

date 12/09/2024

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DESCRIPTION: AC-DC POWER SUPPLY **SERIES:** SWI24-N

FEATURES

- up to 24 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





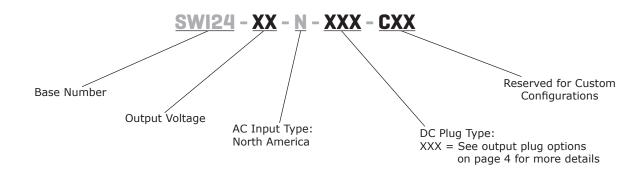




MODEL	output voltage	output current	output power	ripple and noise¹	efficiency level
	(Vdc)	max (A)	max (W)	max (mVp-p)	
SWI24-12-N	12	2.0	24	120	VI
SWI24-15-N	15	1.6	24	150	VI
SWI24-24-N	24	1.0	24	240	VI

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. Notes:

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current				0.58	Α
inrush current	at 230 Vac, full load, 25°C, cold start			60	Α
leakage current				0.25	mA
no load power consumption				0.1	W

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation			±5		%
hold-up time	at full load	10			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
	output shut down				
	12 Vdc output model			22	Vdc
over voltage protection	15 Vdc output model			32	Vdc
	24 Vdc output model			45	Vdc
	output shut down, auto recovery				
aver average probables	12 Vdc output model			5.0	Α
over current protection	15 Vdc output model			4.0	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			МΩ
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	%

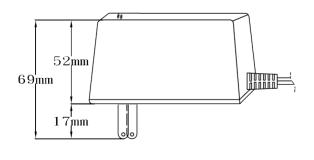
MECHANICAL

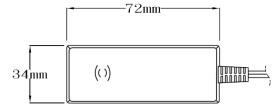
parameter	conditions/description	min	typ	max	units
dimensions	72 x 34 x 69				mm
inlet plug	North America, 2-pin				
weight			148		g

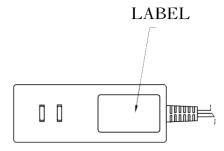
MECHANICAL DRAWING

units: mm

tolerance: ±1.0 mm







DC CORD

units: mm

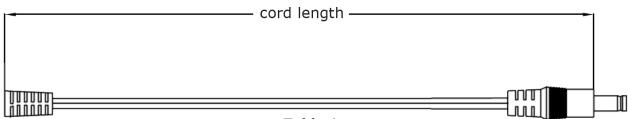
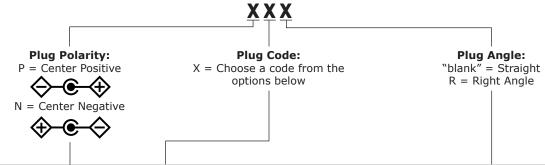


Table 1

MODEL NO.	CABLE	CORD LENGTH	
SWI24-12-N	UL2468, 20 AWG	1,500 mm ±30	
SWI24-15-N	UL2468, 20 AWG	1,500 mm ±30	
SWI24-24-N	UL2468, 22 AWG	1,500 mm ±30	

DC PLUG TYPE PART NUMBER KEY



Plug P	olarity	Code		Dim	Dimensions (mm)			Angle
Center Pos.	Center Neg.	Option	Туре	А	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

REVISION HISTORY

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