SERIES: SMI6AD | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- 5W continuous output power
- universal USB-A Output
- interchangeable AC blades
- universal input voltage range
- no load power consumption <0.1W
- LPS (Limited Power Source) Rated
- over current and short circuit protection
- regulatory compliance: UL/cUL, CE, FCC standards
- certified to IEC/UL 62368-1

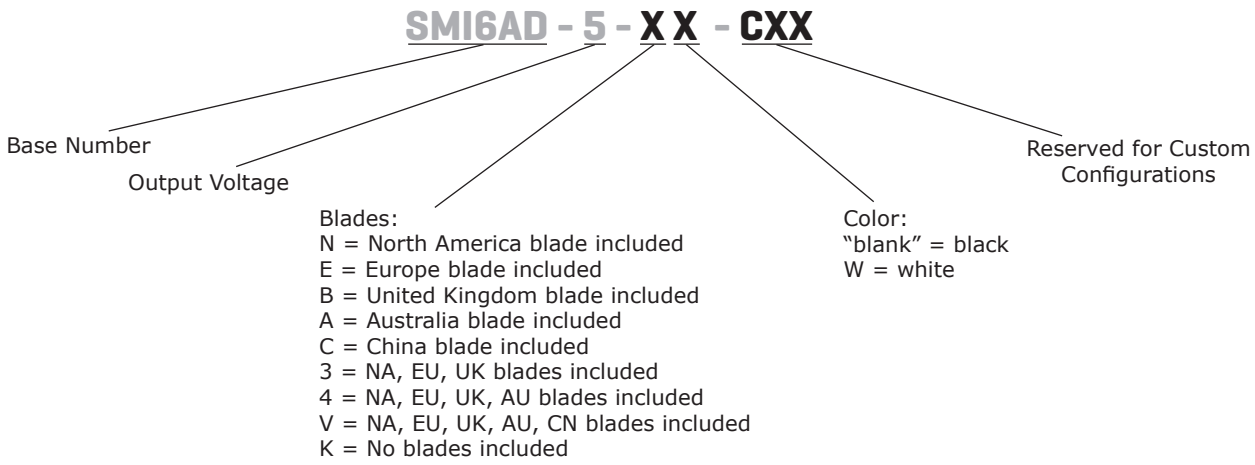


MODEL

MODEL	input voltage range (Vac)	input frequency range (Hz)	output voltage nom (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level[2] typ (%)	no load power consumption typ (W)
SMI6AD-5	90 ~ 264	47 ~ 63	5.0	1.0	5.0	200	73.62	0.1

Notes: 1. At full load, nominal AC input voltage, 25°C, 20 MHz bandwidth oscilloscope, output terminated with 0.1 µF ceramic and 10 µF aluminum electrolytic capacitors.
2. Average efficiency is measured at 115V/60Hz and 230V/60Hz, 25%, 50%, 75%, and 100% load.

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				0.18	A
leakage current				0.25	mA
no load power consumption				0.1	W

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±5		%
load regulation			±5		%
start-up time	at nominal input voltage, full load			3	s
rise time				50	ms
hold-up time	at 100 Vac, full load	8			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	clamped by internal protection				
over current protection		110		200	%
short circuit protection	auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 5 mA for 1 minute		3,000		Vac
safety approvals	certified to 62368-1: IEC, UL				
EMI/EMC	EN 55032 Class B, FCC PART 15 Class B, CE				
ESD	IEC 61000-4-2 contact: ±4 kV, air: ±8 kv, perf. Criteria B				
radiated immunity	IEC 61000-4-3 frequency: 80 ~ 1000 MHz, field strength: 3V/M with 80% AM (1KHz), perf. Criteria A EN 61000-4-3, EN 55035				
EFT/burst	EN 61000-4-4 power line: 1 kV, signal line: 0.5 kV, perf. Criteria B				
surge	power line: 1 kV, line to earth: 2 kV, 90°/-270°				
MTBF	as per Telcordia SR-332 (Issue 3), at full load, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

