



SERIES: SMI6B | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

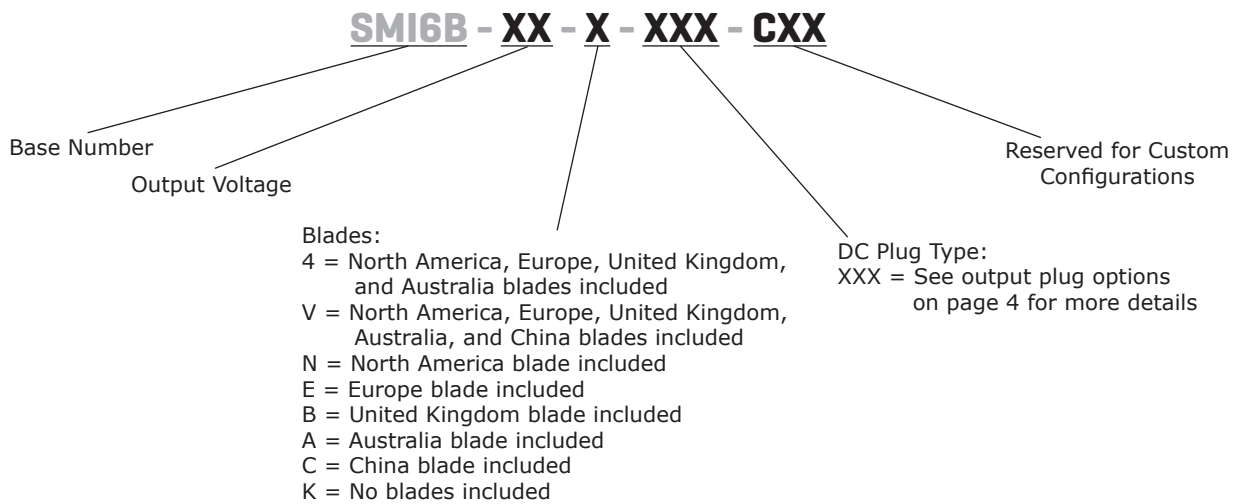
- DoE Level VI, CoC Tier 2 efficiency
- up to 6 W power
- compact design
- interchangeable AC blades
- universal input (90~264 Vac)
- single regulated output from 5~15 Vdc
- over voltage and short circuit protections
- UL/cUL, GS, RCM, CCC, PSE safety approvals
- certified to 62368-1
- custom designs available



| MODEL | output voltage | output current | output power | ripple and noise ¹ | efficiency level ² |
|----------|----------------|----------------|--------------|-------------------------------|-------------------------------|
| | (Vdc) | max (A) | max (W) | max (mVp-p) | |
| SMI6B-5 | 5 | 1.2 | 6 | 300 | VI |
| SMI6B-6 | 6 | 1.0 | 6 | 300 | VI |
| SMI6B-9 | 9 | 0.66 | 5.94 | 300 | VI |
| SMI6B-12 | 12 | 0.5 | 6 | 300 | VI |
| SMI6B-15 | 15 | 0.4 | 6 | 300 | VI |

Notes: 1. At full load, 100-240 Vac input, 20 MHz bandwidth oscilloscope, output terminated with 0.1 μF and 10 μF capacitors.
 2. CoC Tier 2 compliant

PART NUMBER KEY



INPUT

| parameter | conditions/description | min | typ | max | units |
|---------------------------|-----------------------------------|-----|-----|-------|-------|
| voltage | | 90 | | 264 | Vac |
| frequency | | 47 | | 63 | Hz |
| current | | | | 0.2 | A |
| leakage current | at nominal AC input and frequency | | | 0.25 | mA |
| no load power consumption | at 115/ 230 Vac, 60/50 Hz | | | 0.075 | W |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|-----------------|------------------------|-----|-----|-----|-------|
| line regulation | | | ±5 | | % |
| load regulation | | | ±5 | | % |
| start-up time | at 115 Vac input | | | 3 | s |
| rise time | at 90~264 Vac input | | | 100 | ms |
| hold-up time | at nominal input | 5 | | | ms |

PROTECTIONS

| parameter | conditions/description | min | typ | max | units |
|--------------------------|---------------------------------|-----|-----|-----|-------|
| over current protection | output shut down, auto recovery | | | | |
| | 5 Vdc output models | | | 1.8 | A |
| | 6 Vdc output models | | | 1.6 | A |
| | 9, 12 Vdc output models | | | 1.0 | A |
| | 15 Vdc output models | | | 0.8 | A |
| short circuit protection | output shut down, auto recovery | | | | |

