CUI INC
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SERIES: SMI10-USB | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- up to 10 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- no load power consumption < 0.075 W
- universal input voltage range
- interchangeable Ac blades for global use
- over voltage and short circuit protections
- UL/cUL, RCM, CCC, PSE safety approvals
- UL/EN/IEC 62368 certified

MODEL

	input voltage	input frequency	output voltage	output current	output power	ripple and noise[1]	efficiency level[2]		no load power consumption
	range (Vac)	range (Hz)	nom (Vdc)	max (A)	max (W)	max (mVp-p)	average (%)	10% (%)	typ (W)
SMI10-5-I38	90 ~ 264	47 ~ 63	5	2	10	300	80.9	76.6	0.06

Notes: 1. At full load, 25°C, nominal input, 20 MHz bandwidth oscilloscope, output parallel with 0.1 µF and 10 µF capacitors to ground.
2. CoC Tier 2 compliant

PART NUMBER KEY

SMI10 - 5 - X - I38 - CXX

- SMI10: Base Number
- 5: Output Voltage
- X: Blades:
  - V = North America, Europe, United Kingdom, Australia, and China blade included
  - N = North America blade included
  - E = Europe blade included
  - B = United Kingdom blade included
  - A = Australia blade included
  - C = China blade included
  - K = No blades included
- I38: USB Type A Inlet
- CXX: Reserved for Custom Configurations

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at nominal input voltage			0.3	A
leakage current	at nominal input voltage & frequency			0.25	mA
no load power consumption	at 115/230 Vac, 60/50 Hz Level VI CoC Tier 2			 0.075 0.075	 W W

OUTPUT

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

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	with zener clamp			10	Vdc
over current protection	output shut down, auto recovery			4	A
short circuit protection					

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute		3,000 4,242		Vac Vdc
safety approvals	UL/cUL, RCM, CCC, PSE, UKCA				
EMI/EMC	FCC Part 15B Class B, CE				
MTBF	as per Telcordia SR-332 Issue 2, at 115/230 Vac, full load, 0 ~ 40°C	50,000			hours
RoHS	2011/65/EU				

ENVIRONMENTAL

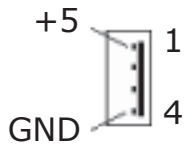
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		60	°C
operating humidity	non-condensing	20		85	%
storage humidity	non-condensing	5		95	%

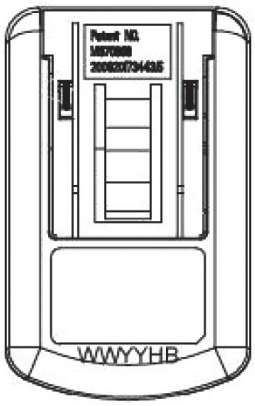
MECHANICAL

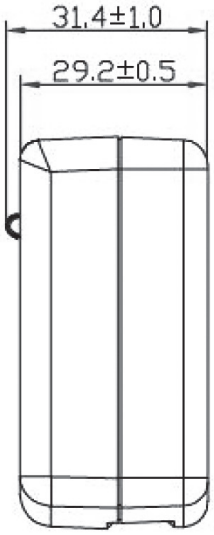
parameter	conditions/description	min	typ	max	units
dimensions	60.9 x 38 x 29.2				mm
inlet plug	interchangeable blades (North America, Europe, UK, Australia, China)				
ac blade clip type	hidden clip				
weight	without interchangeable blades		40		g

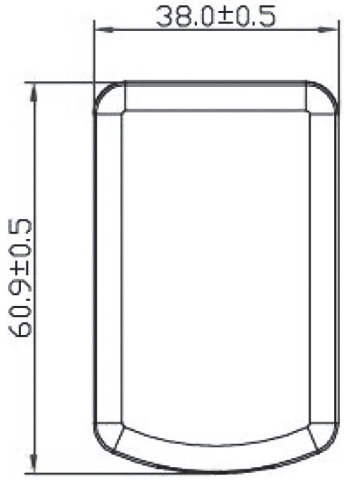
MECHANICAL DRAWING

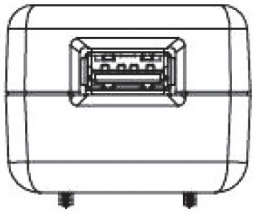
units: mm

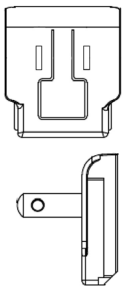
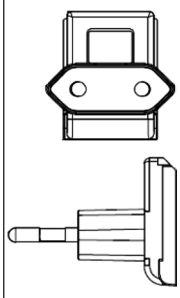
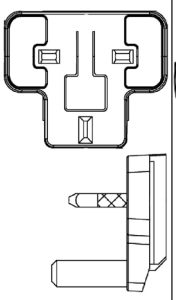
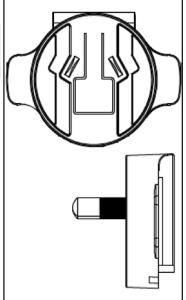
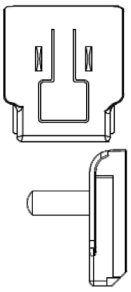
PIN	Output Voltage
1	+5V
2	Short
3	Short
4	GND
	









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

REVISION HISTORY

rev.	description	date
1.0	initial release	04/25/2016
1.01	updated datasheet	09/15/2016
1.02	updated features	07/22/2020
1.03	model table updated	11/27/2020
1.04	GS removed from safeties	12/11/2020
1.05	UKCA added to specification	08/12/2021
1.06	ac blade clip type added	06/23/2022

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.