

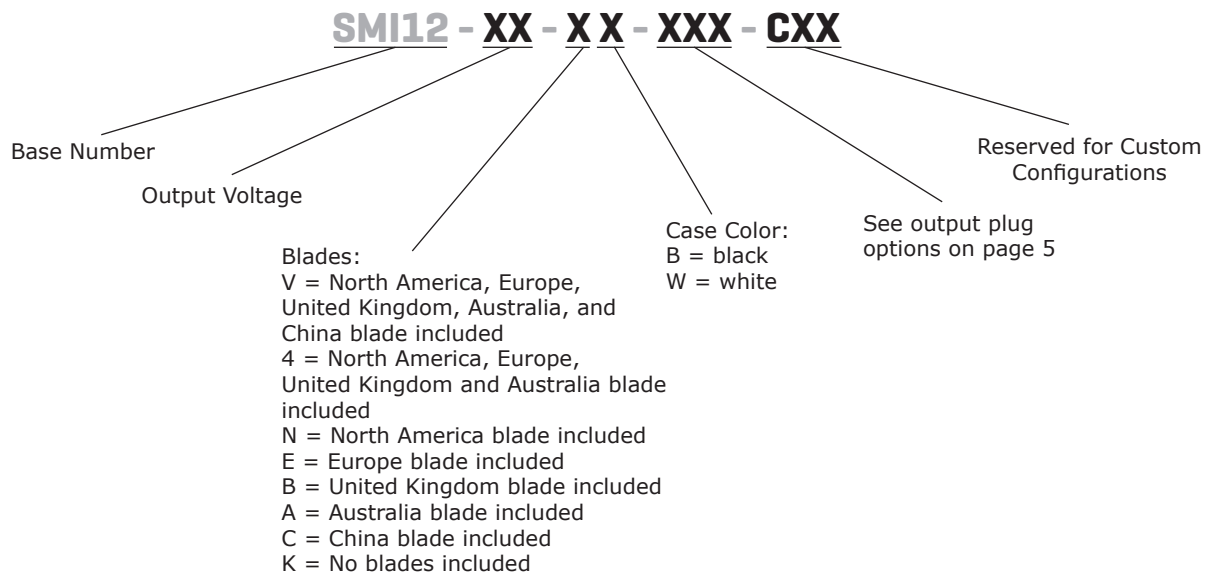
SERIES: SMI12 | **DESCRIPTION:** EXTERNAL AC-DC POWER SUPPLY

FEATURES

- up to 12 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- universal input voltage range
- interchangeable Ac blades for global use
- over voltage, over current, and short circuit protections
- UL/cUL, CE, PSE, RCM & FCC safety approvals
- IEC 62368 certified
- white and black case options



MODEL	output voltage	output current max	output power max	ripple and noise max	efficiency level
	(Vdc)	(A)	(W)	(mVp-p)	
SMI12-5	5	2.0	10.0	200	VI
SMI12-9	9	1.33	11.97	300	VI
SMI12-12	12	1.0	12.0	300	VI

PART NUMBER KEY


INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current				0.5	A
leakage current	at nominal ac input voltage and frequency			0.25	mA
no load power consumption				0.075	W

OUTPUT

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

PROTECTIONS

parameter	conditions/description	min	typ	max	units
short-circuit protection	auto recovery				
over-voltage protection				12	V
over-current protection	auto recovery			3	A

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	10mA for 1 minute	3,000			Vac
safety approvals	certified to 62368: IEC UL/cUL, CE, RCM, PSE, UKCA				
EMI/EMC	EN 55032:2015, EN 55034:2010+A1:2015, FCC				
MTBF	as per Telcordia SR-332, Issue 2 at 115/230 Vac, full load, 0~40°C	50,000			hours
RoHS	yes				

ENVIRONMENTAL

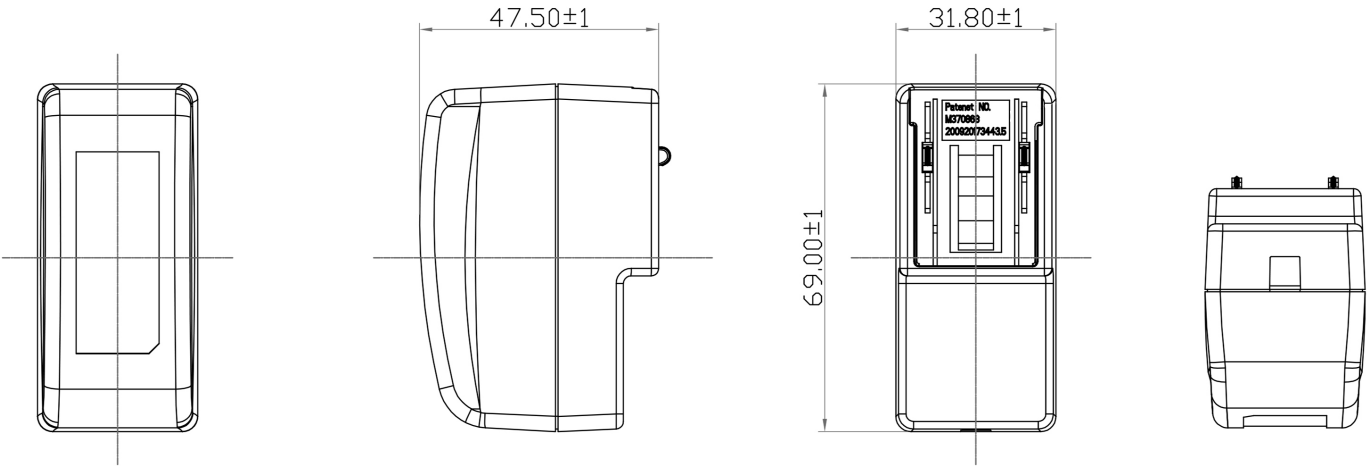
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		60	°C
operating humidity		20		85	%
storage humidity		5		95	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	70 x 32.8 x 48.5				mm
inlet plug	multi-blade wall mount				
ac blade clip type	hidden clip				
weight			89		g

