

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

FEATURES

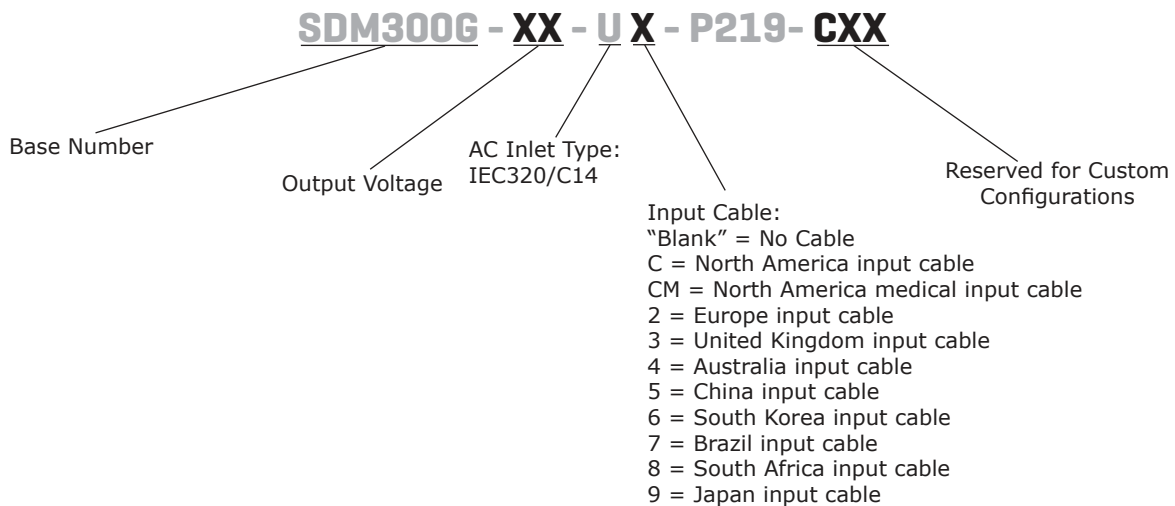
- GaN technology
- compact size
- 300 W power
- universal input (85~264 Vac)
- single regulated outputs
- over voltage, over current, over temperature and short circuit protections
- UL/cUL (60601), TUV
- level VI efficiency
- power factor correction
- custom designs available



MODEL	output voltage	output current	output power	ripple and noise ¹	efficiency level
	(Vdc)	max (A)	max (W)	max (mVp-p)	
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



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				

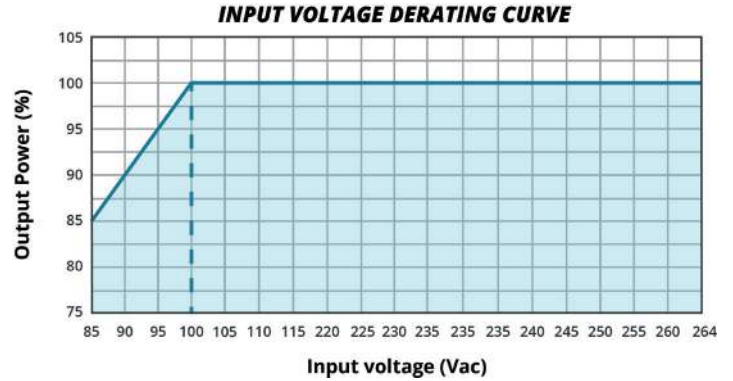
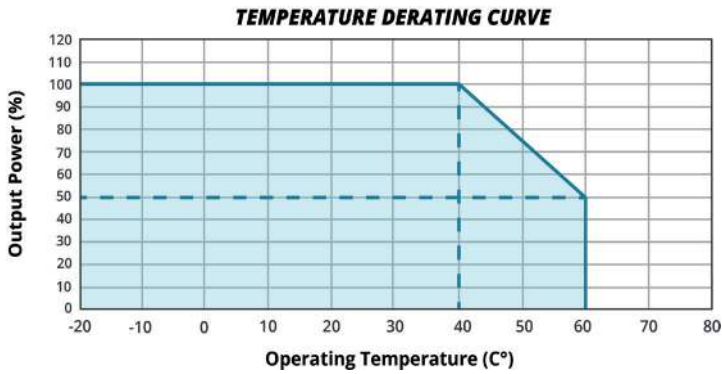
SAFETY & COMPLIANCE

