

date 06/20/2025

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SERIES: SDI100-D **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- 100 W power
- universal input (90~264 Vac)
- level VI efficiency
- USB power delivery (PD 3.0)
- over voltage, over current, and short circuit protection
- IEC/EN/UL 62368-1 certified
- UL/cUL, PSE, CE safety approvals
- 0 ~ 40 °C ambient operating temperature range
- IEC320/C8 AC inlet
- custom design available







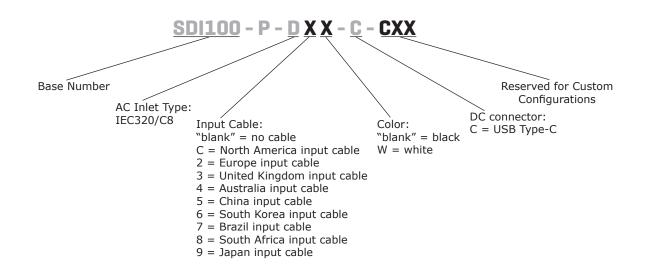




MODEL	output voltage	output current	output power	ripple and noise ¹	efficiency level ²
	(Vdc)	max (A)	max (W)	max (mVp-p)	
	5	3	15	100	VI
	9	3	27	180	VI
SDI100-D	12	3	36	240	VI
	15	3	45	300	VI
	20	5	100	360	VI

1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 µF multilayer ceramic and 47 µF low ESR electrolytic capacitors. Notes: 2. 115Vac/60Hz & 230Vac/50Hz input voltage and 25%, 50%, 75% & 100% of max output current

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current	at 230 Vac, full load			0.9	А
inrush current	at 230 Vac, full load, cold start			120	Α
leakage current	at 240 Vac/50 Hz			0.75	mA
no load power consumption				0.1	W

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation			±5		%
line regulation			±1		%
start-up time	0 ~ 90% of output voltage			3	S
rise time	5 ~ 90% of output voltage			275	ms
hold-up time		8.3			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output latch off			170	%
over current protection	continuous, auto recovery	110		150	%
short circuit protection	continuous, auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units	
isolation voltage	input to output for 1 minute, 10mA max		3,000		Vac	
safety approvals	certified to 62368-1: IEC, EN, UL UL/cUL, PSE					
EMI/EMC	EN 55032 Class B, FCC PART 15 Class B, CE					
ESD	IEC 61000-4-2: contact ±4 kV, air ±8 kV					
radiated emissions	IEC 61000-4-3: frequency 80~1000 MHz, field strength: 3V/M, 80% AM (1 kHz)					
EFT/burst	IEC 61000-4-4: 1.0 kV on input AC power p	orts				
surge	IEC 61000-4-5: line to line ±1 kV (peak)					
MTBF	as per MIL-HDBK-217F, at 25°C	100,000			hours	
RoHS	yes					

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		85	°C
operating humidity	non-condensing	10		90	%
storage humidity	non-condensing	5		90	%
altitude				5,000	m

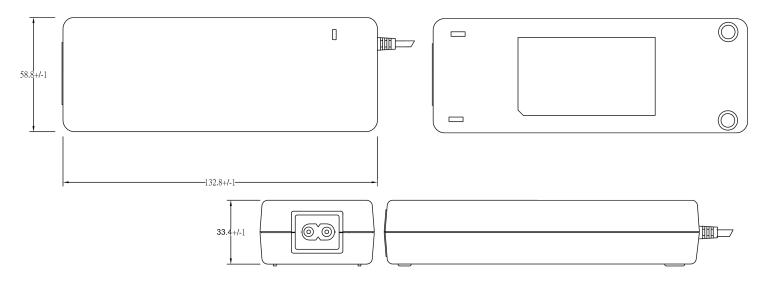
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	132.8 x 58.8 x 33.4				mm
inlet plug	IEC320/C8				
weight			600		g

MECHANICAL DRAWING

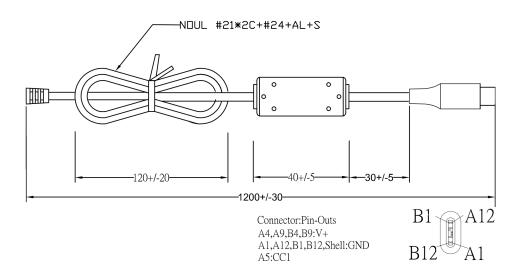
units: mm

tolerance: ±1.0 mm

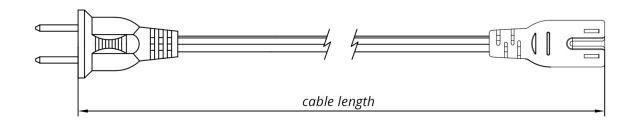


DC CORD

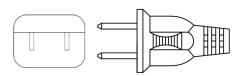
units: mm



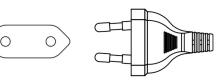
AC CORD



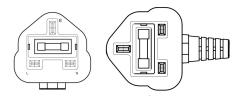
NORTH AMERICA



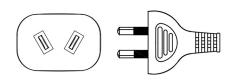
EUROPE



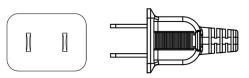
UNITED KINGDOM



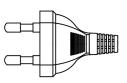
AUSTRALIA



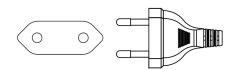
CHINA



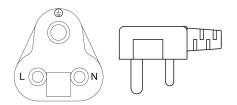
SOUTH KOREA



BRAZIL



SOUTH AFRICA



JAPAN

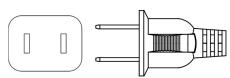


Table 1

AC INPUT	CORD LENGTH
North America	1,830 mm ±50
Europe	1,830 mm ±30
United Kingdom	1,830 mm ±50
Australia	1,830 mm ±50
China	1,830 mm ±50
South Korea	1,830 mm ±50
Brazil	1,830 mm ±50
South Africa	1,830 mm ±50
Japan	1,830 mm ±50

rev.	description	date
1.0	initial release	06/10/2025
1.01	PN key updated	06/20/2025

The revision history provided is for informational purposes only and is believed to be accurate.



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CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

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