CUI INC®



# **SERIES:** SDM65-U | **DESCRIPTION:** AC-DC POWER SUPPLY

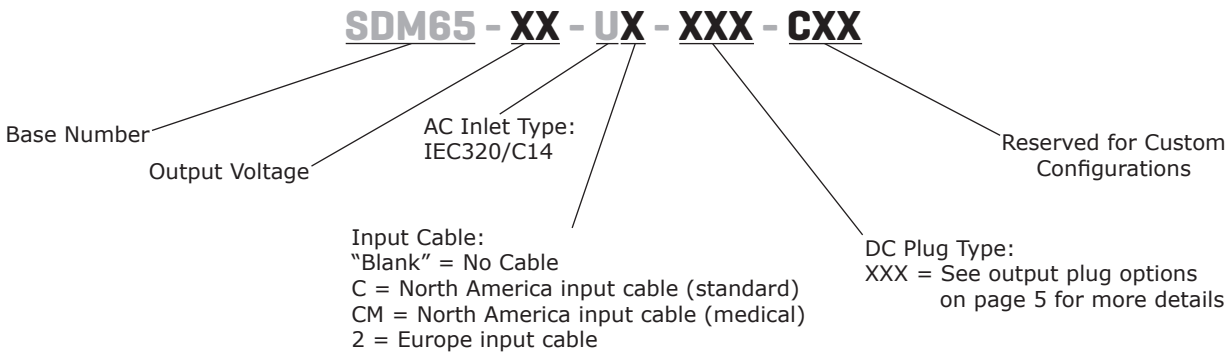
## FEATURES

- up to 65 W continuous power
- meets DoE Level VI efficiency
- universal input voltage range
- compact size
- no load power consumption < 0.21 W
- over voltage and short circuit protections
- UL/cUL, TUV (60601-1), and PSE safety approvals
- LED indicator
- custom designs available

| MODEL | output voltage (Vdc) | output current max (A) | output power max (W) | ripple and noise[1] max (mVp-p) | efficiency level |
|---|---|---|---|---|---|
| SDM65-12-U | 12 | 5 | 60 | 150 | VI |
| SDM65-15-U | 15 | 4.34 | 65 | 150 | VI |
| SDM65-18-U | 18 | 3.62 | 65 | 180 | VI |
| SDM65-19-U | 19 | 3.43 | 65 | 190 | VI |
| SDM65-24-U | 24 | 2.71 | 65 | 240 | VI |
| SDM65-48-U | 48 | 1.36 | 65 | 480 | VI |

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, output terminated with 0.1 µF multilayer ceramic and 10 µF low ESR electrolytic capacitors.

## PART NUMBER KEY



## INPUT

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| voltage | | 90 | | 264 | Vac |
| frequency | | 47 | | 63 | Hz |
| current | | | | 1.6 | A |
| inrush current | at 240 Vac, full load, 25°C, cold start | | | 80 | A |
| leakage current | | | | 0.3 | mA |
| no load power consumption | at 230 Vac | | | 0.21 | W |

## OUTPUT

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| regulation | | | ±5 | | % |

## PROTECTIONS

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| over voltage protection | output shut down, latch | | | 150 | % |
| over current protection | output shut down, auto recovery | | | 170 | % |
| 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<br>input to frame ground at 10 mA for 1 minute | | 4,000<br>1,500 | | Vac<br>Vac |
| isolation resistance | input to output at 500 Vdc<br>input to frame ground at 500 Vdc | 10<br>10 | | | MΩ<br>MΩ |
| safety approvals | Medical: UL/cUL, TUV (60601-1)<br>ITE: PSE | | | | |
| EMI/EMC | FCC Part 15B Class B, CE | | | | |
| MTBF | as per Telcordia SR-332, 25°C | 300,000 | | | hours |
| RoHS | yes | | | | |

