CUI INC
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SERIES: SDI160G-UD | **DESCRIPTION:** AC-DC POWER SUPPLY

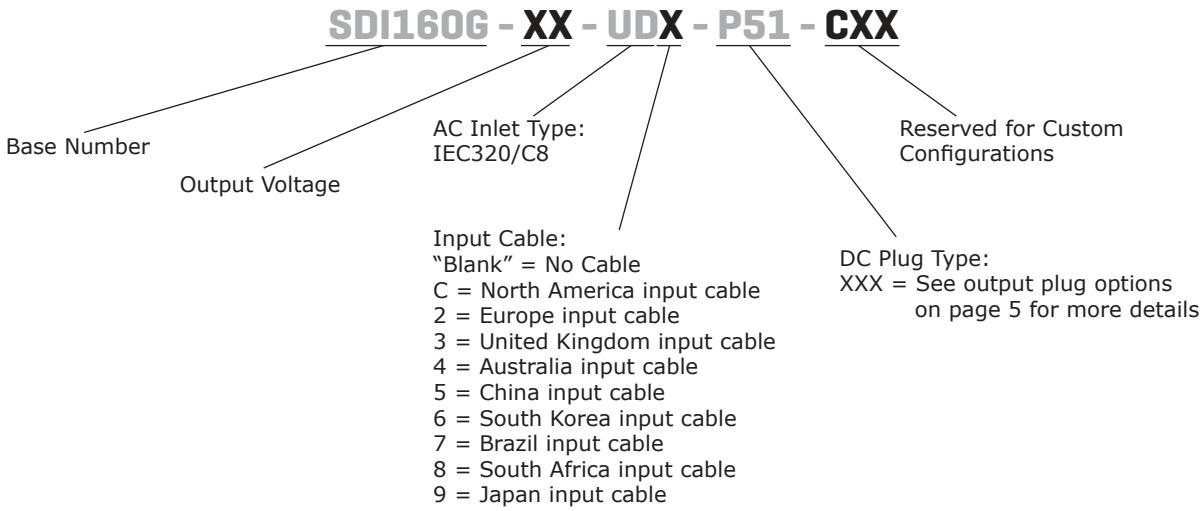
FEATURES

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

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

Notes: 1. Ripple & noise measurement, use a 20 MHz bandwidth frequency oscilloscope and add 0.1 µF ceramic and 10 µF 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		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current	at full load			2.2	A
inrush current	at 230 Vac, full load, 25°C, cold start			100	A
leakage current			0.25		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

