CUI INC®

SERIES: SWC45-N | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

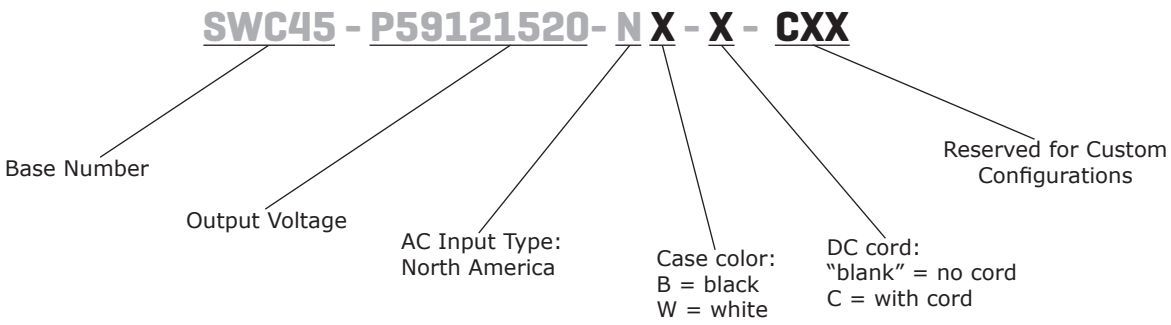
- up to 45 W continuous power
- DoE Level VI compliant
- flip Ac pins
- universal input voltage range
- integrated USB Type C connector
- USB Power Delivery (PD) 3.0
- UL/cUL safety approvals
- Class II construction

MODEL

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level[2]
SWC45-P59121520-N	5	3	15	100	VI
	9	3	27	120	VI
	12	3	36	150	VI
	15	3	45	200	VI
	20	2.25	45	300	VI

Notes: 1. At full load, nominal AC input voltage, 25°C, 20 MHz bandwidth oscilloscope, output terminated with 0.1 µF ceramic and 10 µF aluminum electrolytic capacitors.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at nominal input			1.5	A
leakage current	at nominal AC input and frequency			0.25	mA
no load power consumption	at 115/230 Vac, 60/50 Hz (5 Vdc mode)			0.1	W

OUTPUT

parameter	conditions/description	min	typ	max	units
output regulation			±5		%
start-up time				3	s
rise time	at nominal input			100	ms
hold-up time	at nominal input, full load	5			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output shutdown, auto recovery 5 Vdc output 9 Vdc output 12 Vdc output 15 Vdc output 20 Vdc output			 8 11.5 15 19 25	 Vdc Vdc Vdc Vdc Vdc
over current protection	hiccup, auto recovery 20 Vdc output all other outputs			 3.2 4	 A A
short circuit protection	hiccup, auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute		3,000 4,242		Vac Vdc
insulation resistance	input to output at 500 Vdc, 10 mA for 1 minute	20			MΩ
safety approvals	UL/cUL (UL 60950-1)				
EMI/EMC	FCC Part 15 Class B				
MTBF	as per Telcordia SR-332, Issue 2 at 115/230 Vac full load, 25°C	50,000			hours
RoHS	yes				

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		60	°C
operating humidity	non-condensing	20		85	%
storage humidity	non-condensing	5		90	%

MECHANICAL

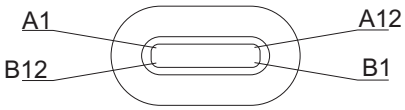
parameter	conditions/description	min	typ	max	units
dimensions	60 x 28 x 57.3				mm
inlet plug	North America, 2-pin (flip AC pins)				
DC output	USB 3.1 Type C				
weight			106		g

