SERIES: SMM30 | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

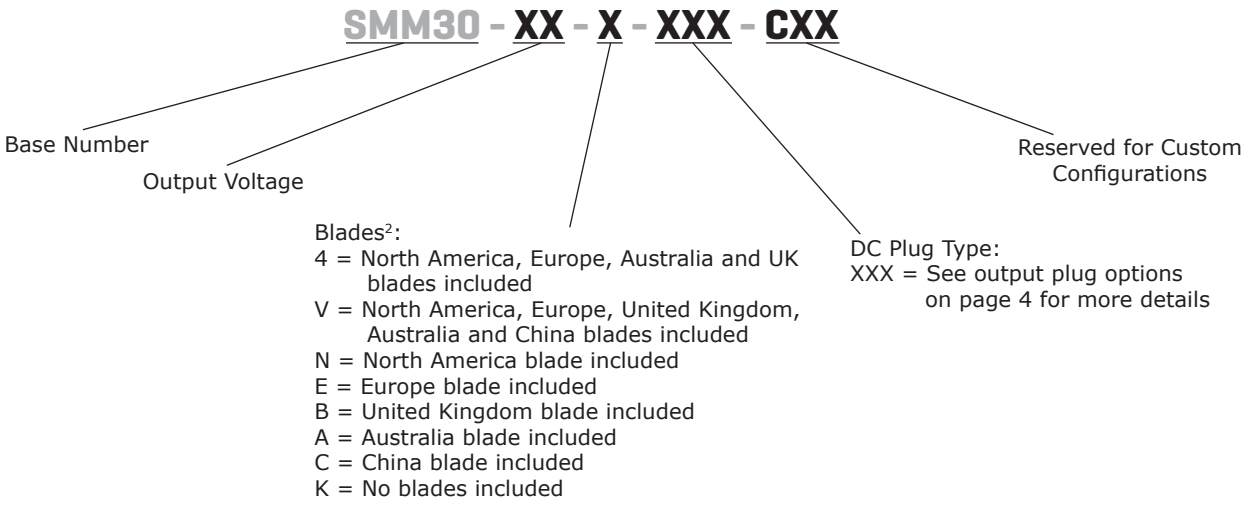
- up to 36 W continuous power
- meets DoE Level VI efficiency
- universal input (90~264 Vac)
- interchangeable blades
- UL/cUL 60601-1, TUV, FCC/CE, PSE, UKCA safety approvals
- custom designs available



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
SMM30-5	5	4.0	20	100	VI
SMM30-6	6	4.0	24	120	VI
SMM30-9	9	3.0	27	180	VI
SMM30-12	12	3.0	36	240	VI
SMM30-15	15	2.0	30	225	VI
SMM30-18	18	1.66	30	270	VI
SMM30-24	24	1.5	36	240	VI
SMM30-36	36	0.83	30	360	VI
SMM30-48	48	0.62	30	480	VI

Notes: 1. At full load, 100~240 Vac input, 20 MHz bandwidth oscilloscope, output terminated with a 0.1 µF ceramic and a 47 µF electrolytic capacitor.

PART NUMBER KEY



Notes: 2. Australia blade (SMI-AU-5) has been discontinued (EOL-01162024).

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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	at 115 Vac, full load at 230 Vac, full load			1 0.5	A A
inrush current	at 115 Vac, cold start, full load at 230 Vac, cold start, full load			30 60	A A
leakage current	240 Vac/50Hz			100	uA
no load power consumption	at 115/230 Vac, 60/50 Hz			0.1	W

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	at full load			±1	%
load regulation				±5	%
start-up time	at 220 Vac, output voltage rise to 90% of rated output voltage			3	s
rise time	at rated input, full load, from 10% to 90% of rated output voltage			50	ms
hold-up time	at nominal input, full load	8.3			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	5V model: output clamped with zener diode 6V model: output clamped with zener diode 9V model: output clamped with zener diode 12V model: output clamped with zener diode 15V model: output clamped with zener diode 18V model: output clamped with zener diode 24V model: output clamped with zener diode 36V model: output clamped with zener diode 48V model: output clamped with zener diode			200 150 200 150 150 150 150 150 150	% % % % % % % % %
short circuit protection	continuous, auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output		4,000		Vac
insulation resistance	input to output at 500 Vdc for 2 seconds	100			MΩ
safety approvals	UL/cUL 60601-1, TUV, CB, CE, FCC, PSE, UKCA				
EMI/EMC	FCC Part 15 Class B, CE				
MTBF	as per MIL-HDBK-217F at 25°C	100,000			hours
RoHS	yes				

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		85	°C
operating humidity	non-condensing	10		90	%
storage humidity	non-condensing	5		90	%
altitude				5,000	m

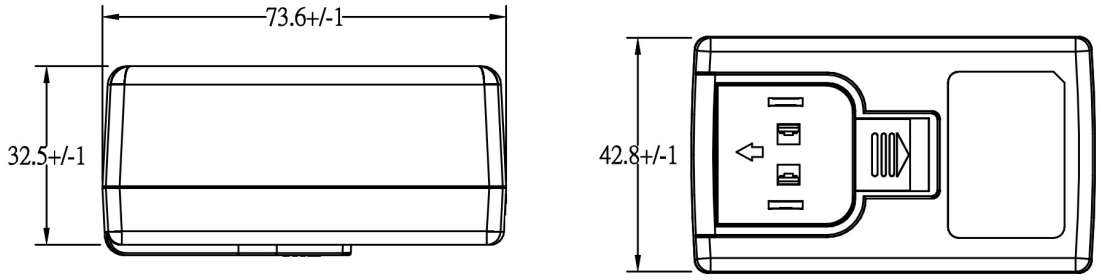
Please read our datasheet & drawing disclaimer here.

