

SERIES: SDI160G-U | **DESCRIPTION:** AC-DC POWER SUPPLY

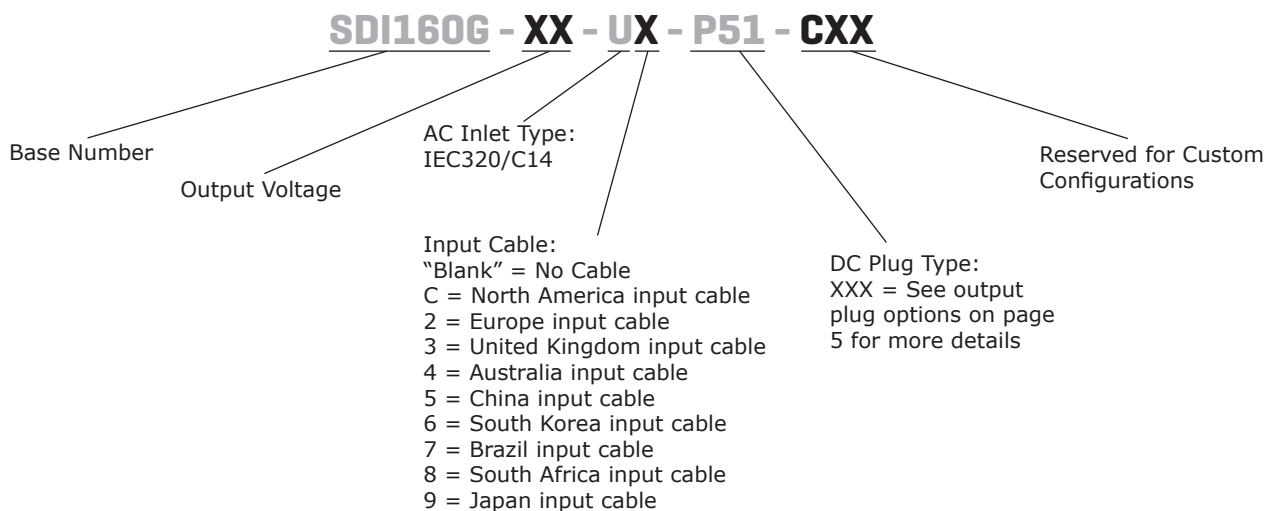
FEATURES

- up to 160 W continuous power
- gallium nitride (GaN) technology
- universal input (90~264 Vac)
- over voltage, over current and short circuit protections
- IEC 62368-1 compliant
- power factor correction
- compact design
- custom design available



MODEL	output voltage	output current max	output power max	ripple and noise ¹ max	efficiency ² typ
	(Vac)	(A)	(W)	(mVp-p)	(%)
SDI160G-12-U-P51	12	12.5	150	120	90
SDI160G-19-U-P51	19	8.4	160	190	90
SDI160G-24-U-P51	24	6.6	160	240	90
SDI160G-48-U-P51	48	3.3	160	480	90
SDI160G-56-U-P51	56	2.86	160	560	90

Notes: 1. Ripple & noise measurement, use a 20 MHz bandwidth frequency oscilloscope and add 0.1 μ F ceramic and 10 μ F electrolytic capacitor at output terminals.
 2. Average efficiency measured at 25, 50, 75 & 100% load.

PART NUMBER KEY


INPUT

parameter	conditions/description	min	typ	max	units
voltage		100		240	Vac
frequency		50		60	Hz
current	at full load			2.2	A
inrush current	at 230 Vac, full load, 25°C, cold start			100	A
leakage current				3.5	mA
power factor correction	at 115 Vac & 230 Vac, at full load	0.9			
no load power consumption	at 115 Vac, 230 Vac & no load			0.15	W
input fuse					

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation				5	%

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	shut down, latch			180	%
over current protection	shut down, auto recover			180	%
short circuit protection	shut down, auto recover				%

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output	3000			Vac
isolation resistance	primary to secondary, 500 Vdc	10			MΩ
safety approvals	UL & CUL, UKCA				
EMI/EMC	CE / FCC Class B				
MTBF	as per Telcordia SR-332, 25°C	300,000			hours

