CUI INC®

SERIES: SWI12-E | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

- DoE Level VI, CoC Tier 2 efficiency
- up to 12 W power
- universal input (90~264 Vac)
- single regulated output from 5~24 Vdc
- over voltage, over current, and short circuit protections
- CE safety approval
- custom designs available

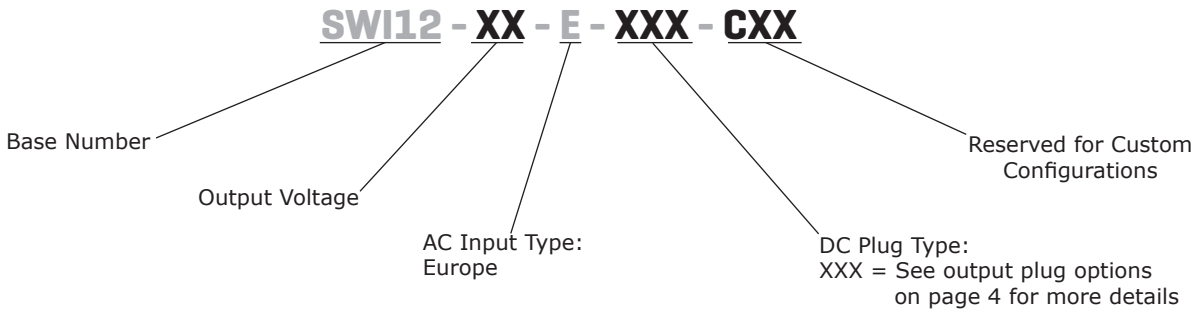
RoHS CE LPS

MODEL

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level[2]
SWI12-5-E	5	2.5	12.5	100	VI
SWI12-12-E	12	1.0	12	120	VI
SWI12-24-E	24	0.5	12	240	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.
2. CoC Tier 2 compliant

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				0.31	A
inrush current	at 100 Vac, full load, 25°C, cold start at 240 Vac, full load, 25°C, cold start			30 60	A A
leakage current				0.25	mA
no load power consumption	at 115/230 Vac			0.075	W

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation			±5		%

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output shut down			180	%
over current protection	output shut down, auto recovery 5 Vdc model 12 Vdc model 24 Vdc model			 5.0 3.0 1.5	 A A A
short circuit protection	output shut down, auto recovery				

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	LPS				
EMI/EMC	CE				
MTBF	as per Telcordia SR-332, at 25°C	300,000			hours
RoHS	2011/65/EU				

ENVIRONMENTAL

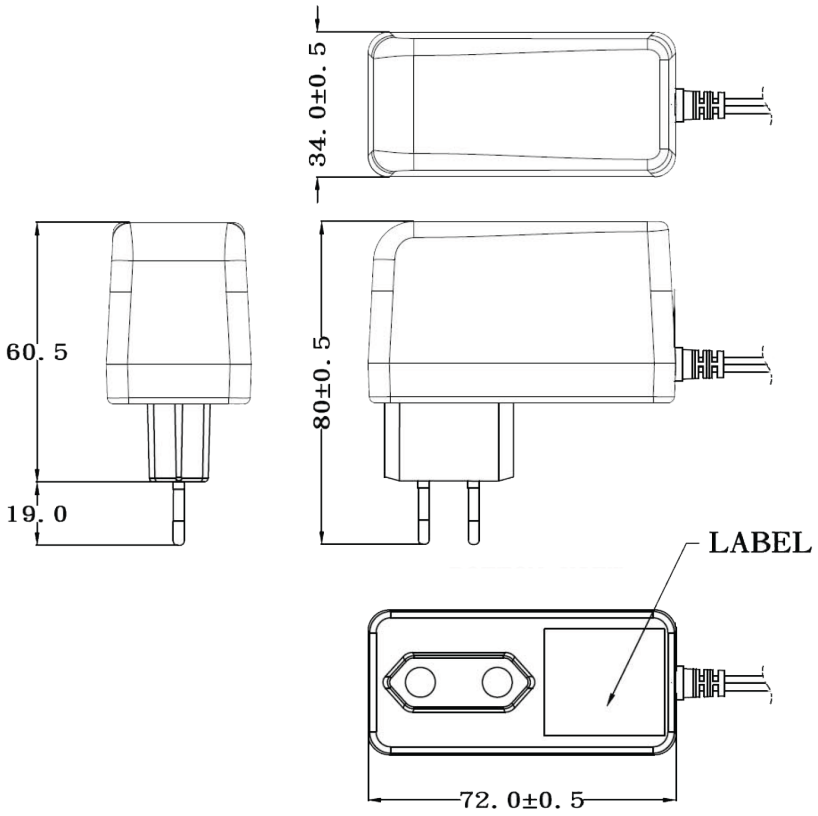
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	72 x 34 x 80				mm
inlet plug	Europe				
weight	5 Vdc model 12 Vdc model 24 Vdc model		156 118 110		g g g