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 | yes | | | | |

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 | % |

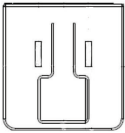
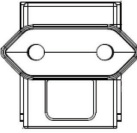
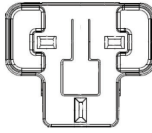
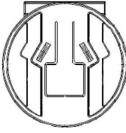

MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|------------|--|-----|-----|-----|-------|
| dimensions | 47 x 34.5 x 26.5 | | | | mm |
| inlet plug | interchangeable blades (North America, Europe, UK, Australia, China) | | | | |
| weight | 5 Vdc output models (without interchangeable blades) | | 54 | | g |
| | all other models (without interchangeable blades) | | 50 | | g |

MECHANICAL DRAWING

units: mm
tolerance: ±1 mm



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

DC CORD

units: mm

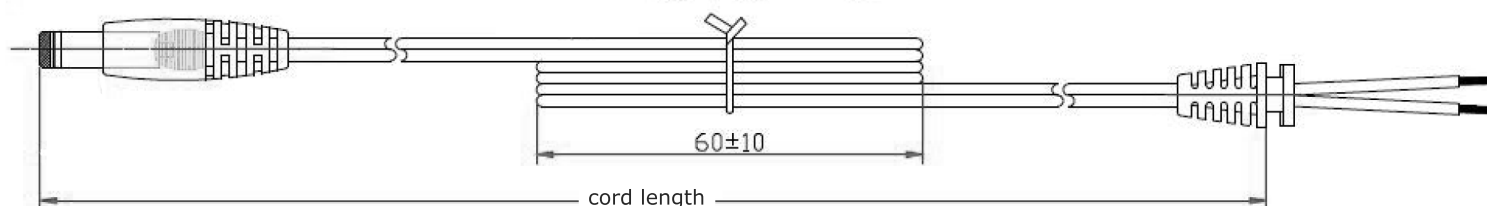


Table 1

| MODEL NO. | CABLE | CORD LENGTH |
|-----------|----------------|--------------|
| SMI6B-5 | UL2468, 22 AWG | 1,530 mm ±50 |
| SMI6B-6 | UL2468, 22 AWG | 1,530 mm ±50 |
| SMI6B-9 | UL2468, 24 AWG | 1,530 mm ±50 |
| SMI6B-12 | UL2468, 24 AWG | 1,530 mm ±50 |
| SMI6B-15 | UL2468, 24 AWG | 1,530 mm ±50 |

DC PLUG TYPE PART NUMBER KEY

XXX

Plug Polarity:
P = Center Positive

N = Center Negative

Plug Code:
X = Choose a code from the options below

Plug Angle:
"blank" = Straight
R = Right Angle

| Plug Polarity | | Code | | Dimensions (mm) | | | Plug Angle | |
|---------------|-------------|--------|----------|------------------|------|-----|------------|-------|
| Center Pos. | Center Neg. | Option | Type | A | B | C | Straight | Right |
| • | • | 5 | Standard | 5.5 | 2.1 | 9.5 | • | • |
| • | • | 6 | Standard | 5.5 | 2.5 | 9.5 | • | • |
| • | • | 7 | Standard | 3.5 | 1.35 | 9.5 | • | • |
| • | • | 10 | Locking | 5.5 | 2.1 | 9.5 | • | N/A |
| • | • | 11 | Locking | 5.5 | 2.5 | 9.5 | • | N/A |
| • | • | 12 | EIAJ-1 | 2.35 | 0.7 | 9.5 | • | • |
| • | • | 13 | EIAJ-2 | 4.0 | 1.7 | 9.5 | • | • |
| • | • | 14 | EIAJ-3 | 4.75 | 1.7 | 9.5 | • | • |
| N/A | N/A | CUB | USB | USB Type C | | | • | N/A |
| N/A | N/A | MUB | USB | Micro USB Type B | | | • | N/A |

Note: 1. Contact CUI for additional plug options

Standard



EIAJ



Locking



USB



REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 06/04/2019 |

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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- Доставку товара в любую точку России и стран СНГ.
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- Работу по проектам и поставку образцов.
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