CUI INC
a bel group

SERIES: SDI300G-UR | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- GaN technology
- compact size
- 300 W power
- universal input (85~265 Vac)
- single regulated outputs
- over voltage, over current, over temperature and short circuit protections
- UL/cUL (62368-1)
- CE certified
- level VI efficiency
- power factor correction
- custom designs available



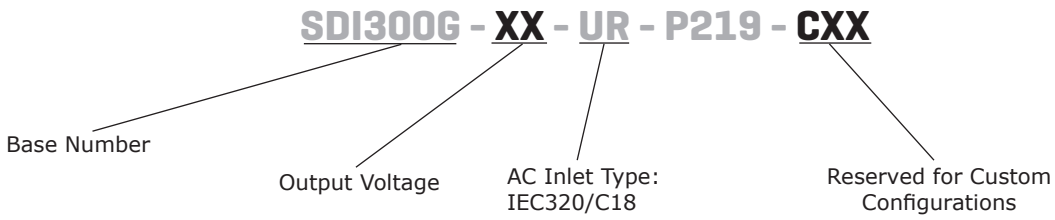
GaN

RoHS CE FC c UL us UK CA

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
SDI300G-12-UR	12	24.0	288.0	120	VI
SDI300G-15-UR	15	20.0	300.0	150	VI
SDI300G-19-UR	19	15.79	300.01	190	VI
SDI300G-24-UR	24	12.5	300.0	240	VI
SDI300G-48-UR	48	6.25	300.0	480	VI
SDI300G-56-UR	56	5.36	300.16	560	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	see derating curve	85		264	Vac
frequency		50		60	Hz
current				3.5	A
inrush current	at 240 Vac, full load, 25°C, cold start			150	A
leakage current				0.25	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				

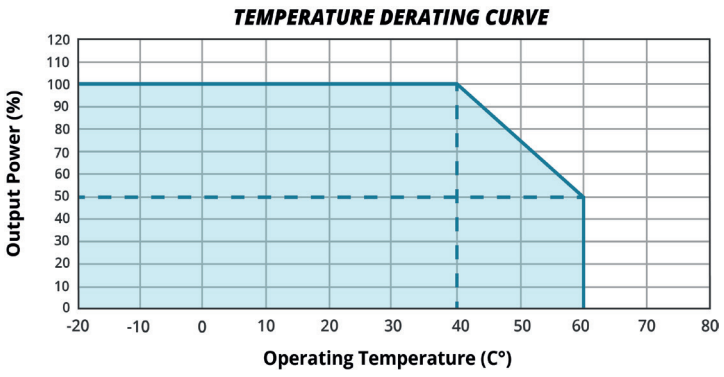
SAFETY & COMPLIANCE

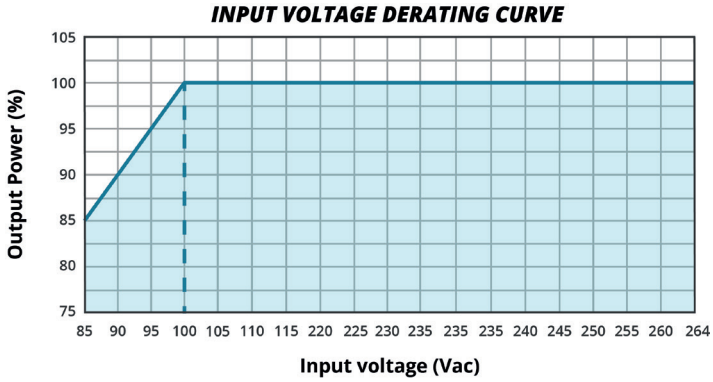
parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute		3,000		Vac
isolation resistance	input to output at 500 Vdc	10			MΩ
safety approvals	62368: UL/cUL UKCA				
EMI/EMC	CE, FCC Part 15 Class B, ICES-003, EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3				
MTBF	as per Telcordia SR-332, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature	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