ENVIRONMENTAL

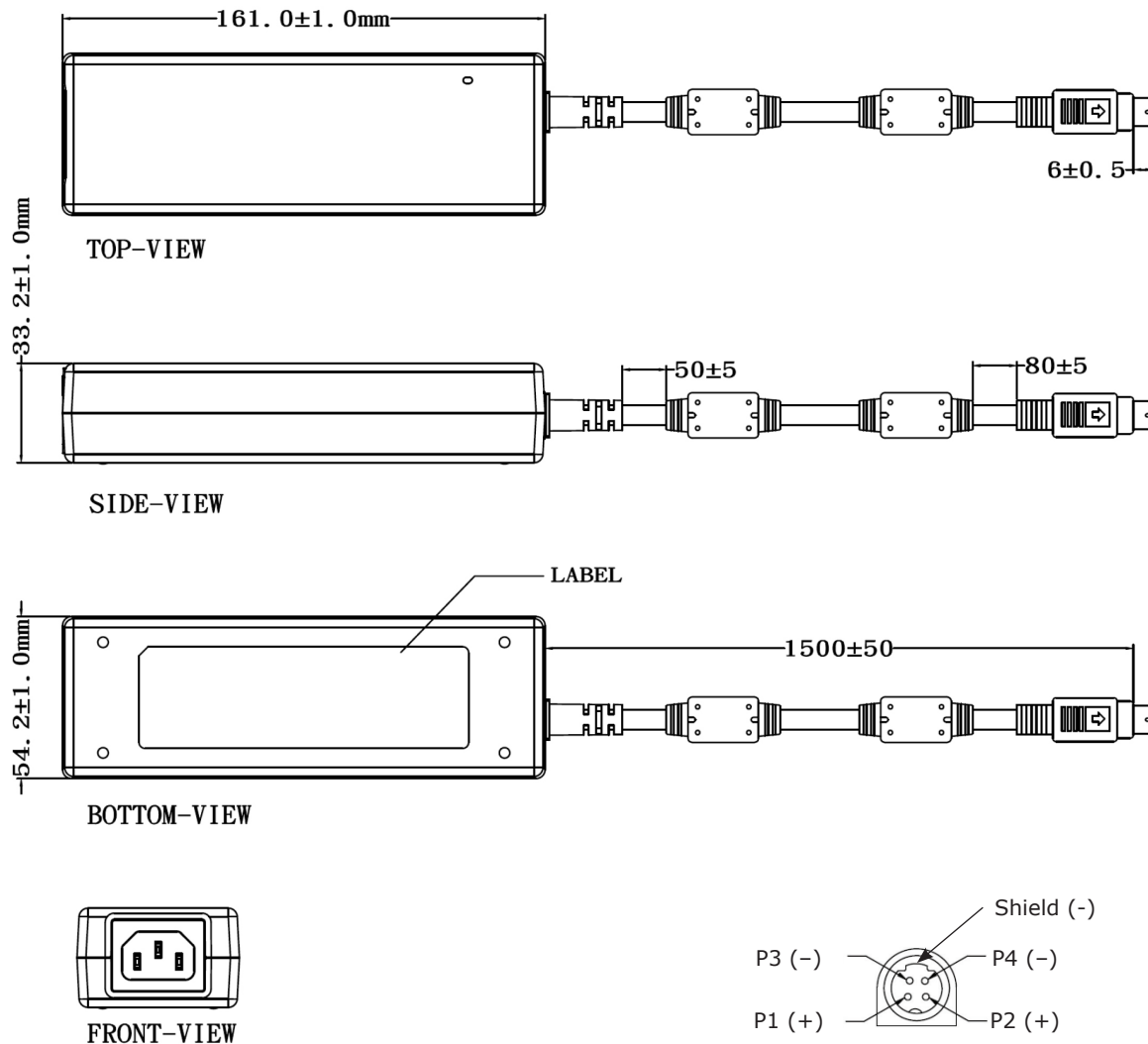
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	161.0 x 54.2 x 33.2				mm
weight			530		g

MECHANICAL DRAWING

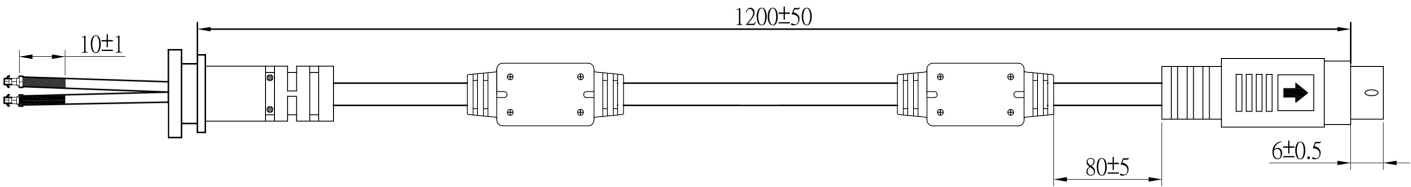
units: mm
tolerance: ± 1.0 mm



Shield (-)
P3 (-) P4 (-)
P1 (+) P2 (+)
Output cable plug pin assignment

DC CORD

units: mm



MODEL NO.	CABLE	CORD LENGTH
SDI160G-12	UL2464, 16 AWG	1,200 mm ±50
SDI160G-19	UL2464, 18 AWG	1,500 mm ±50
SDI160G-24	UL2464, 18 AWG	1,500 mm ±50
SDI160G-48	UL2464, 18 AWG	1,500 mm ±50
SDI160G-56	UL2464, 18 AWG	1,500 mm ±50

REVISION HISTORY

rev.	description	date
1.0	initial release	06/12/2020
1.01	drawing tolerance updated	06/16/2020
1.02	UKCA added to the specification	05/25/2021
1.03	dc cord updated	06/15/2021
1.04	cable table updated	03/23/2022

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.