

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

FEATURES

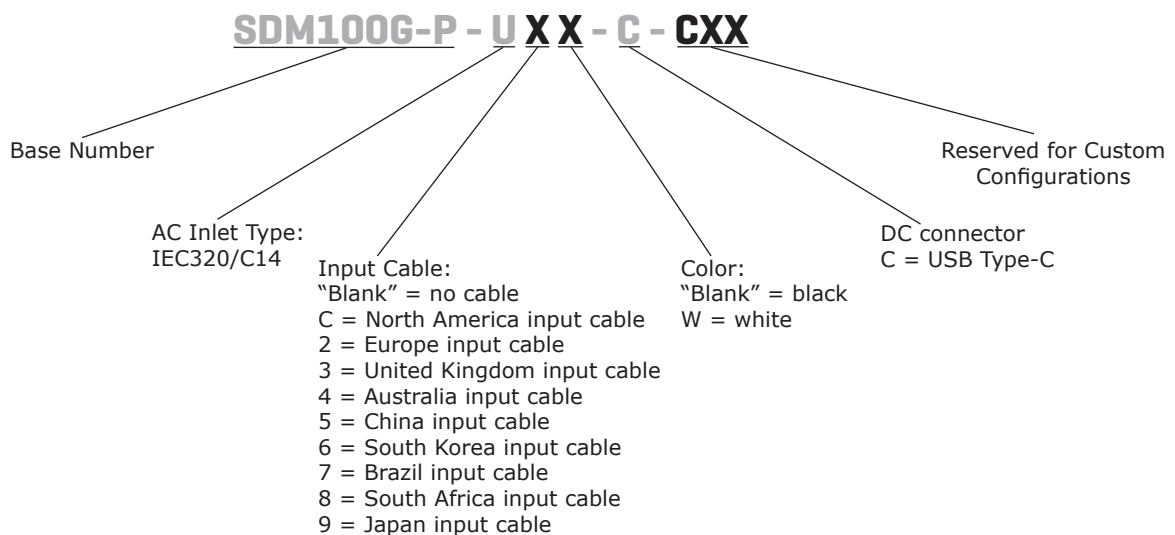
- 100W maximum dc power
- medical grade USB-C desktop power supply
- GaN technology
- class I (C14 ac inlet)
- USB power delivery
- variable output - 5V, 9V, 12V, 15V at 3A or 20V at 5A
- certified UL/cUL / TUV / FCC / CE 60601
- 2 MOPP compliant
- customization available



MODEL	output voltage	output current max	output power max	ripple and noise ¹ max	efficiency level
	(Vdc)	(A)	(W)	(mVp-p)	
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 μ F multilayer ceramic and 47 μ F low ESR electrolytic capacitors

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 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

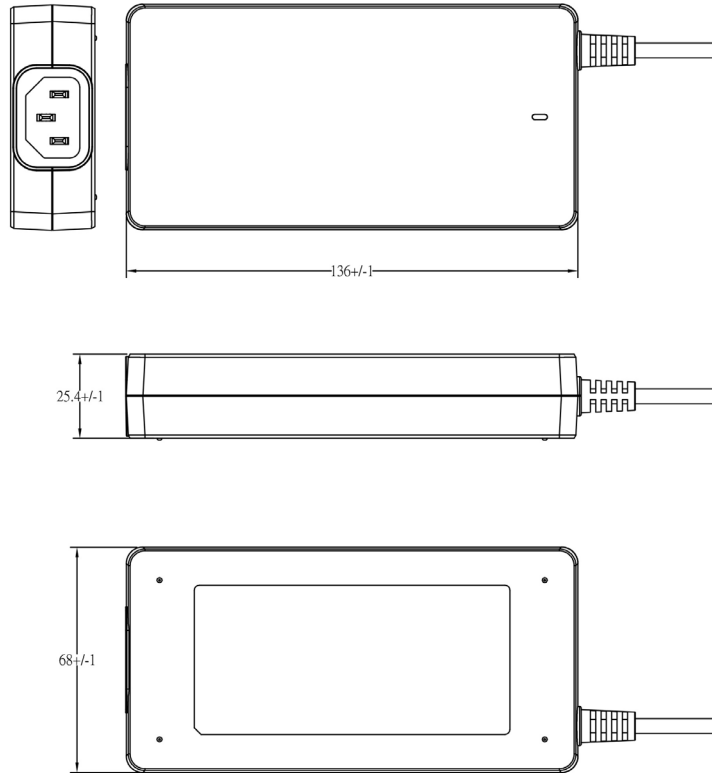
parameter	conditions/description	min	typ	max	units
operating temperature		-20		40	°C
storage temperature		-20		85	°C
operating humidity		10		90	%
storage humidity		5		90	%
altitude			5,000		m