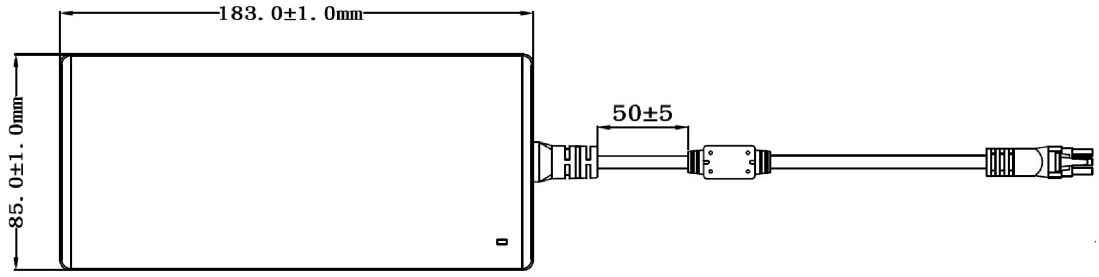


MECHANICAL

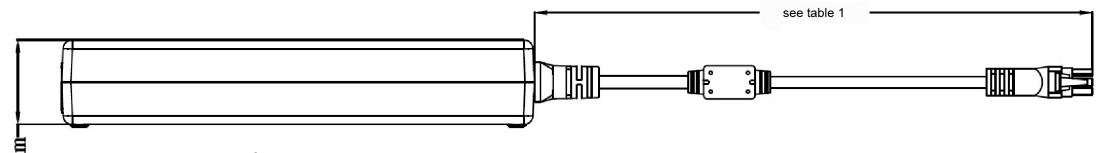
parameter	conditions/description	min	typ	max	units
dimensions	183.0 (L) x 85.0 (W) x 35.0 (H)				mm
inlet plug	C13				
output plug	Housing: Molex p/n 39-01-2060 Pins: Molex p/n 45750-3111				
weight	12, 15, 19 Vdc output models 24, 48, 56 Vdc output models		1100 1000		g g

MECHANICAL DRAWING

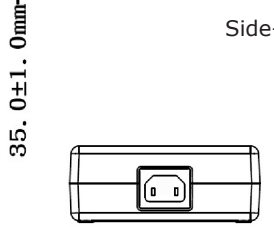
units: mm
tolerance: ±1.0 mm



Top-View



Side-View



Front-View

DC CORD

units: mm

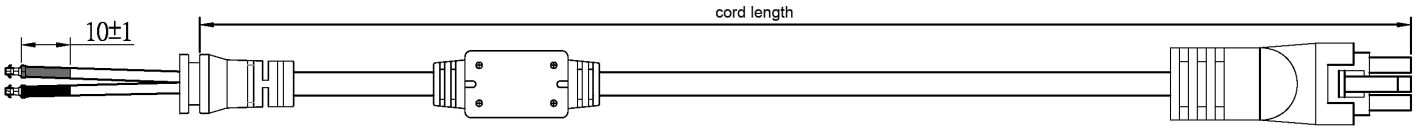
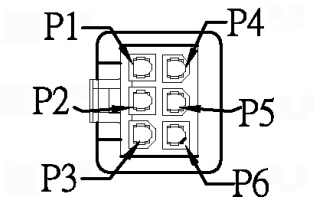


Table 1

MODEL NO.	CABLE	CORD LENGTH
SDI300G-12-UR	Black, UL2464, 16 AWG	1,000 mm ±50
SDI300G-15-UR	Black, UL2464, 16 AWG	1,000 mm ±50
SDI300G-19-UR	Black, UL2464, 16 AWG	1,000 mm ±50
SDI300G-24-UR	Black, UL2464, 16 AWG	1,200 mm ±50
SDI300G-48-UR	Black, UL2464, 18 AWG	1,200 mm ±50
SDI300G-56-UR	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/56V
P1	+Vout	+Vout
P2	+Vout	n.c.
P3	+Vout	+Vout
P4	-Vout	-Vout
P5	-Vout	NC
P6	-Vout	-Vout

REVISION HISTORY

rev.	description	date
1.0	initial release	07/26/2021
1.01	UKCA added to specification	08/12/2021
1.02	part numbers updated in the model table	10/14/2021
1.03	inlet & output plug updated	03/11/2022
1.04	CE added	04/07/2022

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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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.