



SERIES: SWI18-N | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

- up to 18 W continuous power
- DOE Level VI, CEC, ErP Stage 2
- no load power consumption < 0.1 W
- compact size
- universal input voltage range
- over voltage, over current, and short circuit protections
- UL/cUL, PSE safety approvals
- certified to 60950-1 and 62368-1 standards

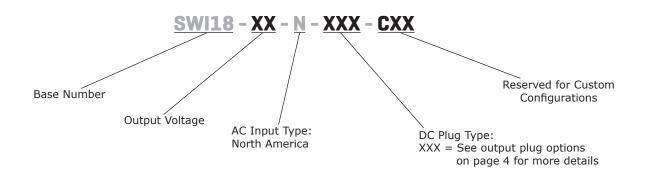




MODEL	output voltage	output current	output power	ripple and noise ¹	efficiency level
	(Vdc)	max (A)	max (W)	max (mVp-p)	
SWI18-5-N	5	3.0	15.0	100	VI
SWI18-9-N	9	2.2	19.8	100	VI
SWI18-12-N	12	1.6	19.2	120	VI
SWI18-24-N	24	0.8	19.2	240	VI

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

PART NUMBER KEY



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INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	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			0.1	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
	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	input to output at 10 mA for 1 minute	3,000			Vac	
isolation resistance	input to output at 500 Vdc	10			ΜΩ	
safety approvals	certified to 60950-1: UL certified to 62368-1: UL PSE					
EMI/EMC	FCC Part 15B Class B					
MTBF	as per Telcordia SR-332, 25°C	300,000			hours	
RoHS	yes					

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	%

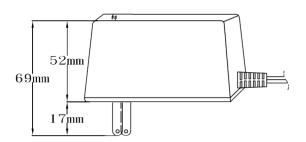
MECHANICAL

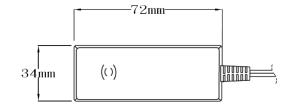
parameter	conditions/description	min	typ	max	units
dimensions	72 x 34 x 69				mm
inlet plug	North America, 2-pin				
weight			170		g

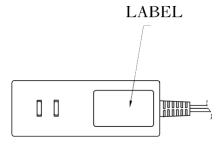
MECHANICAL DRAWING

units: mm

tolerance: ±1.0 mm







DC CORD

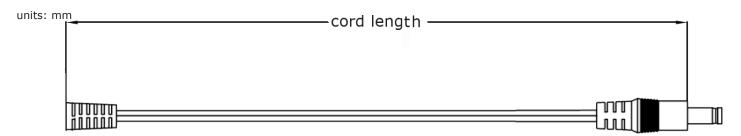
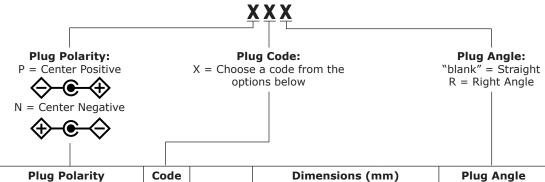


Table 1

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

DC PLUG TYPE PART NUMBER KEY



Plug P	olarity	Code		Dimensions (mm)		Plug	Angle	
Center Pos.	Center Neg.	Option	Type	Α	В	С	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 ²	5.5	2.1	9.5	•	N/A
•	•	11	Locking ²	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:

- Contact CUI for additional plug options
 Maximum insertion depth is 10mm

Standard **EIAJ** Ω В Straight Right Angle (R) Straight Right Angle (R) Locking Stripped & Tinned 25±5 2.5±0.3 5±5 10±2

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REVISION HISTORY

rev.	description	date
1.0	initial release	08/07/2015
1.01	updated datasheet	01/29/2016
1.02	added 62368-1 standard	08/31/2018
1.03	company logo updated	09/18/2020
1.04	safety marks updated	04/26/2021
1.05	plug polarity symbols updated	09/16/2021
1.06	dc plugs updated	04/27/2022
1.07	datasheet updated	12/09/2024

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.