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, CB				
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

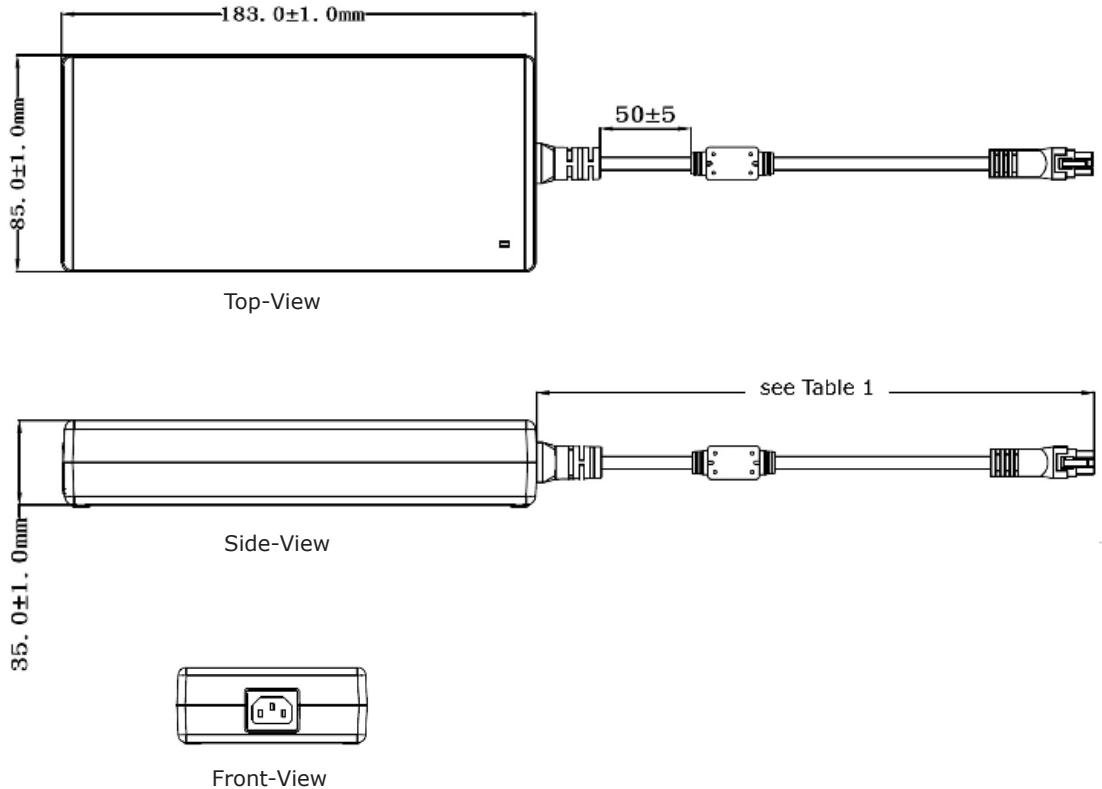


MECHANICAL

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

MECHANICAL DRAWING

units: mm
tolerance: ±1.0 mm



DC CORD

units: mm

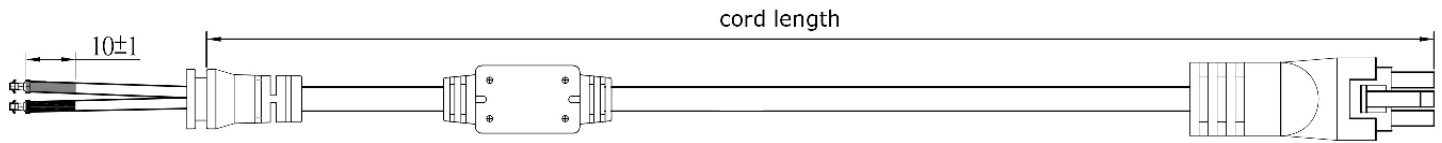
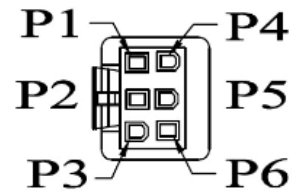


