

date 06/20/2025

page 1 of 5

SERIES: SDI100-U | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

- 100 W power
- universal input (90~264 Vac)
- USB-C DC connector
- 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/C14 AC inlet
- custom design available









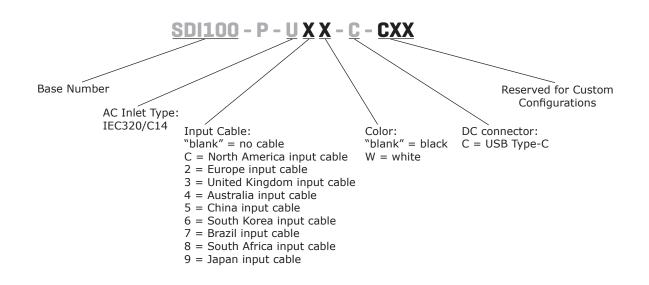


MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise ¹ max (mVp-p)	efficiency level ²
	5	3	15	100	VI
	9	3	27	180	VI
SDI100-U	12	3	36	240	VI
	15	3	45	300	VI
	20	5	100	360	VI

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	А
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, f	ield strength: 3V/M, 8	30% AM (1 kH	łz)	
EFT/burst	IEC 61000-4-4: 1.0 kV on input AC power p	oorts			
surge	IEC 61000-4-5: line to line ±1 kV (peak), li	ne to FG ±2 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

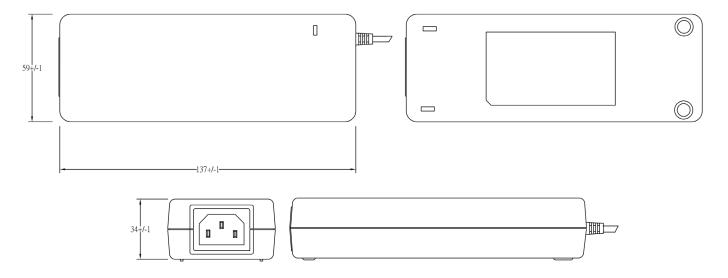
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	137 x 59 x 34				mm
inlet plug	IEC320/C14				
weight			600		g

MECHANICAL DRAWING

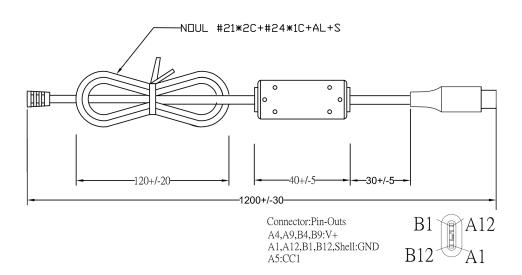
units: mm

tolerance: ±1.0 mm

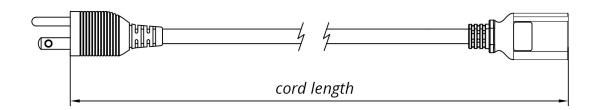


DC CORD

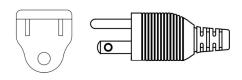
units: mm



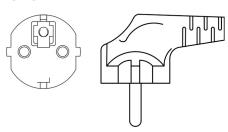
AC CORD



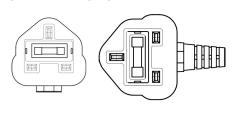
NORTH AMERICA



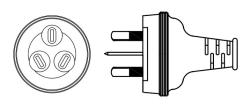
EUROPE



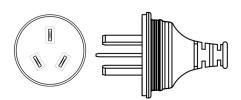
UNITED KINGDOM



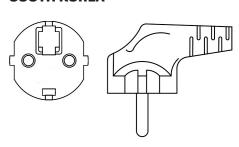
AUSTRALIA



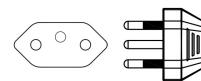
CHINA



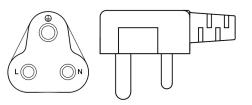
SOUTH KOREA



BRAZIL



SOUTH AFRICA



JAPAN

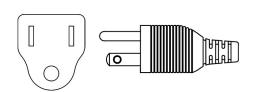


Table 1

AC INPUT	CORD LENGTH
North America	1,830 mm ±30
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

REVISION HISTORY

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.



15575 SW Sequoia Pkwy #100 Fax 503.612.2383 Portland, OR 97224 800.275.4899

Belfuse.com powersupport@belf.com

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

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.