SERIES: SDM300G-U | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- GaN technology
- compact size
- 300 W power
- universal input (85~264 Vac)
- single regulated outputs
- over voltage, over current, over temperature and short circuit protections
- UL/cUL (60601), TUV
- level VI efficiency
- power factor correction
- custom designs available



MODEL

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
SDM300G-12-U	12	24.0	288	120	VI
SDM300G-15-U	15	20.0	300	150	VI
SDM300G-19-U	19	15.79	300	190	VI
SDM300G-24-U	24	12.5	300	240	VI
SDM300G-48-U	48	6.25	300	480	VI

Notes: 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.

PART NUMBER KEY

SDM300G - XX - U X - P219- CXX

- Base Number
- Output Voltage
- AC Inlet Type: IEC320/C14
- Input Cable:
  "Blank" = No Cable
  C = North America input cable
  CM = North America medical input cable
  2 = Europe input cable
  3 = United Kingdom input cable
  4 = Australia input cable
  5 = China input cable
  6 = South Korea input cable
  7 = Brazil input cable
  8 = South Africa input cable
  9 = Japan input cable
- Reserved for Custom Configurations

Please read our datasheet & drawing disclaimer here.

INPUT

parameter	conditions/description	min	typ	max	units
voltage		85	100~240	264	Vac
frequency		47	50~60	63	Hz
current		1.5		3.5	A
inrush current	at 240 Vac, full load, 25°C, cold start			150	A
leakage current				0.1	mA
no load power consumption	at 115 & 230 Vac			0.5	W
power factor	at 115 & 230 Vac, full load	0.9			

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation			±5		%

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	latch			150	%
over current protection	auto recovery			180	%
short circuit protection	auto recovery				
over temperature protection	output shut down				

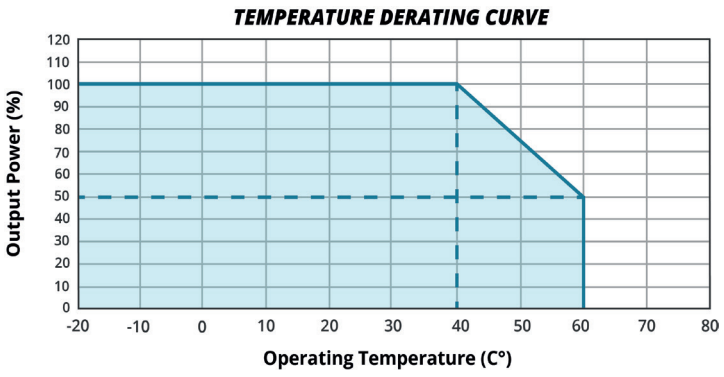
SAFETY & COMPLIANCE

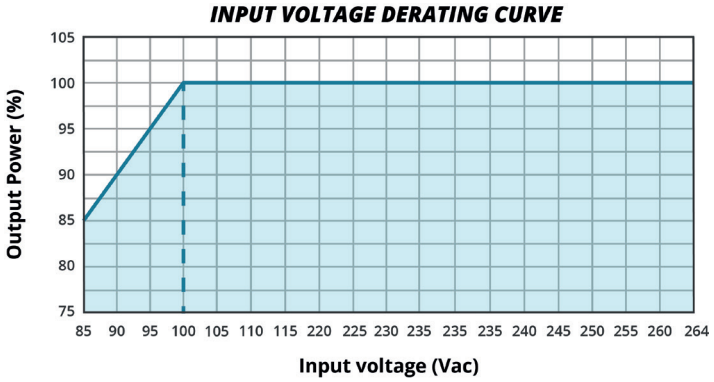
parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute input to ground at 10 mA for 1 minute		4,000 1,770		Vac Vac
isolation resistance	input to output at 500 Vdc input to ground at 500 Vdc	10 10			MΩ MΩ
safety approvals	UL/cUL 60601, TUV, UKCA, PSE				
EMI/EMC	CE, FCC				
MTBF	as per Telcordia SR-332, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature	60°C max at 50% load, see derating curve	-20		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

