	%/°C

* **Note:** The Ripple & Noise which is under 3.3VDC at 2% max.

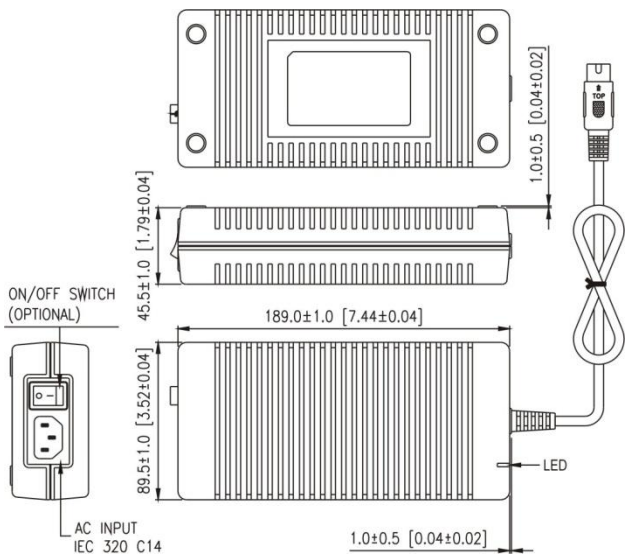
Conditions

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		0	50	70	°C
Storage Temperature		-40		85	°C
Relative Humidity		5		95	%
Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
De-rate linearly from 100% load at 50°C to 50% load at 70°C					

Approvals and Compliances

Parameter	Test Conditions	Min.	Unit
Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	5656	VDC
Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2828	VDC
Isolation Resistance	Test Voltage = 500VDC	50	MΩ
EMI requirements for CISPR-11	Vin=220VAC	B	CLASS
EMI requirements for FCC PART-18	Vin=110VAC	B	CLASS

Mechanical and PIN out



Note:

1. Dimensions are shown in inches and mm.
2. Weight: 778-800g approx.
   (Exclude the input cord)
3. Optional output connector.