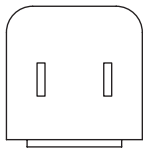
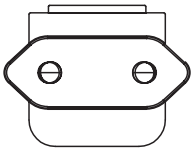
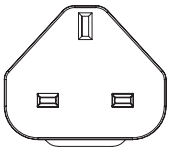
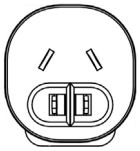
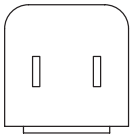
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	73.6 x 42.8 x 32.5				mm
inlet plug	interchangeable blades (North America, Europe, UK, Australia, China)				
ac blade clip type	sliding clip				
weight			200		g

MECHANICAL DRAWING

units: mm
tolerance: ±1 mm



INTERCHANGEABLE BLADES					
BLADE DESIGNATOR	N	E	B	A	C
REGION	North America	Europe	UK	AU	China
BLADE ACCESSORY	SMI-US-5	SMI-EU-5	SMI-UK-5	SMI-AU-5B	SMI-CN-5
BLADE					

DC CORD

units: mm

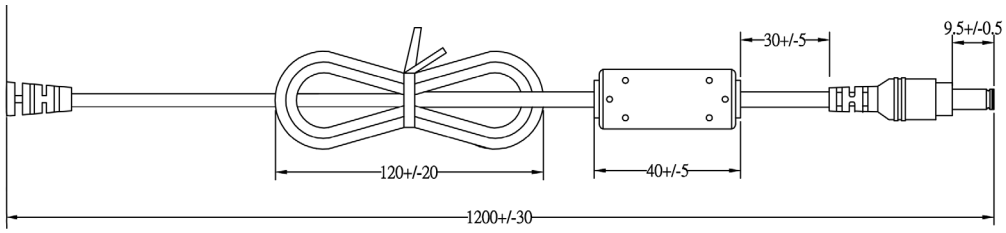


Table 1

MODEL NO.	CABLE	CORD LENGTH
SMM30-5	UL 1185, 16 AWG	1,200 mm ±30
SMM30-6	UL 1185, 16 AWG	1,200 mm ±30
SMM30-9	UL 1185, 16 AWG	1,200 mm ±30
SMM30-12	UL 1185, 18 AWG	1,200 mm ±30
SMM30-15	UL 1185, 18 AWG	1,200 mm ±30
SMM30-18	UL 1185, 18 AWG	1,200 mm ±30
SMM30-24	UL 1185, 18 AWG	1,200 mm ±30
SMM30-36	UL 2468, 22 AWG	1,800 mm ±50
SMM30-48	UL 2468, 22 AWG	1,800 mm ±50

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DC PLUG TYPE PART NUMBER KEY

X X X

Plug Polarity:
P = Center Positive



N = Center Negative



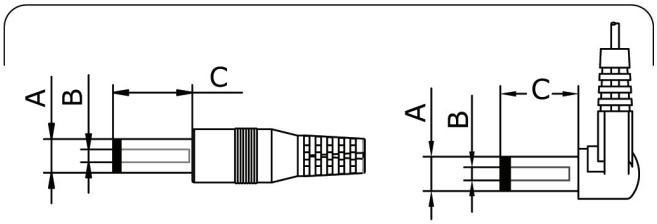
Plug Code:
X = Choose a code from the options below

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	•	•

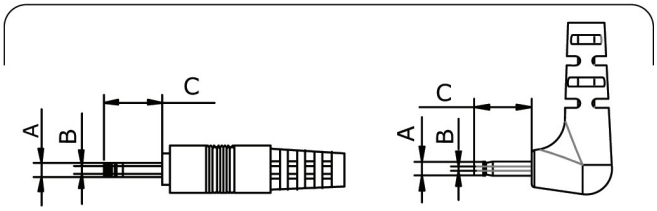
Note: 1. Contact CUI for additional plug options
2. Maximum insertion depth is 10mm

Standard



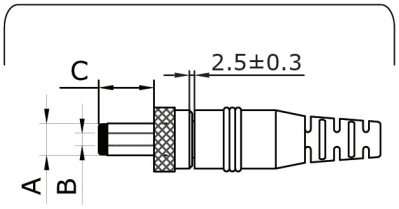
Straight Right Angle (R)

EIAJ



Straight Right Angle (R)

Locking



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REVISION HISTORY

rev.	description	date
1.0	initial release	02/18/2020
1.01	dc plug updated	07/30/2020
1.02	OVP and DC cord table updated	03/10/2022
1.03	dc plugs updated	04/29/2022
1.04	ac blade clip type added	06/23/2022
1.05	added UKCA	01/06/2023
1.06	Australia blade removed	03/14/2024
1.07	Australia blade added, mechanical drawing updated	03/27/2024
1.08	datasheet updated	12/02/2024

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.

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