DERATING CURVES



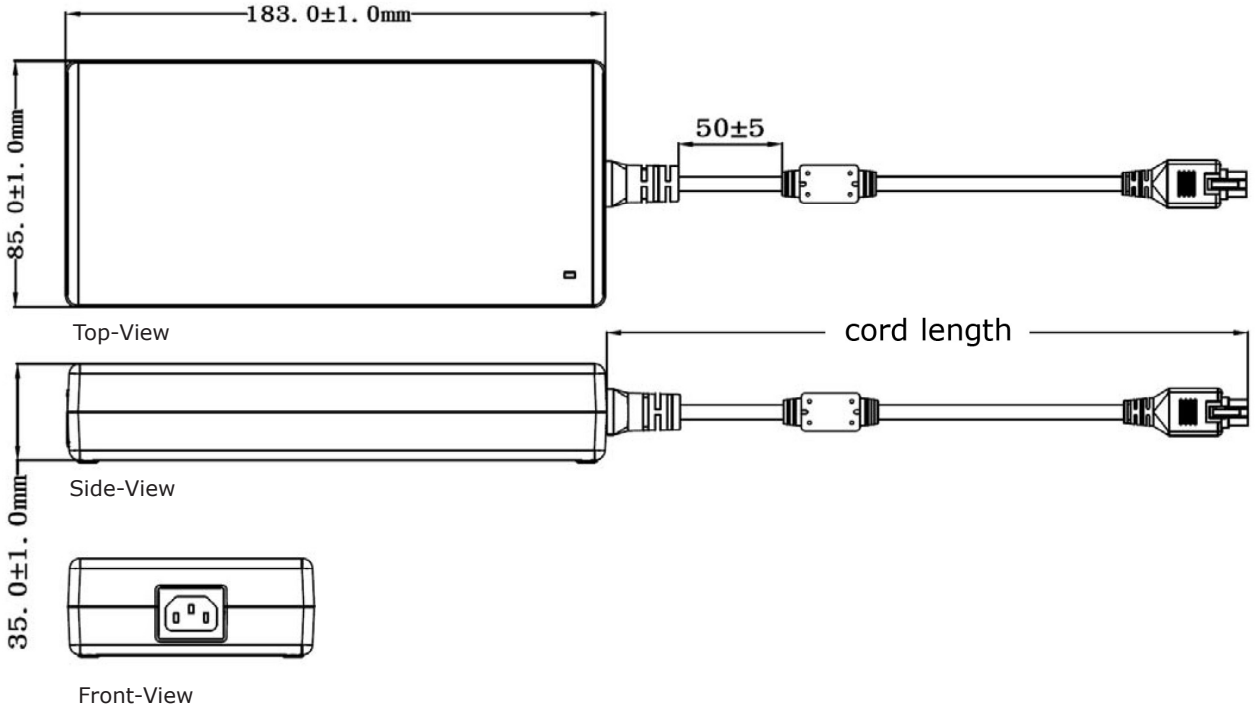


MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	183.0 (L) x 85.0 (W) x 35.0 (H)				mm
dc output plug	6 pin housing				
weight	12, 15, 19 Vdc output models 24, 48 Vdc output models		1100 1000		g g

