SERIES: SDM100G-U | **DESCRIPTION:** EXTERNAL AC-DC POWER SUPPLY

FEATURES

- 100W maximum dc power
- medical grade USB-C desktop power supply
- GaN technology
- class I (C14 ac inlet)
- USB power delivery
- variable output - 5V, 9V, 12V, 15V at 3A or 20V at 5A
- certified UL/cUL / TUV / FCC / CE 60601
- 2 MOPP compliant
- customization available

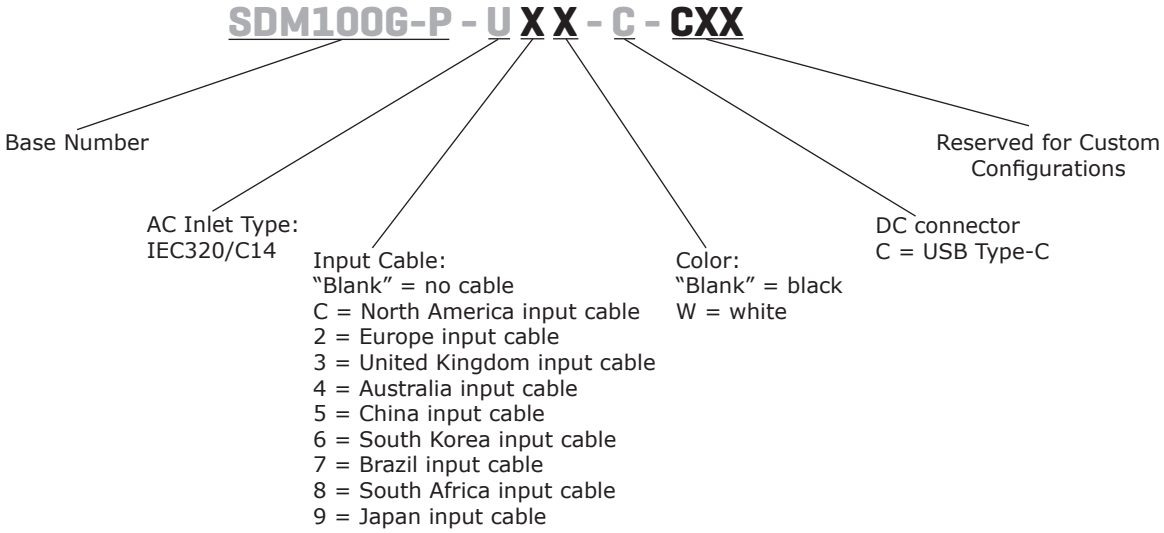


MODEL

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
SDM100G-P-U	5	3	15	100	VI
	9	3	27	180	VI
	12	3	36	240	VI
	15	3	45	300	VI
	20	5	100	360	VI

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, output terminated with 0.1 µF multilayer ceramic and 47 µF low ESR electrolytic capacitors

PART NUMBER KEY



Please read our datasheet & drawing disclaimer here.

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current	at 115 Vac, full load at 230 Vac, full load			2.0 1.0	A A
inrush current	at 110 Vac, full load, cold start at 230 Vac, full load, cold start			60 120	A A
leakage current	at 240 Vac / 50 Hz			0.25	mA
no load power consumption				0.1	W

OUTPUT

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

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output shut-down, latch off			170	%
over current protection	continuous, auto recovery	110		160	%
short-circuit protection	continuous, auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10mA for 1 minute		4,000		Vac
safety approvals	certified to 60601: IEC, UL UL/cUL, TUV, UKCA, CE				
EMI/EMC	EN 55011 Class B, FCC Part 15 Class B				
ESD	IEC 61000-4-2 contact: ±8 kV, air: ±15 kV				
radiated & conducted emissions	IEC 61000-4-3 frequency: 80~2700 MHz, field strength: 10 V/M, 80% AM (1KHz)				
EFT/burst	IEC 61000-4-4 ±2 kV on input ac power ports				
surge	IEC 61000-4-5 line to line ±1 kV (peak)				
radiated immunity	IEC 61000-4-6 0.15 ~ 30MHz field strength 3V/ M, 80% AM (1KHz)				
conducted immunity	IEC 61000-4-6 ISM bands field strength 6V/ M, 80% AM (1KHz)				
PFMF	IEC 61000-4-8 30 A/m				
MTBF	as per MIL-HDBK-217F at 25°C	100,000			hours
RoHS	yes				