## ENVIRONMENTAL

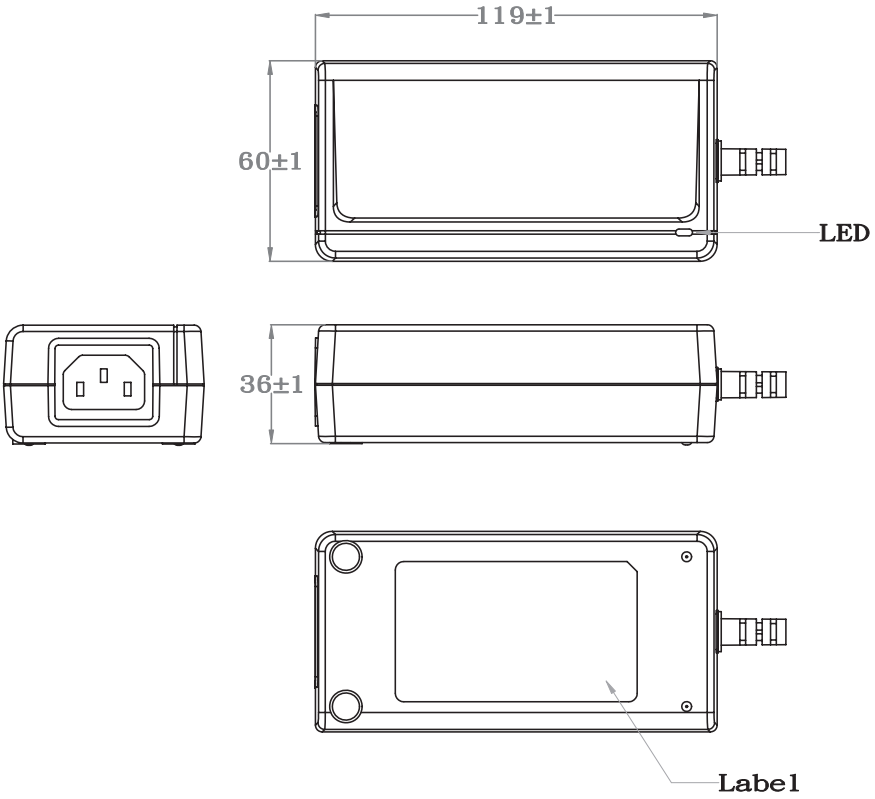
| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| operating temperature | | 0 | | 40 | °C |
| storage temperature | | -20 | | 80 | °C |
| operating humidity | non-condensing | 20 | | 80 | % |
| storage humidity | non-condensing | 10 | | 90 | % |

## MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| dimensions | 119 x 60 x 36 | | | | mm |
| inlet plug | IEC320/C14 | | | | |
| weight | without ac cord | | 310 | | g |

## MECHANICAL DRAWING

units: mm
tolerance: ±1.0 mm




## DC CORD

units: mm

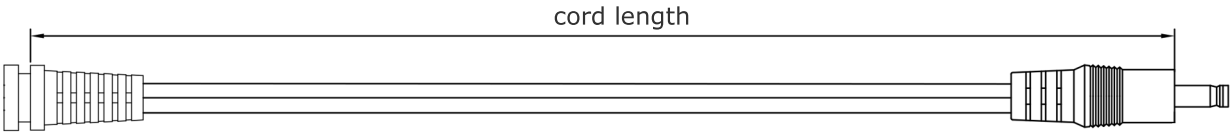


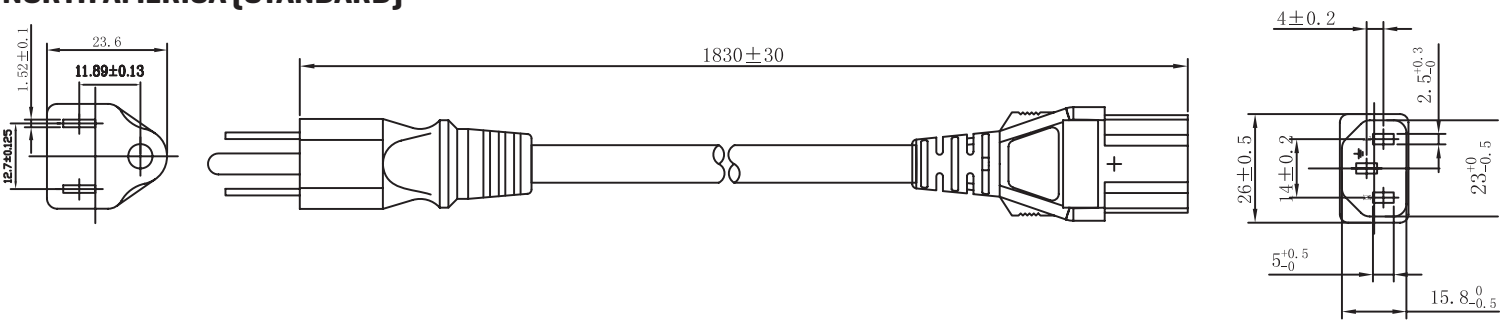

**Table 1**

| MODEL NO. | CABLE | CORD LENGTH |
|---|---|---|
| SDM65-12-U | UL1185, 16 AWG | 1,500 mm ±30 |
| SDM65-15-U | UL1185, 16 AWG | 1,500 mm ±30 |
| SDM65-18-U | UL1185, 18 AWG | 1,500 mm ±30 |
| SDM65-19-U | UL1185, 18 AWG | 1,500 mm ±30 |
| SDM65-24-U | UL1185, 18 AWG | 1,500 mm ±30 |
| SDM65-48-U | UL1185, 18 AWG | 1,500 mm ±30 |