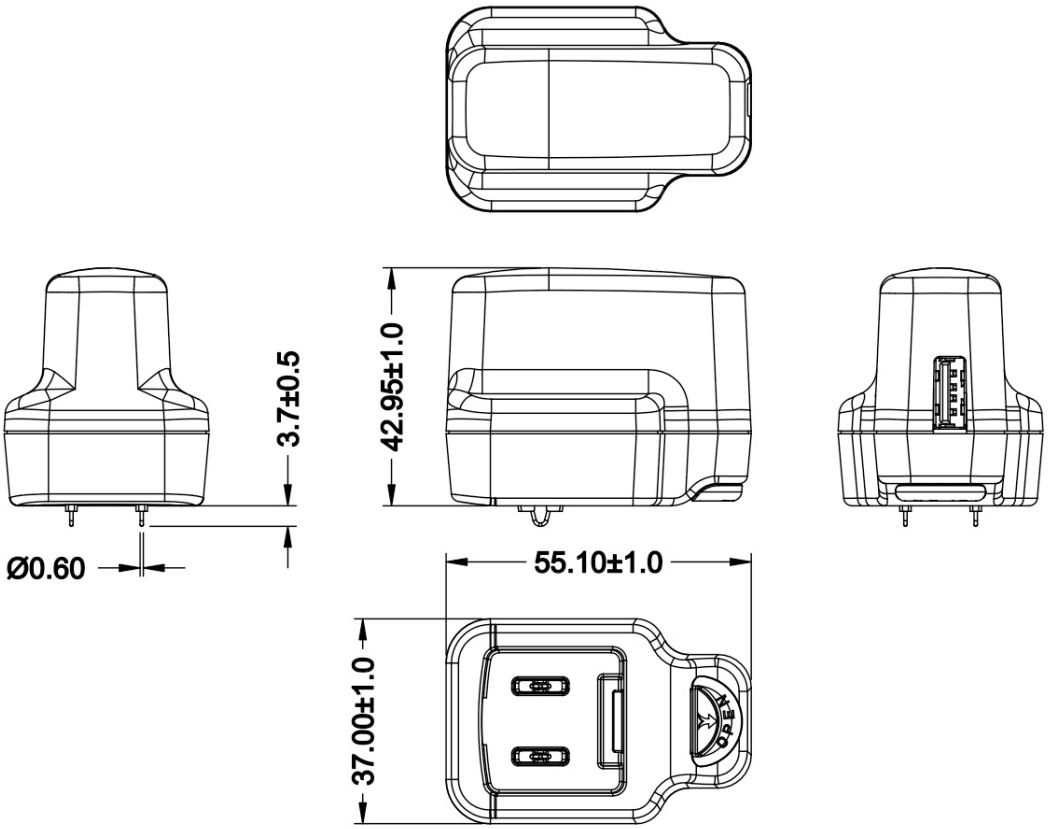
parameter	conditions/description	min	typ	max	units
operating temperature		0		50	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	10		90	%
storage humidity	non-condensing	10		90	%

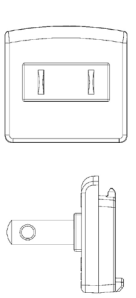
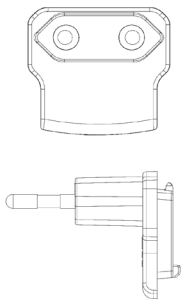
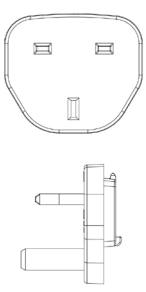
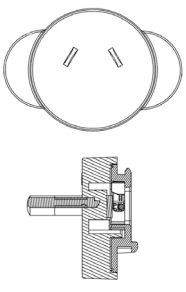
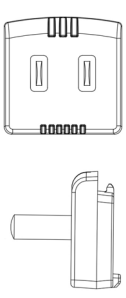
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	55.1 x 37 x 42.95				mm
inlet plug	interchangeable blades (NA, EU, UK, AU, CN)				
ac blade clip type	hidden clip				
weight				41	g

MECHANICAL DRAWING

units: mm
tolerance: ±1 mm



INTERCHANGEABLE BLADES					
BLADE DESIGNATOR	N	E	B	A	C
REGION	North America	Europe	United Kingdom	Australia	China
BLADE ACCESSORY	SMI-US-9	SMI-EU-9	SMI-UK-9	SMI-AU-9	SMI-CN-9
BLADE					

REVISION HISTORY

rev.	description	date
1.0	initial release	11/12/2025

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.