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

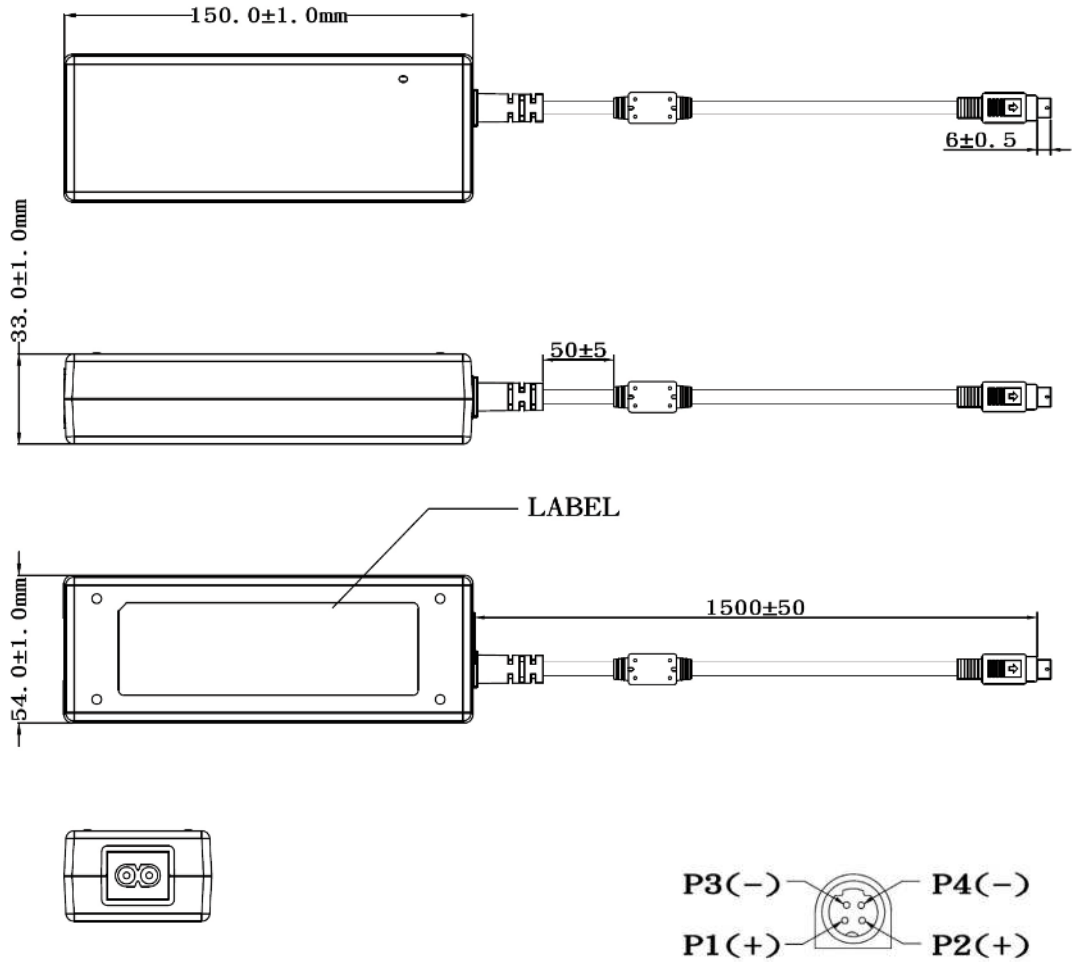
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	150 x 54 x 33				mm
weight			495		g
cooling	by natural air				

