

date 09/15/2016

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#### SERIES: SWI18-E **DESCRIPTION:** AC-DC POWER SUPPLY

#### **FEATURES**

- up to 18 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- no load power consumption < 0.075 W
- compact size
- universal input voltage range
- over voltage, over current, and short circuit protections
- CE safety approvals



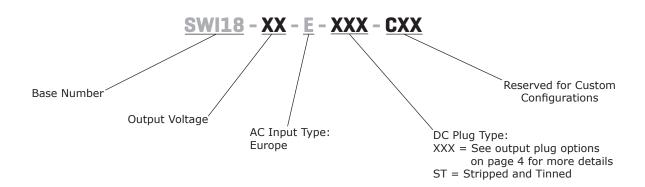


MODEL	output voltage	output current	output power	ripple and noise¹	efficiency level <sup>2</sup>
	(Vdc)	max (A)	max (W)	<b>max</b> (mVp-p)	
SWI18-5-E	5	3	15	100	VI
SWI18-9-E	9	2.2	19.8	100	VI
SWI18-12-E	12	1.6	19.2	120	VI
SWI18-24-E	24	0.8	19.2	240	VI

1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1  $\mu F$  multilayer ceramic and 10  $\mu F$  low ESR electrolytic capacitors. Notes:

2. CoC Tier 2 compliant

#### **PART NUMBER KEY**



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## **INPUT**

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				0.48	А
inrush current	at 100 Vac, full load, 25°C, cold start at 230 Vac, full load, 25°C, cold start			50 60	A A
leakage current				0.25	mA
no load power consumption	at 230 Vac Level VI CoC Tier 2			0.1 0.075	W W

## **OUTPUT**

parameter	conditions/description	min	typ	max	units
regulation	5 Vdc output model all other models		±6 ±5		% %
hold-up time	at full load	10			ms

## **PROTECTIONS**

parameter	conditions/description	min	typ	max	units
	output shut down				
	5 Vdc output model			12	Vdc
over voltage protection	9 Vdc output model			16	Vdc
5 .	12 Vdc output model			22	Vdc
	24 Vdc output model	45	Vdc		
	output shut down, auto recovery				
	5 Vdc output model			7	Α
over current protection	9 Vdc output model			5	Α
·	12 Vdc output model			5	Α
	24 Vdc output model			2.5	Α
short circuit protection	output shut down, auto recovery		-		

# **SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	ation 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	CE				
EMI/EMC	CE				
MTBF	as per Telcordia SR-332, 25°C	300,000			hours
RoHS	2011/65/EU				

## **ENVIRONMENTAL**

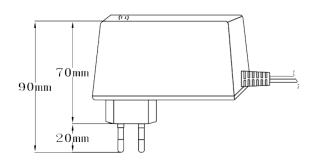
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

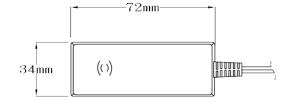
## **MECHANICAL**

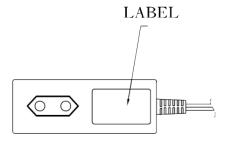
parameter	conditions/description	min	typ	max	units
dimensions	72 x 34 x 90				mm
inlet plug	Europe				
weight			170		g

### **MECHANICAL DRAWING**

units: mm







### **DC CORD**

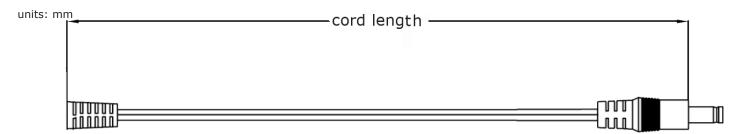
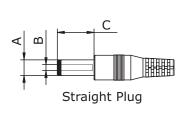


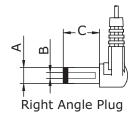
Table 1

MODEL NO.	CABLE	CORD LENGTH
SWI18-5-E	UL2468, 16 AWG	1,500 mm ±30
SWI18-9-E	UL2468, 18 AWG	1,500 mm ±30
SWI18-12-E	UL2468, 20 AWG	1,500 mm ±30
SWI18-24-E	UL2468, 22 AWG	1,500 mm ±30

## **OUTPUT PLUG OPTIONS**

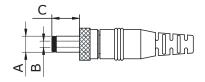
# **Standard DC Plug**





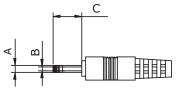
Size	Α	В	С	Unit
5	5.5	2.1	9.5	mm
6	5.5	2.5	9.5	mm
7	3.5	1.35	9.5	mm
8	3.8	1.35	9.5	mm
9	3.8	1.05	9.5	mm

## **Locking DC Plug**

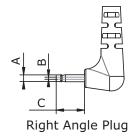


Size	А	В	С	Unit
10	5.5	2.1	9.5	mm
11	5.5	2.5	9.5	mm

## **EIAJ DC Plug**

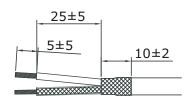




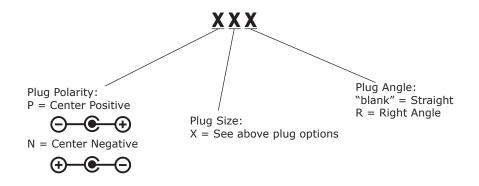


Size	EIAJ	Α	В	С	Unit
12	EIAJ-1	2.35	0.7	9.5	mm
13	EIAJ-2	4.0	1.7	9.5	mm
14	EIAJ-3	4.75	1.7	9.5	mm

# **Stripped and Tinned**



# **DC Plug Type**



<sup>\*</sup>Contact CUI for additional plug options

#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	08/07/2015
1.01	updated datasheet	05/18/2016
1.02	changed wire gauge on 5 Vdc models, updated datasheet	09/15/2016

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



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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

CUI offers a one (1) 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.