

## SERIES: SMI30C | DESCRIPTION: AC-DC POWER SUPPLY

### FEATURES

- up to 30 W continuous power
- interchangeable ac blades for global use
- universal input voltage range
- integrated USB Type C receptacle
- USB Power Delivery (PD) 3.0
- compliant with BC1.2 and QC4+
- 5, 9, 12, 15, 20 Vdc output
- USB PPS 3.3~16 Vdc
- UL/CUL, CE, FCC safety approvals

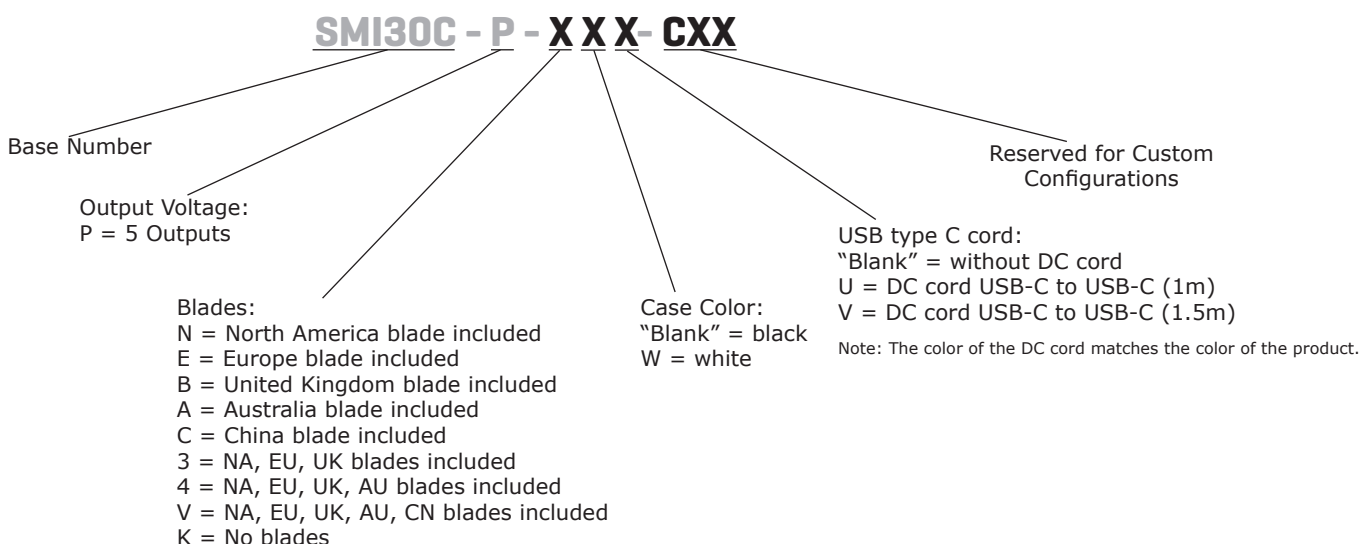


### MODEL

|        | output<br>voltage<br>nom<br>(Vdc) | output<br>current<br>max<br>(A) | output<br>power<br>max<br>(W) | ripple<br>and noise <sup>1</sup><br>max<br>(mVp-p) | efficiency<br>level |
|--------|-----------------------------------|---------------------------------|-------------------------------|----------------------------------------------------|---------------------|
| SMI30C | 5                                 | 3.0                             | 15                            | 150                                                | VI                  |
|        | 9                                 | 3.0                             | 27                            | 150                                                | VI                  |
|        | 12                                | 2.5                             | 30                            | 200                                                | VI                  |
|        | 15                                | 2.0                             | 30                            | 250                                                | VI                  |
|        | 20                                | 1.5                             | 30                            | 300                                                | VI                  |
|        | 3.3~11.0                          | 3.0                             | 30                            | 250                                                | VI                  |
|        | 3.3~16.0                          | 2.0                             | 30                            | 300                                                | VI                  |

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1  $\mu$ F multilayer and 10  $\mu$ F low ESR electrolytic capacitors.  
2. AC 115V/60Hz and 230V/50Hz, output load current from 100%, 75%, 50%, 25%.

### PART NUMBER KEY



INPUT

| parameter                 | conditions/description | min | typ     | max  | units |
|---------------------------|------------------------|-----|---------|------|-------|
| voltage                   |                        | 90  | 100~240 | 264  | Vac   |
| frequency                 |                        | 47  | 50~60   | 63   | Hz    |
| current                   |                        |     |         | 0.8  | A     |
| leakage current           |                        |     |         | 0.25 | mA    |
| no load power consumption | at 230 Vac             |     |         | 0.1  | W     |

OUTPUT

| parameter       | conditions/description      | min | typ | max | units |
|-----------------|-----------------------------|-----|-----|-----|-------|
| load regulation |                             |     | ±5  |     | %     |
| line regulation |                             |     | ±5  |     | %     |
| start-up time   |                             |     |     | 4   | s     |
| rise time       |                             |     |     | 100 | ms    |
| hold-up time    | at 115 & 230 Vac, full load | 8   |     |     | ms    |

