

SERIES: SMM12-USB | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

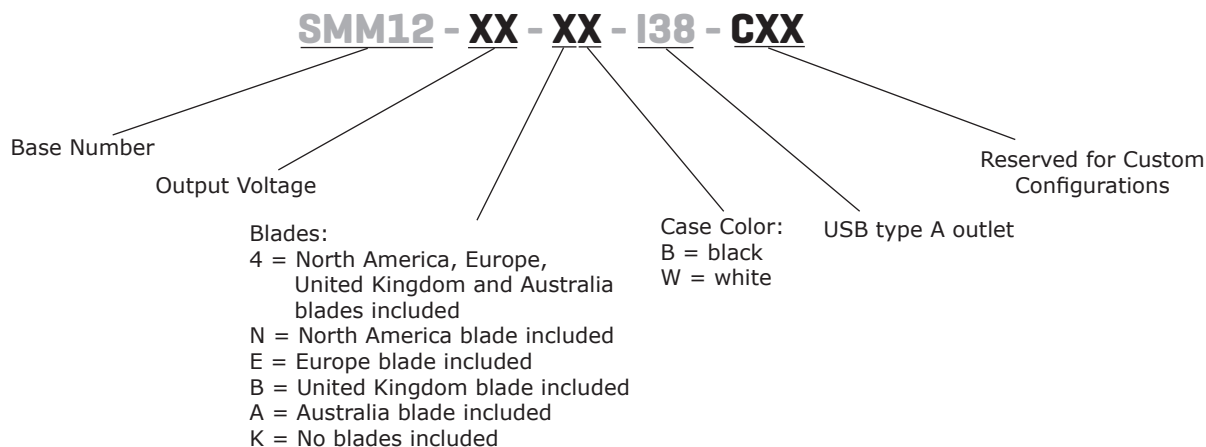
- up to 12W continuous power
- universal input (90~264 Vac)
- interchangeable blades
- IEC 60601 certified
- MOPP
- USB inlet
- black and white case options



MODEL	output voltage	output current max	output power max	ripple and noise ¹ max	efficiency level
	(Vdc)	(A)	(W)	(mVp-p)	
SMM12-5-I38	5	2.4	12	100	VI
SMM12-6-I38	6	2.0	12	120	VI
SMM12-9-I38	9	1.33	12	135	VI
SMM12-12-I38	12	1.0	12	180	VI
SMM12-15-I38	15	0.8	12	225	VI
SMM12-18-I38	18	0.66	12	270	VI
SMM12-24-I38	24	0.5	12	240	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



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at 115 Vac, full load at 230 Vac, full load			1.0 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	at 240 Vac, 50 Hz			0.1	mA
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 100 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	output clamped with zener diode			150	%
over current protection				150	%
short circuit protection	continuous, auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 5 mA for 2 seconds		4,000		Vac
insulation resistance	input to output at 500 Vdc for 3 seconds	50			MΩ
safety approvals	60601: UL/cUL, TUV 60950: J				
EMI/EMC	FCC Part 15, Subpart B ICES-003 EN 55011 J5502				
MTBF	as per MIL-HDBK-217F at 25°C	100,000			hours
RoHS	yes				

ENVIRONMENTAL

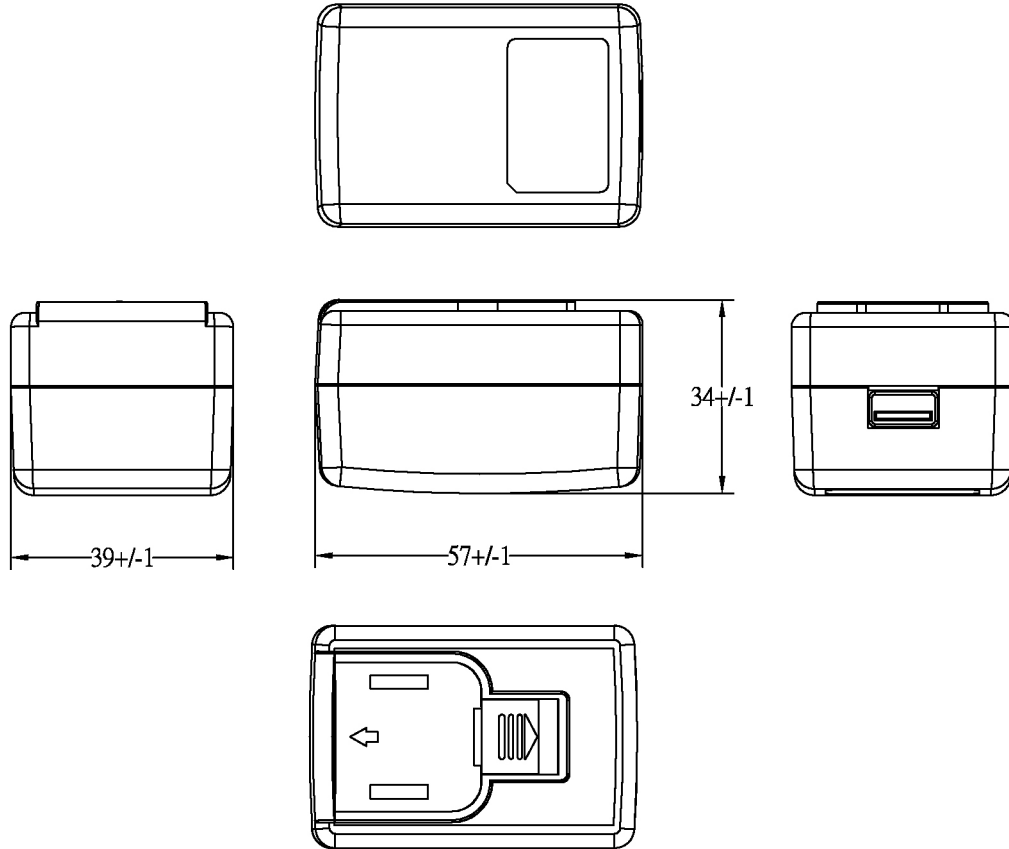
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		85	°C
operating humidity	non-condensing	10		90	%
storage humidity	non-condensing	5		90	%
altitude				5,000	m

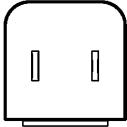
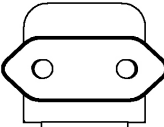
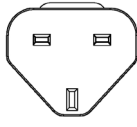
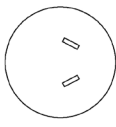
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	57 (L) x 39 (W) x 34 (H)				mm
inlet plug	interchangeable blades (North America, Europe, UK, Australia)				
ac blade clip type	sliding clip				
weight			70		g

MECHANICAL DRAWING

units: mm
tolerance: ±1 mm



INTERCHANGEABLE BLADES				
BLADE DESIGNATOR	N	E	B	A
REGION	North America	Europe	UK	Australia
BLADE ACCESSORY BLACK CASE	SMI-US-5	SMI-EU-5	SMI-UK-5	SMI-AU-5
BLADE ACCESSORY WHITE CASE	SMI-US-5W	SMI-EU-5W	SMI-UK-5W	SMI-AU-5W
BLADE				

REVISION HISTORY

rev.	description	date
1.0	initial release	01/21/2021
1.01	ac blade clip type added	06/23/2022
1.02	medical icon added	05/03/2023

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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