



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

FEATURES

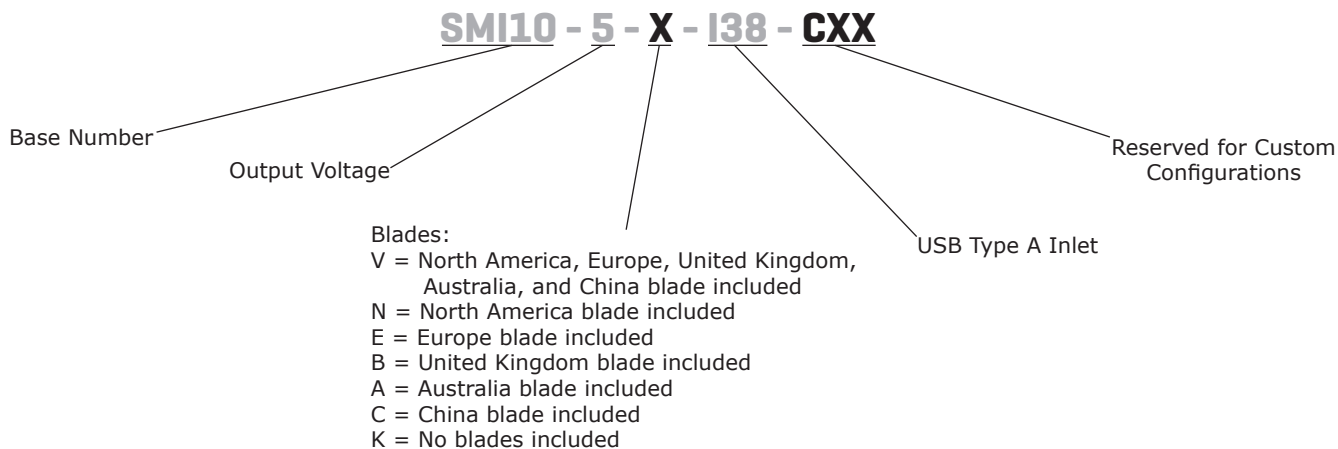
- up to 10 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- no load power consumption < 0.075 W
- universal input voltage range
- interchangeable Ac blades for global use
- over voltage and short circuit protections
- UL/cUL, GS, RCM, CCC, PSE safety approvals



| MODEL | output voltage (Vdc) | output current max (A) | output power max (W) | ripple and noise ¹ max (mVp-p) | efficiency level ² |
|-------------|-------------------------|------------------------------|----------------------------|---|-------------------------------|
| SMI10-5-I38 | 5 | 2 | 10 | 300 | VI |

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 complaint

PART NUMBER KEY



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, GS, RCM, CCC, PSE | | | | |
| 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 |

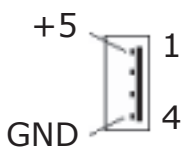
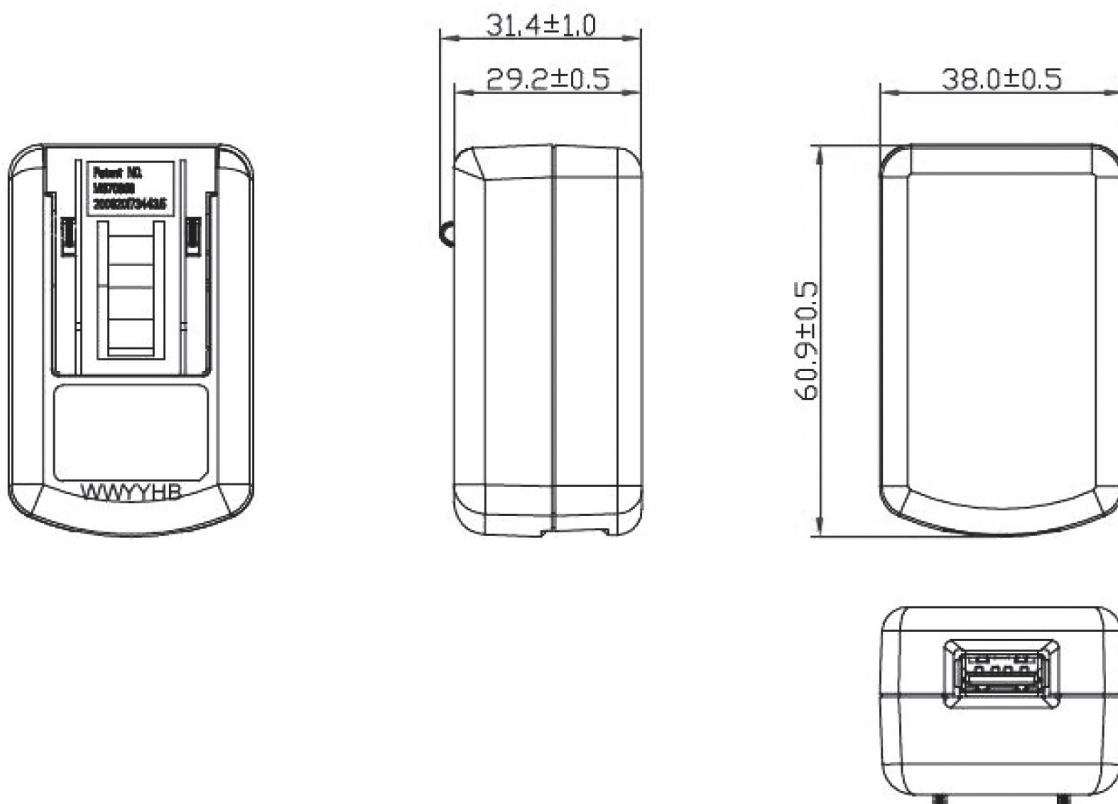
MECHANICAL

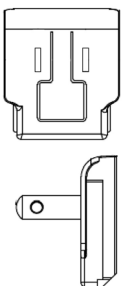
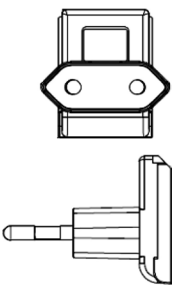
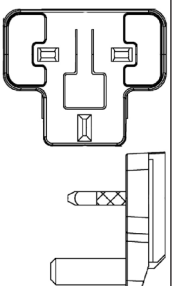
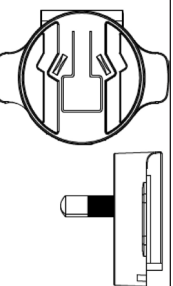
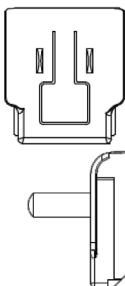
| parameter | conditions/description | min | typ | max | units |
|------------|--|-----|-----|-----|-------|
| dimensions | 60.9 x 38 x 29.2 | | | | mm |
| inlet plug | interchangeable blades (North America, Europe, UK, Australia, China) | | | | |
| weight | without interchangeable blades | | 40 | | 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 |

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.

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