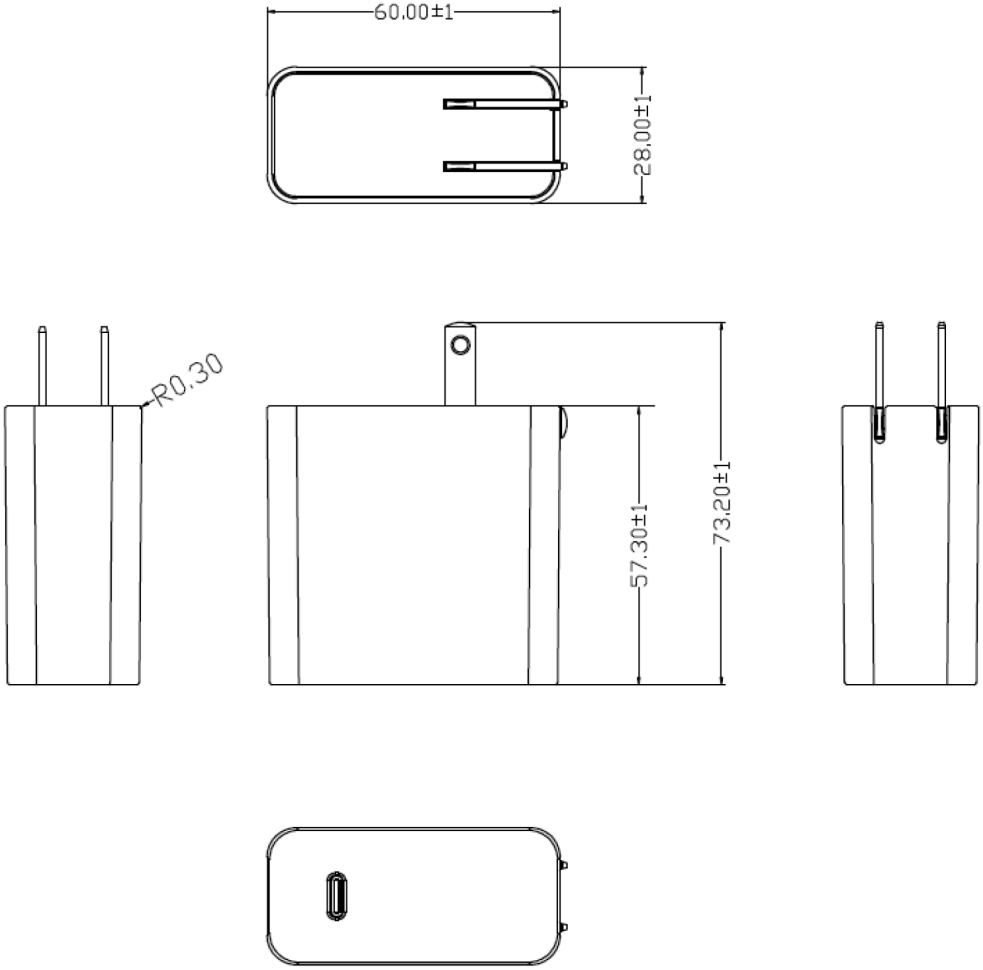
MECHANICAL DRAWING

units: mm

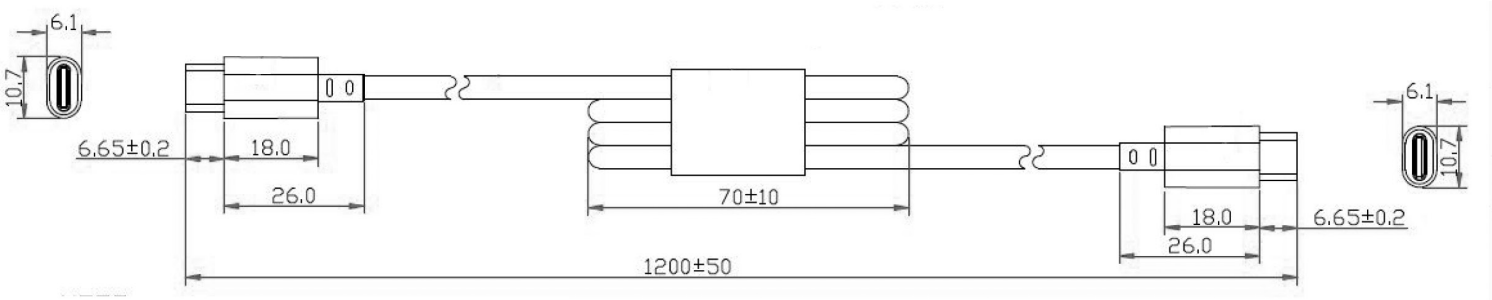
PIN CONNECTIONS			
PIN	SIGNAL NAME	PIN	SIGNAL NAME
A1	GND	B12	GND
A2	NC	B11	NC
A3	NC	B10	NC
A4	V_{BUS}	B9	V_{BUS}
A5	CC	B8	NC
A6	D+	B7	NC
A7	D-	B6	NC
A8	NC	B5*	Vconn
A9	V_{BUS}	B4	V_{BUS}
A10	NC	B3	NC
A11	NC	B2	NC
A12	GND	B1	GND

Note: *Not present on DC cord





DC CORD



REVISION HISTORY

rev.	description	date
1.0	initial release	01/17/2019

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

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