



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

**FEATURES**

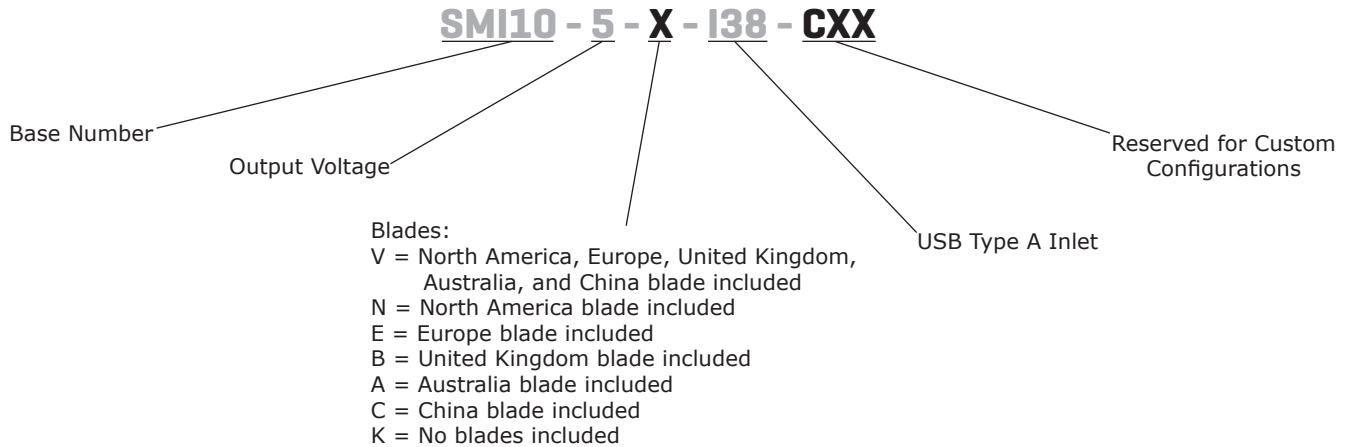
- up to 10 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- no load power consumption < 0.075 W
- universal input voltage range
- interchangeable Ac blades for global use
- over voltage and short circuit protections
- UL/cUL, GS, RCM, CCC, PSE safety approvals



| MODEL       | output voltage<br>(Vdc) | output current<br>max<br>(A) | output power<br>max<br>(W) | ripple and noise <sup>1</sup><br>max<br>(mVp-p) | efficiency level <sup>2</sup> |
|-------------|-------------------------|------------------------------|----------------------------|---|-------------------------------|
| 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<br>Level VI<br>CoC Tier 2 |     |     | 0.075<br>0.075 | W<br>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<br>4,242 |     | Vac<br>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,<br>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    |

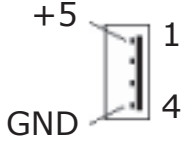
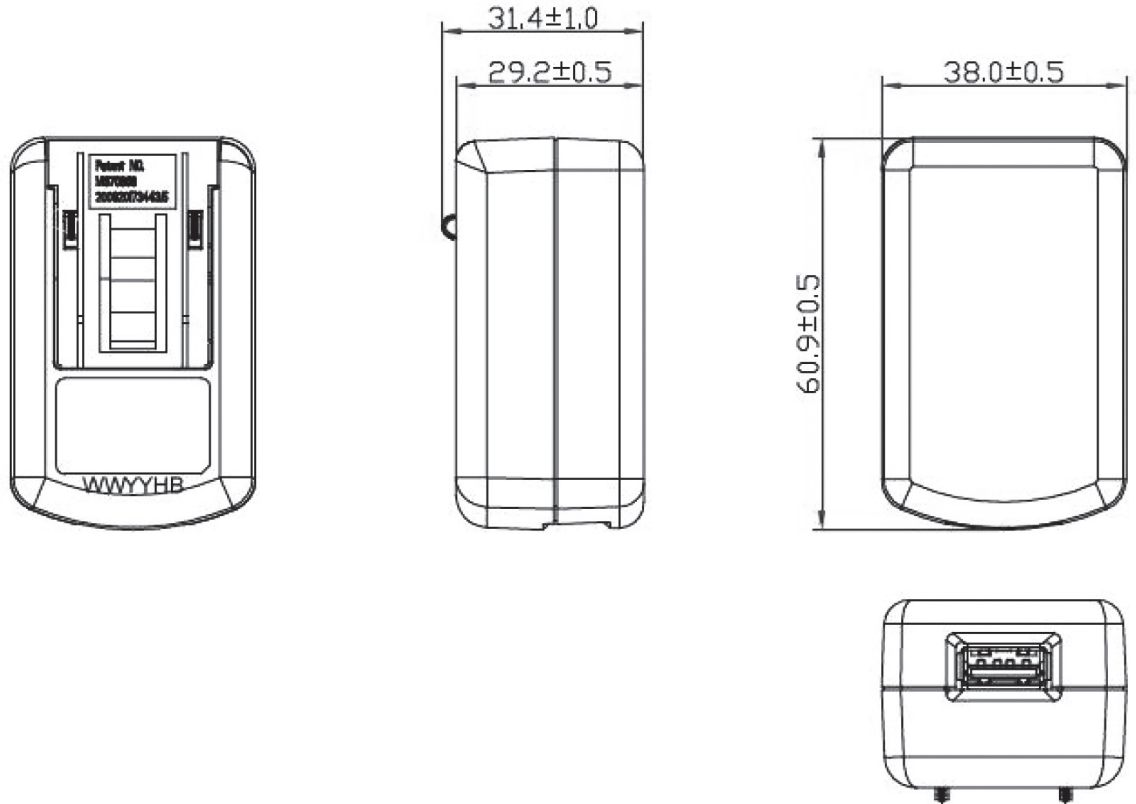
## MECHANICAL

| 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.

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