MECHANICAL DRAWING

units: mm
tolerance: ±1.0 mm



DC CORD

units: mm

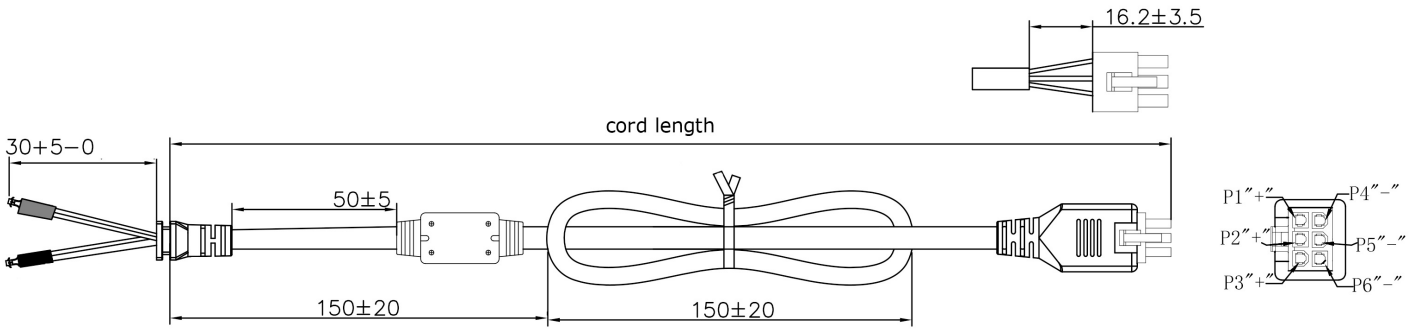


Table 1

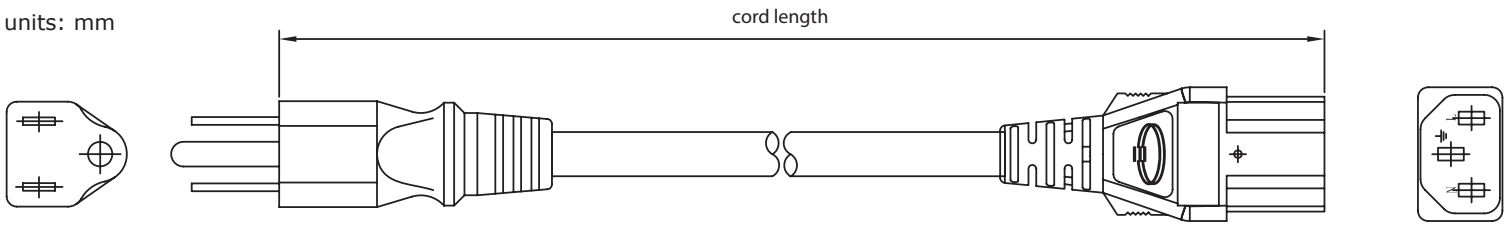
MODEL NO.	CABLE	CORD LENGTH
SDM300G-12-U	Black, UL2464, 16 AWG	1,000 mm ±50
SDM300G-15-U	Black, UL2464, 16 AWG	1,000 mm ±50
SDM300G-19-U	Black, UL2464, 16 AWG	1,000 mm ±50
SDM300G-24-U	Black, UL2464, 16 AWG	1,200 mm ±50
SDM300G-48-U	Black, UL2464, 18 AWG	1,200 mm ±50

Table 2

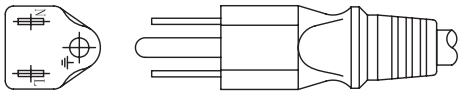
PIN ASSIGNMENT		
PIN	OUTPUT VOLTAGE	
	12V/15V/19V	24V/48V
P1	+Vout	+Vout
P2	+Vout	NC
P3	+Vout	+Vout
P4	-Vout	-Vout
P5	-Vout	NC
P6	-Vout	-Vout

AC CORD

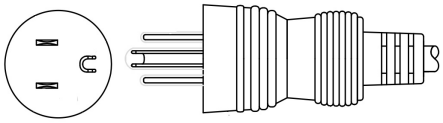
units: mm



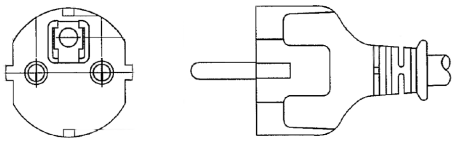
NORTH AMERICA



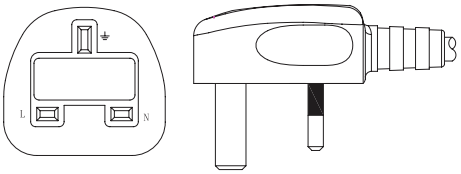
NORTH AMERICA (medical)



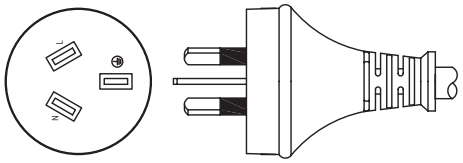
EUROPE



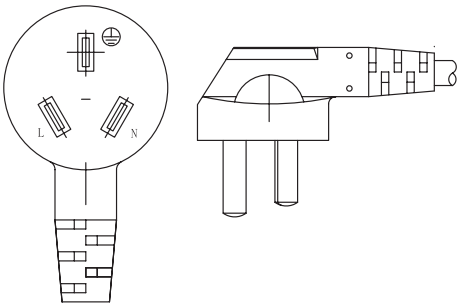
UNITED KINGDOM



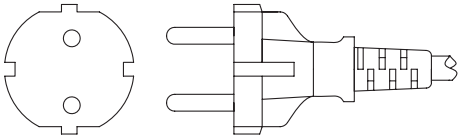
AUSTRALIA



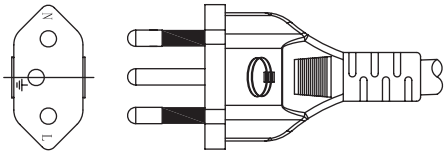
CHINA



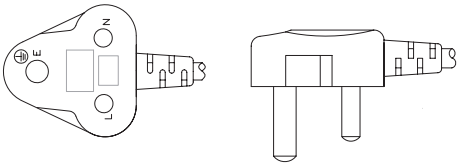
SOUTH KOREA



BRAZIL



SOUTH AFRICA



JAPAN

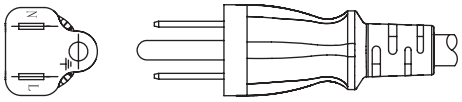


Table 2

AC Input	Cord Length
North America	1,830 mm ±30
North America (medical)	1,830 mm ±50
Europe	1,830 mm ±30
United Kingdom	1,830 mm ±30
Australia	1,830 mm ±30
China	1,830 mm ±30
South Korea	1,830 mm ±50
Brazil	1,830 mm ±30
South Africa	1,830 mm ±50
Japan	1,830 mm ±30

REVISION HISTORY

rev.	description	date
1.0	initial release	06/27/2022
1.01	NA medical input cable added	08/18/2022
1.02	input voltage and frequency updated	02/02/2023
1.03	medical icon added	05/17/2023
1.04	safeties updated	09/26/2023
1.05	mechanical drawing and dc cord updated	09/24/2025

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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