ENVIRONMENTAL

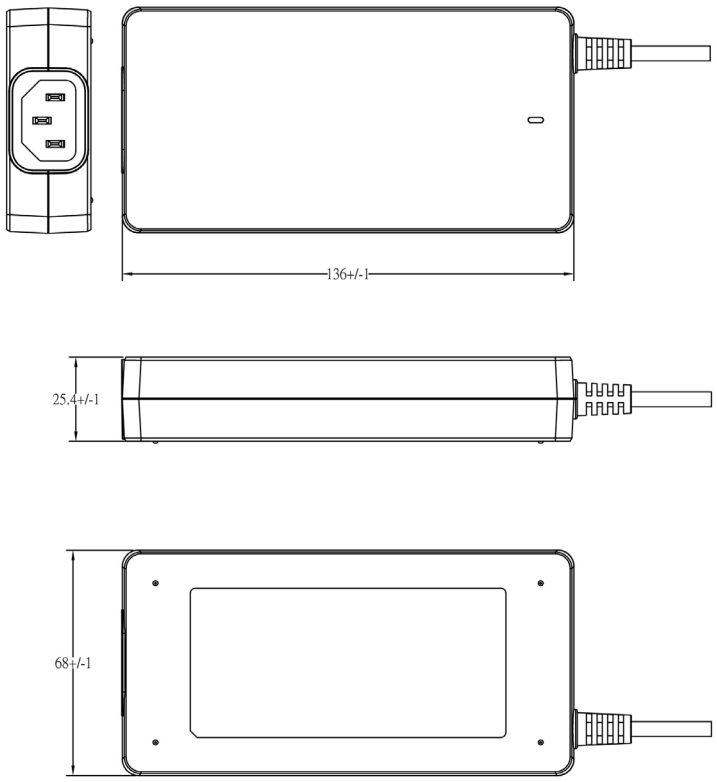
parameter	conditions/description	min	typ	max	units
operating temperature		-20		40	°C
storage temperature		-20		85	°C
operating humidity		10		90	%
storage humidity		5		90	%
altitude			5,000		m

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	136.0 (L) x 68.0 x (W) x 25.4 (H)				mm
inlet plug	IEC320/C14				
weight			500		g