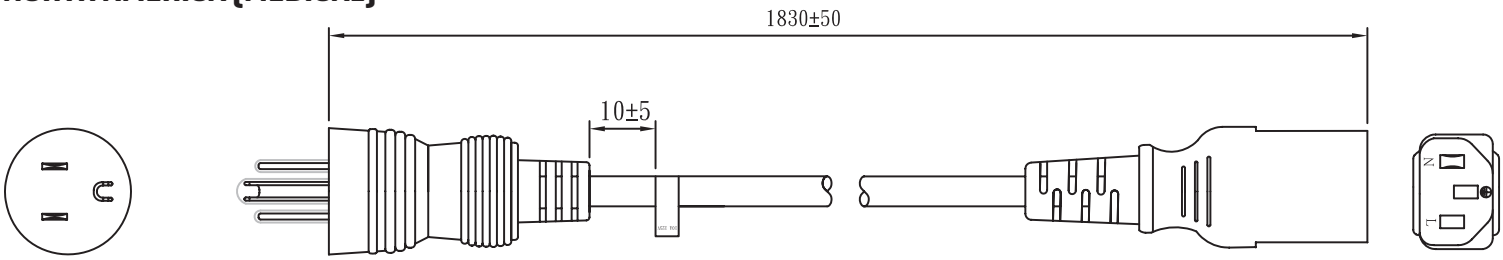
## AC CORDS

units: mm

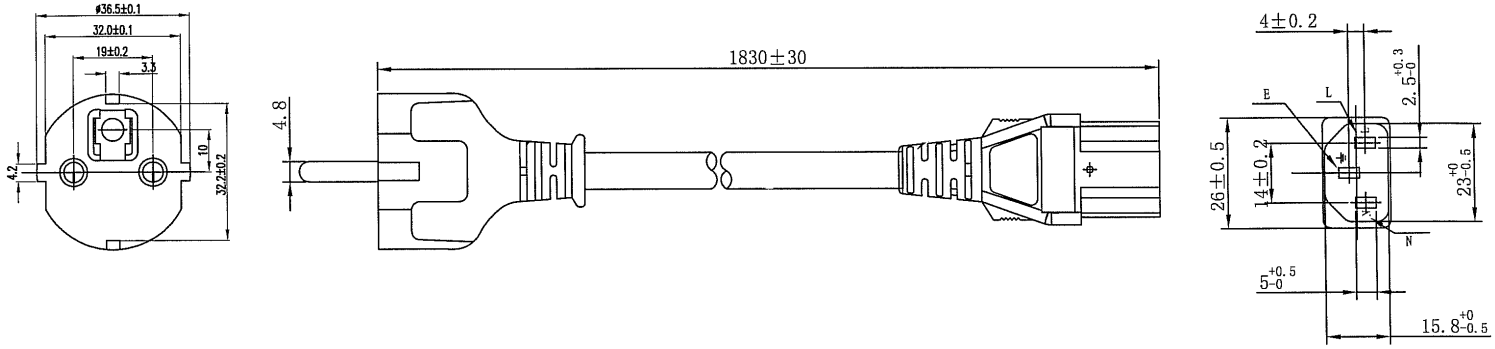
### NORTH AMERICA (STANDARD)




### NORTH AMERICA (MEDICAL)




### EUROPE



## DC PLUG TYPE PART NUMBER KEY

**X X X**

**Plug Polarity:**
P = Center Positive

N = Center Negative

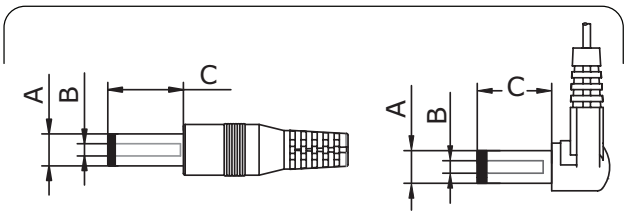
**Plug Code:**
X = Choose a code from the options below

**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 | • | • |
| • | • | 8 | Standard | 3.8 | 1.35 | 9.5 | • | • |
| • | • | 9 | Standard | 3.8 | 1.05 | 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 | ST | Stripped & Tinned | | | | N/A | N/A |

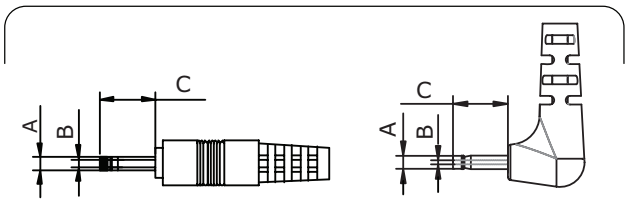
Note: 1. Contact CUI for additional plug options

### Standard



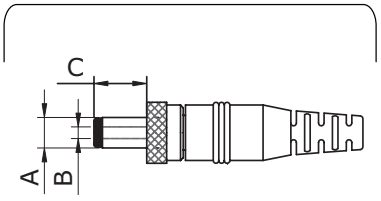

Straight Right Angle (R)

### EIAJ

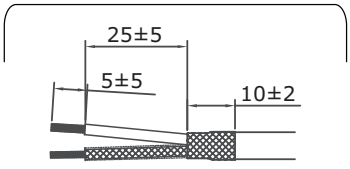



Straight Right Angle (R)

### Locking




### Stripped & Tinned



## REVISION HISTORY

| rev. | description | date |
|---|---|---|
| 1.0 | initial release | 06/10/2019 |

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.

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.

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Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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