MECHANICAL DRAWING

units: mm
tolerance: ±0.5 mm



DC CORD

units: mm

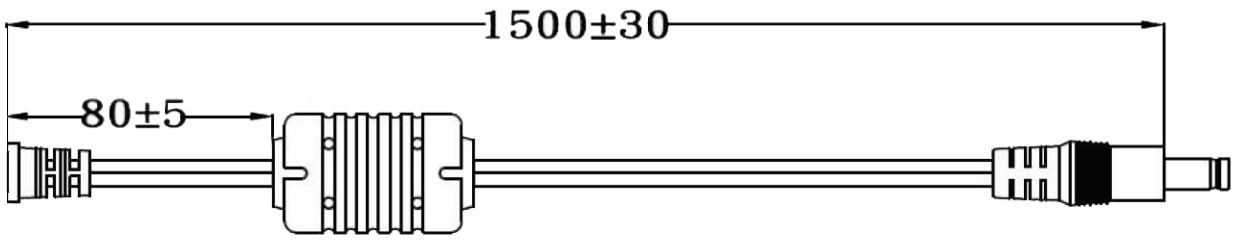


Table 1

MODEL NO.	CABLE	CORD LENGTH
SWI12-5-E	UL2468, 16 AWG	1,500 mm ±30
SWI12-12-E	UL2468, 22 AWG	1,500 mm ±30
SWI12-24-E	UL2468, 22 AWG	1,500 mm ±30

DC PLUG TYPE PART NUMBER KEY

X X X

Plug Polarity:
P = Center Positive

N = Center Negative

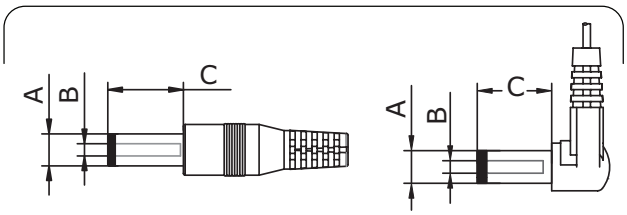
Plug Code:
X = Choose a code from the options below

Plug Angle:
"blank" = Straight
R = Right Angle

Plug Polarity		Code		Dimensions (mm)			Plug Angle	
Center Pos.	Center Neg.	Option	Type	A	B	C	Straight	Right
•	•	5	Standard	5.5	2.1	9.5	•	•
•	•	6	Standard	5.5	2.5	9.5	•	•
•	•	7	Standard	3.5	1.35	9.5	•	•
•	•	8	Standard	3.8	1.35	9.5	•	•
•	•	9	Standard	3.8	1.05	9.5	•	•
•	•	10	Locking	5.5	2.1	9.5	•	N/A
•	•	11	Locking	5.5	2.5	9.5	•	N/A
•	•	12	EIAJ-1	2.35	0.7	9.5	•	•
•	•	13	EIAJ-2	4.0	1.7	9.5	•	•
•	•	14	EIAJ-3	4.75	1.7	9.5	•	•
N/A	N/A	ST	Stripped & Tinned				N/A	N/A

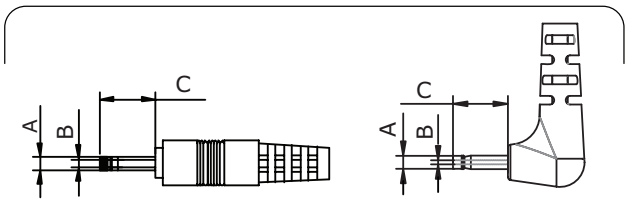
Note: 1. Contact CUI for additional plug options

Standard



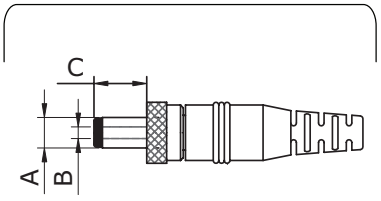
Straight Right Angle (R)

EIAJ

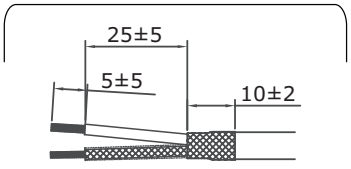


Straight Right Angle (R)

Locking



Stripped & Tinned



REVISION HISTORY

rev.	description	date
1.0	initial release	05/04/2015
1.01	changed wire gauge on 5 Vdc models, updated datasheet	09/15/2016
1.02	added 24 Vdc output model	03/13/2017
1.03	updated weight detail	06/08/2017

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

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