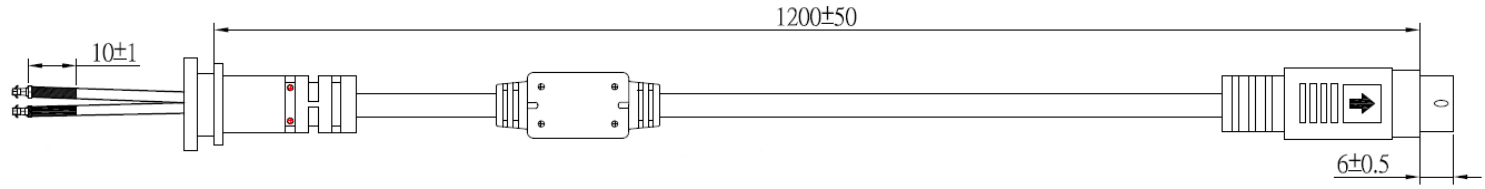
MECHANICAL DRAWING

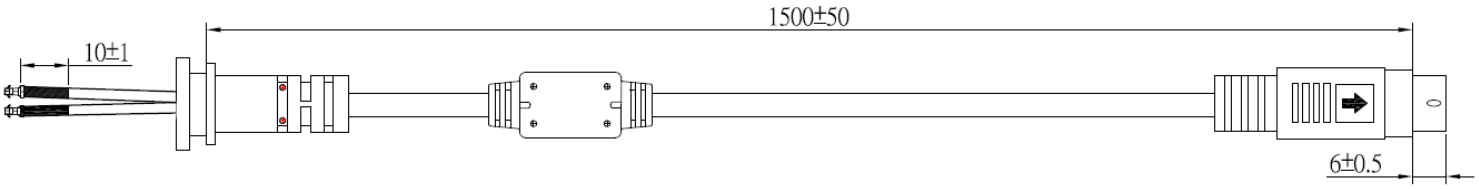
units: mm
tolerance: ±0.1 mm



DC CORD

units: mm

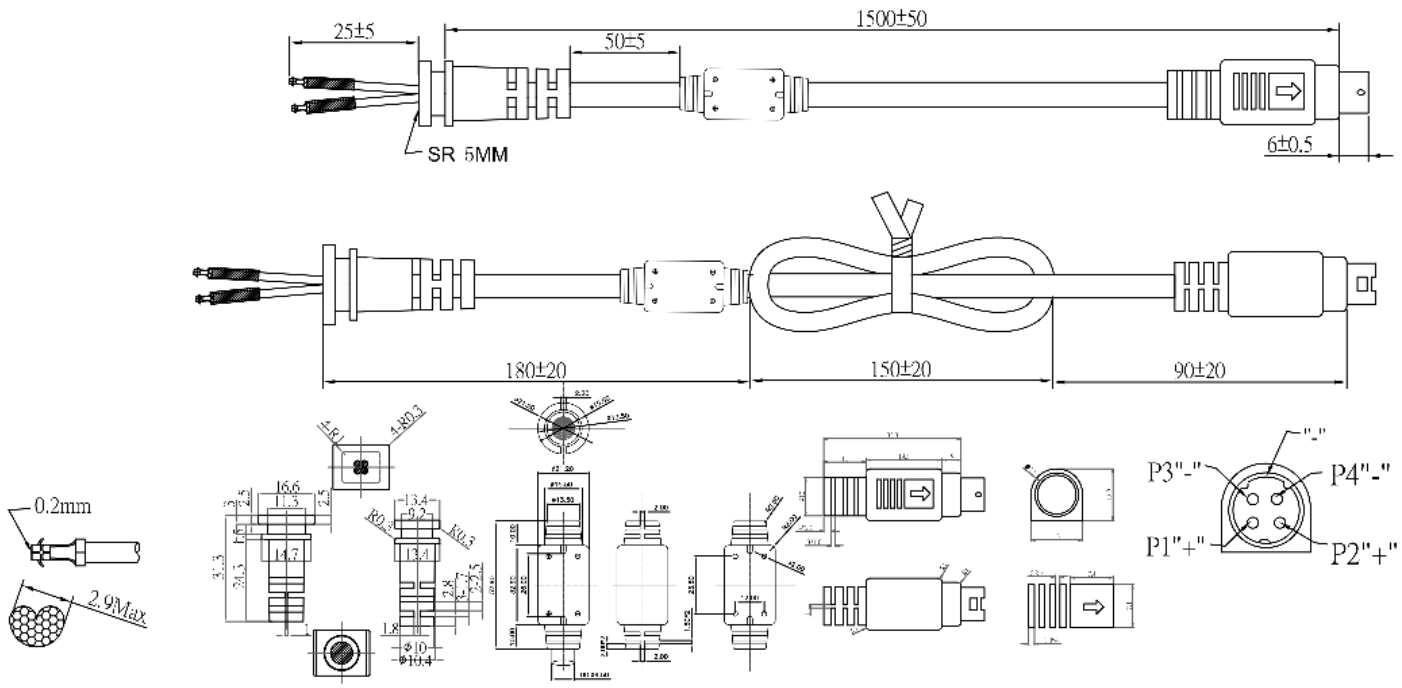




MODEL NO.	CABLE	CORD LENGTH
SDI160G-12	UL2464, 16 AWG	1,200 mm ±50
SDI160G-19	UL2095, 18 AWG	1,500 mm ±50
SDI160G-24	UL2464, 18 AWG	1,500 mm ±50
SDI160G-48	UL2095, 18 AWG	1,500 mm ±50
SDI160G-56	UL2095, 18 AWG	1,500 mm ±50

AC CORDS

units: mm



REVISION HISTORY

rev.	description	date
1.0	initial release	06/12/2020
1.01	UKCA added to the specification	05/25/2021
1.02	dc cord updated	06/15/2021
1.03	cable table updated	03/23/2022
1.04	input voltage updated	01/18/2023

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

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