PROTECTIONS

| parameter                | conditions/description      | min | typ | max | units |
|--------------------------|-----------------------------|-----|-----|-----|-------|
| over voltage protection  | output shut down with clamp |     |     |     |       |
| over current protection  | auto recovery               |     |     | 4   | A     |
| short circuit protection | auto recovery               |     |     |     |       |

SAFETY & COMPLIANCE

| parameter         | conditions/description                                                                                              | min     | typ   | max | units |
|-------------------|---------------------------------------------------------------------------------------------------------------------|---------|-------|-----|-------|
| isolation voltage | input to output for 1 minute, 10 mA max                                                                             |         | 3,000 |     | Vac   |
| safety approvals  | certified to 62368-1: UL, EN                                                                                        |         |       |     |       |
| EMI/EMC           | FCC part 15: Class B for radiated and conducted emissions<br>EN 55032, Class B for radiated and conducted emissions |         |       |     |       |
| MTBF              | as per Telcordia Technologies SR-332 (Issue 3),<br>at 25°C                                                          | 300,000 |       |     | hours |
| RoHS              | yes                                                                                                                 |         |       |     |       |

ENVIRONMENTAL

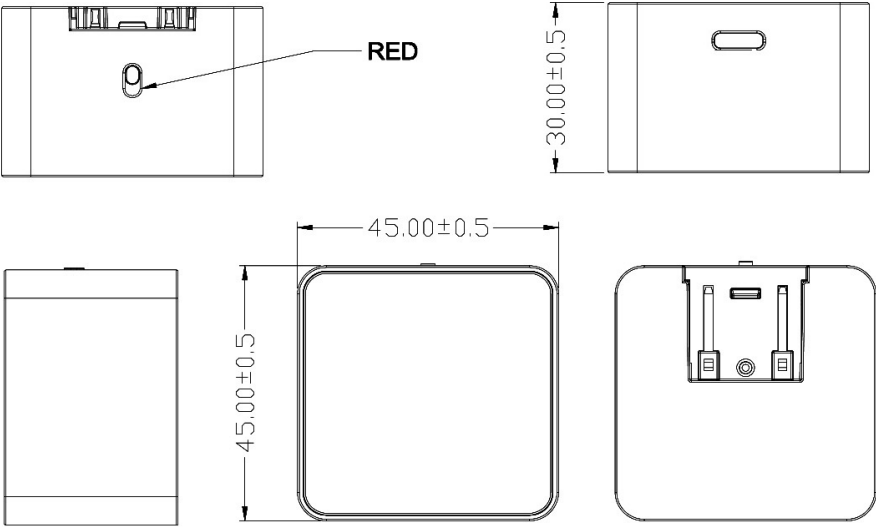
| parameter             | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature |                        | 0   |     | 40  | °C    |
| storage temperature   |                        | -20 |     | 70  | °C    |
| operating humidity    | non-condensing         | 5   |     | 95  | %     |
| storage humidity      | non-condensing         | 5   |     | 95  | %     |

MECHANICAL

| parameter          | conditions/description                      | min | typ  | max | units |
|--------------------|---------------------------------------------|-----|------|-----|-------|
| dimensions         | 45 (L) x 45 (W) x 30 (H)                    |     |      |     | mm    |
| inlet plug         | interchangeable blades (US, EU, UK, AU, CN) |     |      |     |       |
| ac blade clip type | top release                                 |     |      |     |       |
| weight             | without blades                              |     | 61.9 |     | g     |

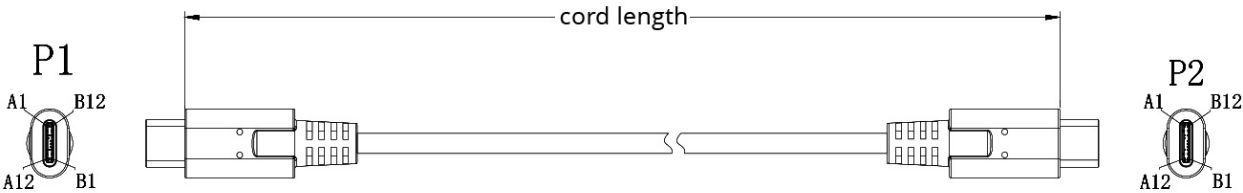
MECHANICAL DRAWING

units: mm  
tolerance: ±1.0 mm



| INTERCHANGEABLE BLADES |               |          |          |           |          |
|------------------------|---------------|----------|----------|-----------|----------|
| BLADE DESIGNATOR       | N             | E        | B        | A         | C        |
| REGION                 | North America | Europe   | UK       | Australia | China    |
| BLADE ACCESSORY        | SMI-US-8      | SMI-EU-8 | SMI-UK-8 | SMI-AU-8  | SMI-CN-8 |
| BLADE                  |               |          |          |           |          |

DC CORD



Plugs: USB-C to USB-C  
Length: 1,000/1,500 mm  
Color: black/white

## REVISION HISTORY

| rev. | description                | date       |
|------|----------------------------|------------|
| 1.0  | initial release            | 02/05/2025 |
| 1.01 | ac blade clip type updated | 11/22/2025 |

The revision history provided is for informational purposes only and is believed to be accurate.



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a bel group

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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.