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

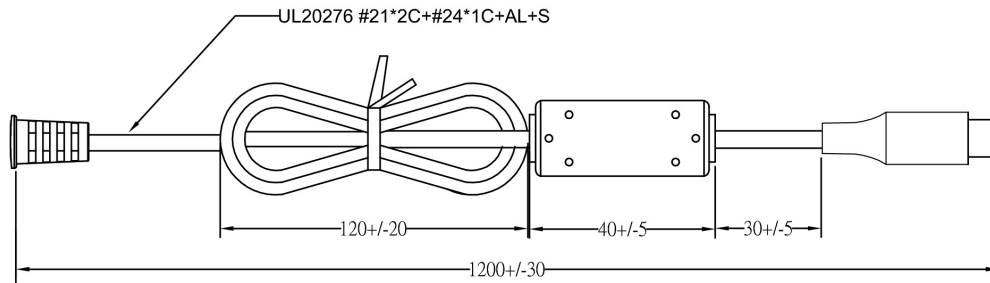
MECHANICAL DRAWING

units: mm
tolerance: ±1.0



DC CORD

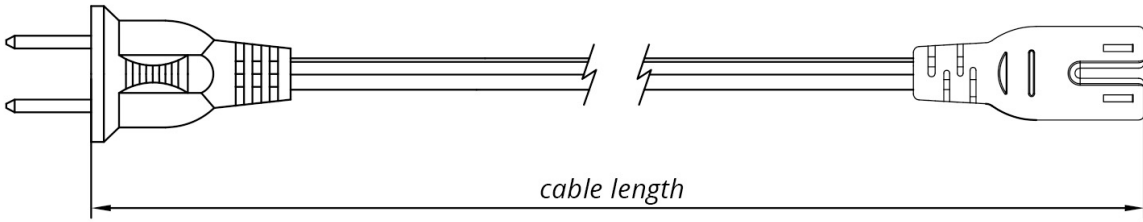
units: mm



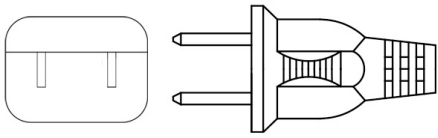
Cable: 20276 #21 x 2C + #24 x 1C + AL + S
Length: 1200 mm
Connector: USB-C
Color: Black

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

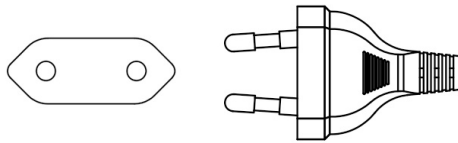
AC CORD



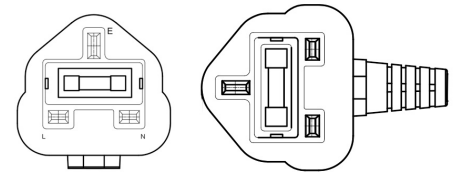
NORTH AMERICA



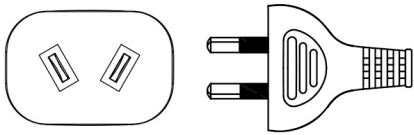
EUROPE



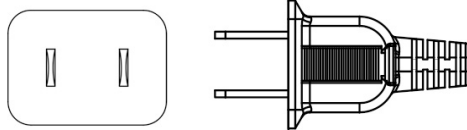
UNITED KINGDOM



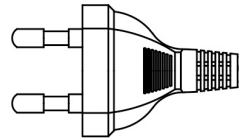
AUSTRALIA



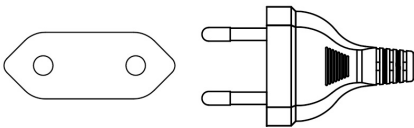
CHINA



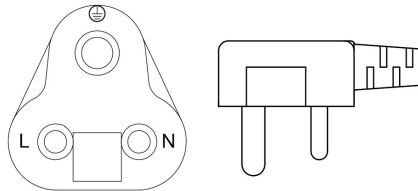
SOUTH KOREA



BRAZIL



SOUTH AFRICA



JAPAN

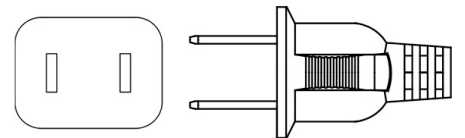


Table 1

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.



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

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.