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

FEATURES

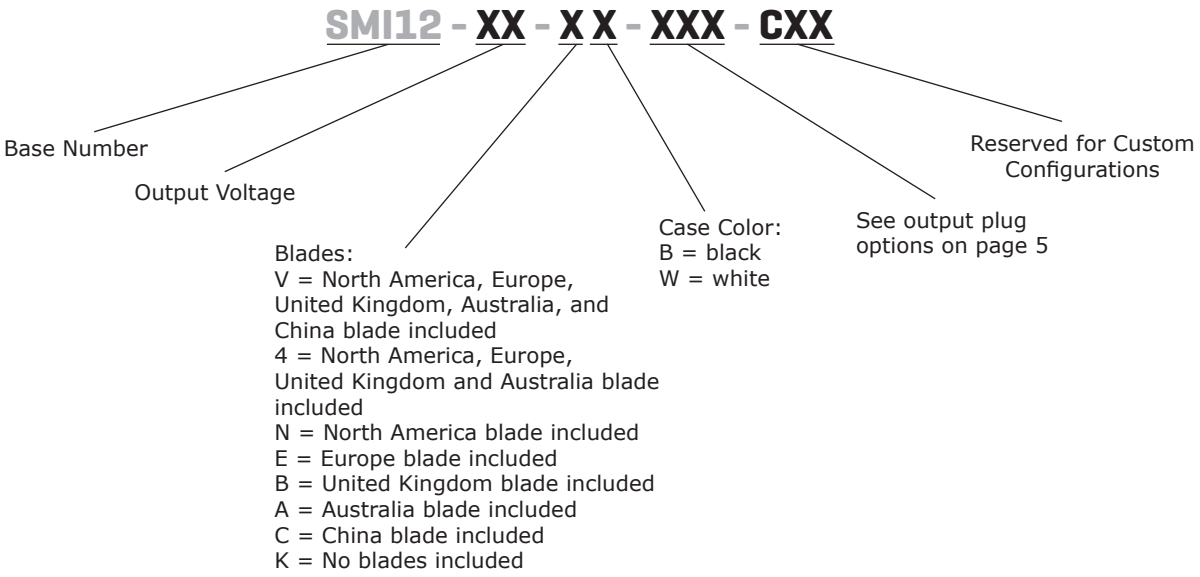
- up to 12 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- universal input voltage range
- interchangeable Ac blades for global use
- over voltage, over current, and short circuit protections
- UL/cUL, CE, PSE, RCM & FCC safety approvals
- IEC 62368 certified
- white and black case options



MODEL

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise max (mVp-p)	efficiency level
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



Please read our datasheet & drawing disclaimer here.

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	%

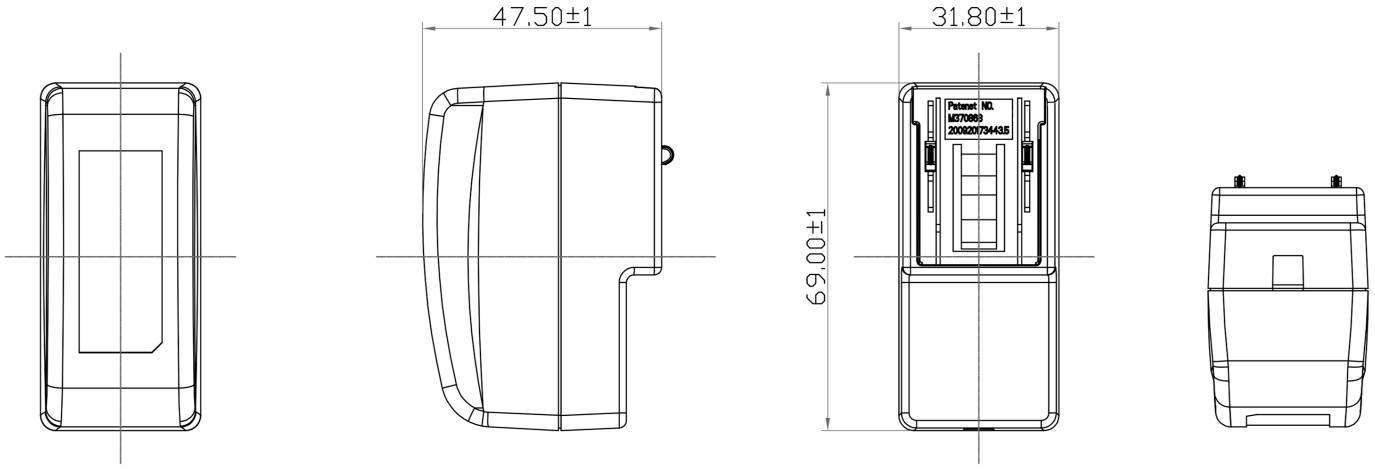
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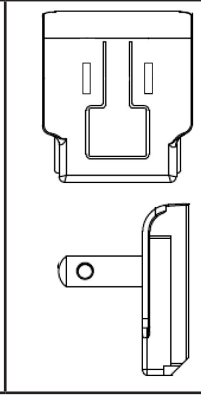
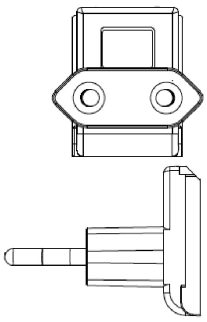
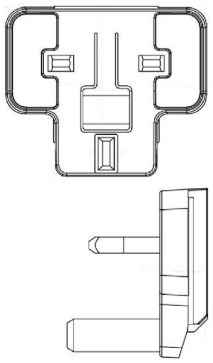
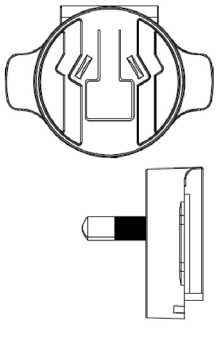
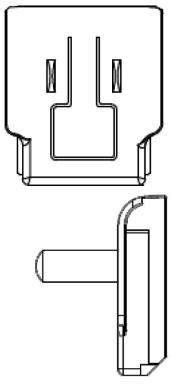
MECHANICAL