Table 1

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



Output cable plug pin assignment

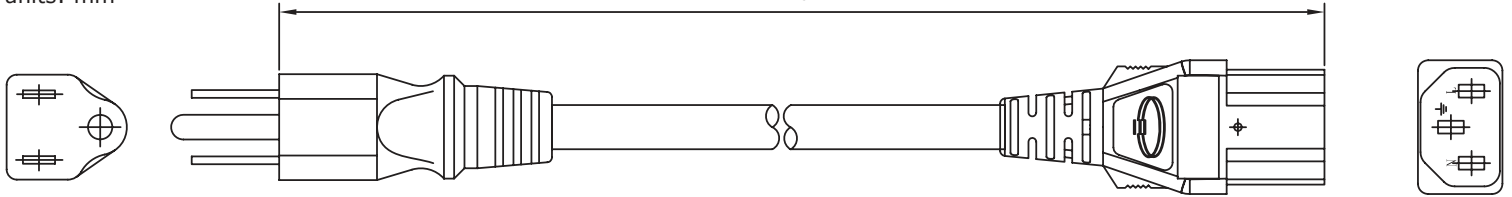
Table 2

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

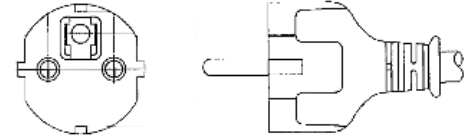
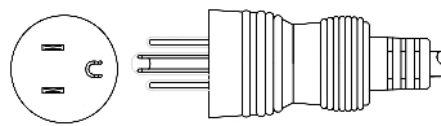
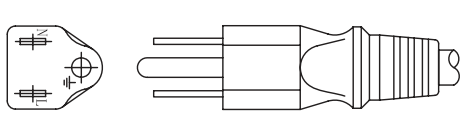
cord length



NORTH AMERICA

NORTH AMERICA (medical)

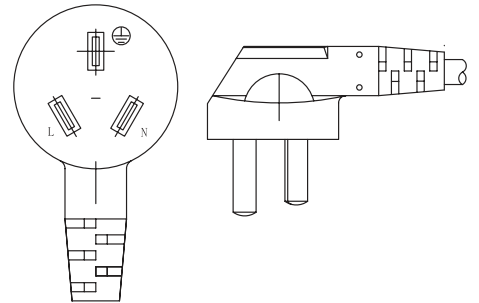
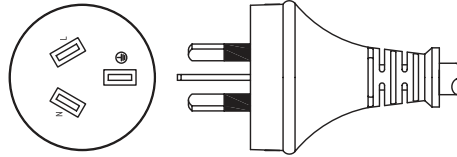
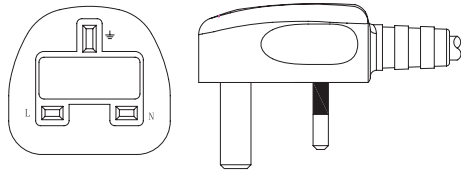
EUROPE



UNITED KINGDOM

AUSTRALIA

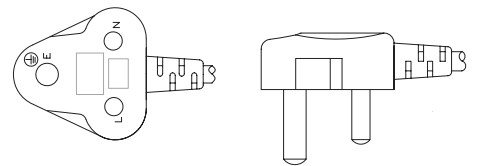
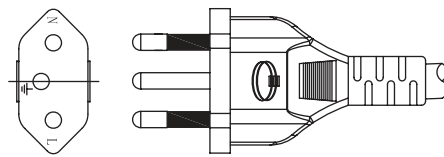
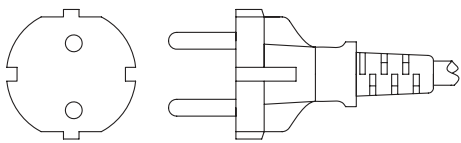
CHINA



SOUTH KOREA

BRAZIL

SOUTH AFRICA



JAPAN

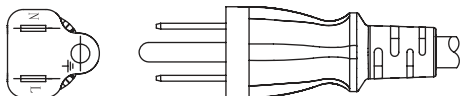


Table 2

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

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



Headquarters
20050 SW 112th Ave.
Tualatin, OR 97062
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.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.