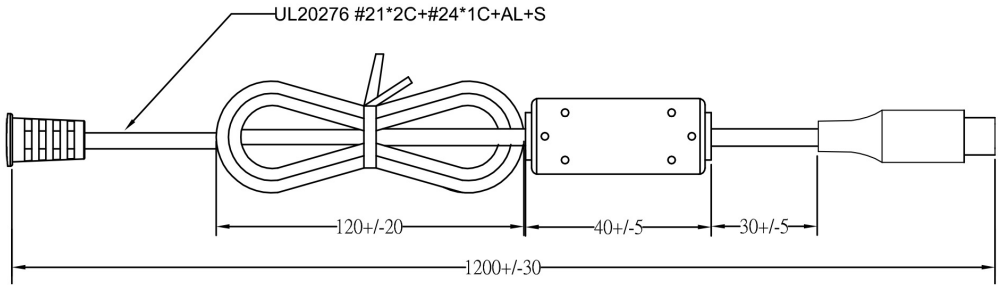
MECHANICAL DRAWING

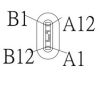
units: mm
tolerance: ±1.0



DC CORD

units: mm

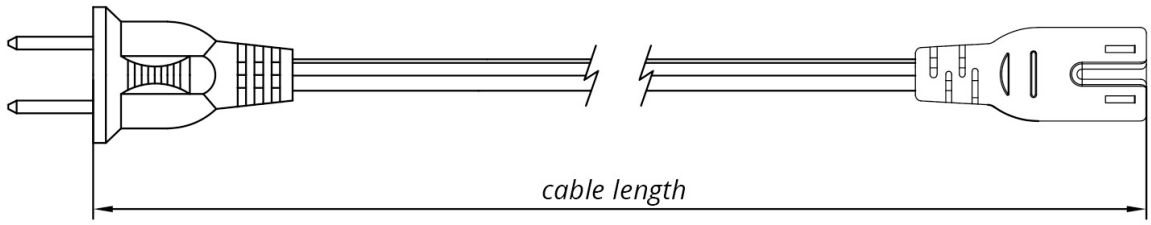




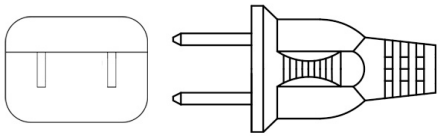
Connector:Pin-Outs
A4,A9,B4,B9:V+
A1,A12,B1,B12,Shell:GND
A5:CC1

Cable: 20276 #21 x 2C + #24 x 1C + AL + S
Length: 1200 mm
Connector: USB-C
Color: Black

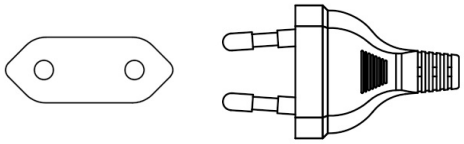
AC CORD



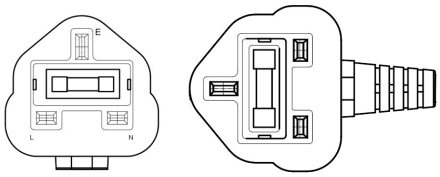
NORTH AMERICA



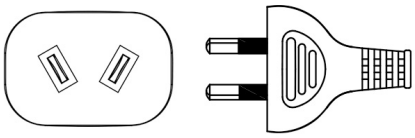
EUROPE



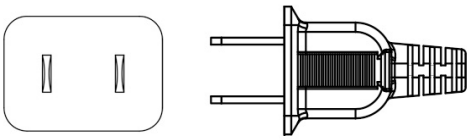
UNITED KINGDOM



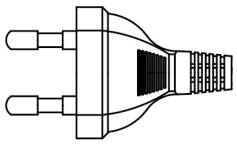
AUSTRALIA



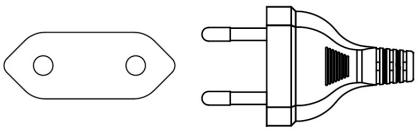
CHINA



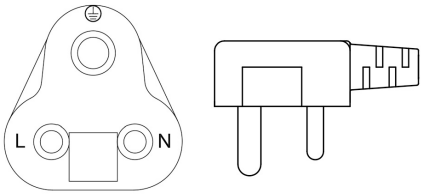
SOUTH KOREA



BRAZIL



SOUTH AFRICA



JAPAN

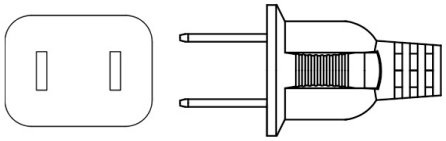


Table 1

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

REVISION HISTORY

rev.	description	date
1.0	initial release	11/13/2025
1.01	features updated	04/02/2026

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

CUI INC
a bel group

15575 SW Sequoia Pkwy #100
Portland, OR 97224
800.275.4899

Fax 503.612.2383
Belfuse.com
powersupport@belf.com

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

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