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					

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DC CORD

units: mm

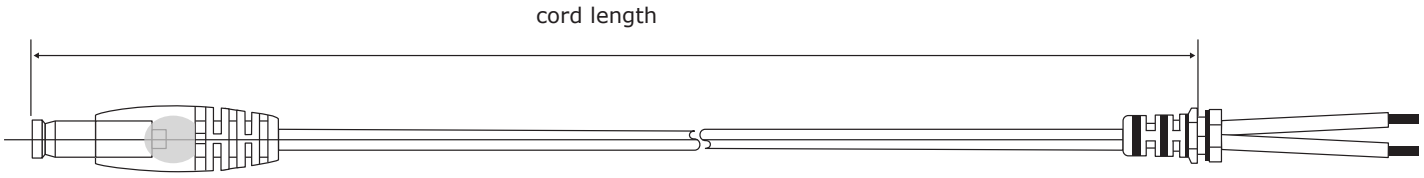


Table 1

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

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

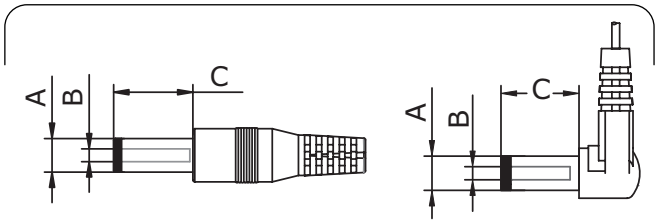
Plug Polarity		Code		Dimensions (mm)			Plug Angle	
Center Pos.	Center Neg.	Option	Type	A	B	C	Straight	Right
•	•	5	Standard	5.5	2.1	9.5	•	•
•	•	6	Standard	5.5	2.5	9.5	•	•
•	•	7	Standard	3.5	1.35	9.5	•	•
•	•	10	Locking[2]	5.5	2.1	9.5	•	N/A
•	•	11	Locking[2]	5.5	2.5	9.5	•	N/A
•	•	12	EIAJ-1	2.35	0.7	9.5	•	•
•	•	13	EIAJ-2	4.0	1.7	9.5	•	•
•	•	14	EIAJ-3	4.75	1.7	9.5	•	•
N/A	N/A	CUB	USB[3]	USB Type C			•	N/A
N/A	N/A	MUB	USB[3]	Micro USB Type B			•	N/A

Note:
1. Contact CUI for additional plug options
2. Maximum insertion depth is 10mm
3. 5V maximum for USB and Micro USB connectors

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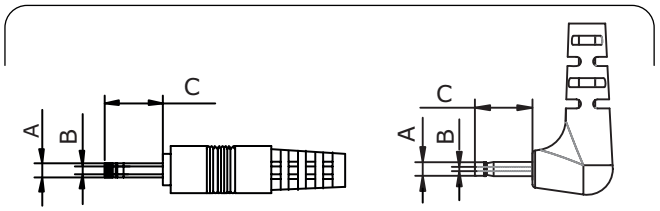
DC PLUG TYPE

Standard



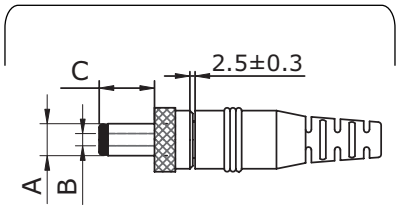
Straight Right Angle (R)

EIAJ

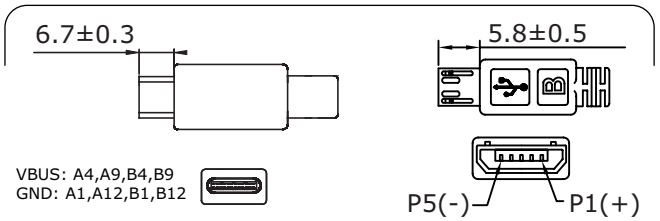


Straight Right Angle (R)

Locking



USB



USB Type C Micro USB Type B

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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
1.08	Note 3 added to DC plug type table	06/09/2025

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

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