MECHANICAL DRAWING

units: mm
tolerance: ±1



INTERCHANGEABLE BLADES					
BLADE DESIGNATOR	N	E	B	A	C
REGION	North America	Europe	UK	Australia	China
BLADE ACCESSORY BLACK CASE	SMI-US-3L	SMI-EU-3L	SMI-UK-3L	SMI-AU-3L	SMI-CN-3L
BLADE ACCESSORY WHITE CASE	SMI-US-3L-W	SMI-EU-3L-W	SMI-UK-3L-W	SMI-AU-3L-W	SMI-CN-3L-W
BLADE					

DC CORD

units: mm

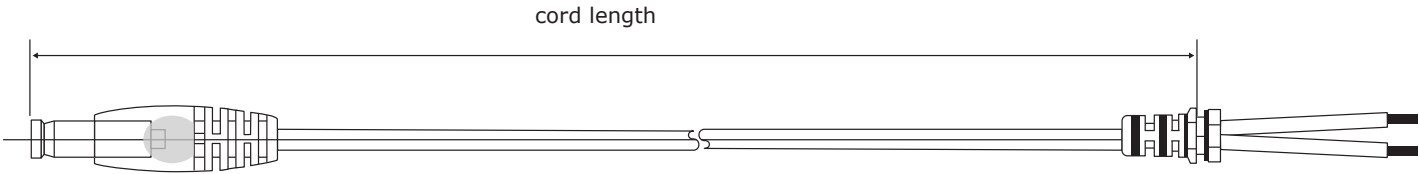


Table 1

MODEL NO.	CABLE	CORD LENGTH
SMI12-5	20 AWG/2C 2468	1,500 mm ±50
SMI12-9	22 AWG/2C 2468	1,500 mm ±50
SMI12-12	24 AWG/2C 2468	1,500 mm ±50

DC PLUG TYPE PART NUMBER KEY

XXX

Plug Polarity:
P = Center Positive

N = Center Negative

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

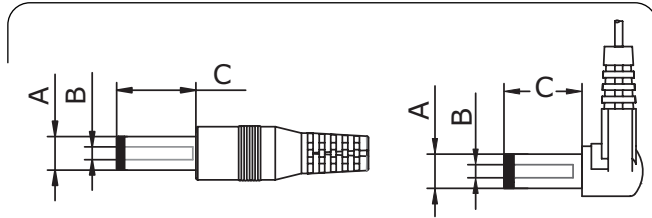
Plug Angle:
"blank" = Straight
R = Right Angle

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	•	•
•	•	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	CUB	USB	USB Type C			•	N/A
N/A	N/A	MUB	USB	Micro USB Type B			•	N/A

Note: 1. Contact CUI for additional plug options
2. Maximum insertion depth is 10mm

DC PLUG TYPE

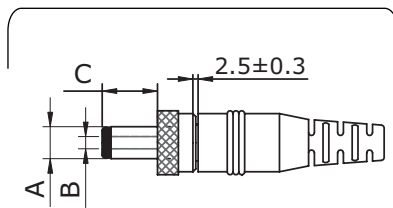
Standard



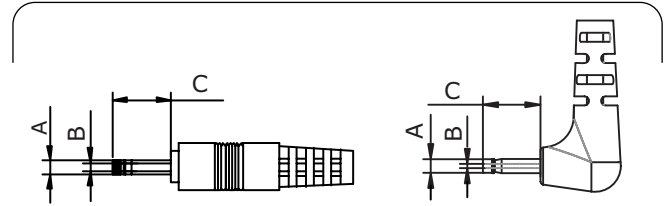
Straight

Right Angle (R)

Locking



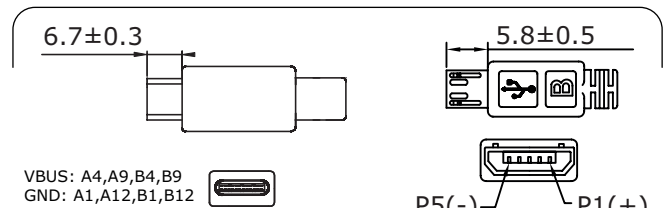
EIAJ



Straight

Right Angle (R)

USB

VBUS: A4, A9, B4, B9
GND: A1, A12, B1, B12

USB Type C

Micro USB Type B

REVISION HISTORY

rev.	description	date
1.0	initial release	07/09/2020
1.01	tolerance updated	01/12/2021
1.02	ac blades updated	08/10/2021
1.03	UKCA added to specification	08/12/2021
1.04	dc plugs updated	04/25/2022
1.05	operating and storage temperature updated	06/06/2022
1.06	ac blade clip type added	06/23/2022
1.07	datasheet updated	11/19/2024

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



Headquarters
15575 SW Sequoia Pkwy #100
Portland, OR 97224
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.com

CUI offers a two (2) 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.