


SERIES: SDI24-U | DESCRIPTION: AC-DC POWER SUPPLY
FEATURES

- up to 24 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- universal input voltage range
- compact size
- no load power consumption < 0.075 W
- over voltage and short circuit protections
- UL/cUL, and PSE safety approvals
- custom designs available
- certified to 60950-1 and 62368-1 standards



| MODEL | output voltage | output current | output power | ripple and noise ¹ | efficiency level ² |
|------------|----------------|----------------|--------------|-------------------------------|-------------------------------|
| | (Vdc) | max (A) | max (W) | max (mVp-p) | |
| SDI24-5-U | 5 | 4.0 | 20 | 100 | VI |
| SDI24-9-U | 9 | 2.5 | 22.5 | 100 | VI |
| SDI24-12-U | 12 | 2.0 | 24 | 120 | VI |
| SDI24-15-U | 15 | 1.6 | 24 | 150 | VI |
| SDI24-24-U | 24 | 1.0 | 24 | 240 | VI |
| SDI24-48-U | 48 | 0.5 | 24 | 480 | VI |

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 µF multilayer ceramic and 10 µF low ESR electrolytic 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 | | | | 0.58 | A |
| inrush current | at 100 Vac, full load, 25°C, cold start at 230 Vac, full load, 25°C, cold start | | | 50 60 | A A |
| leakage current | | | | 3.5 | mA |
| no load power consumption | at 230 Vac | | | 0.075 | W |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|------------|---|-----|----------|-----|--------|
| regulation | 5 Vdc output models all other models | | ±6 ±5 | | % % |

PROTECTIONS

| parameter | conditions/description | min | typ | max | units |
|--------------------------|---------------------------------|-----|-----|-----|-------|
| over voltage protection | output shut down | | | | |
| | 5 Vdc output models | | | 12 | Vdc |
| | 9 Vdc output models | | | 16 | Vdc |
| | 12 Vdc output models | | | 22 | Vdc |
| | 15 Vdc output models | | | 32 | Vdc |
| | 24 Vdc output models | | | 45 | Vdc |
| over current protection | 48 Vdc output models | | | 75 | Vdc |
| | output shut down, auto recovery | | | | |
| | 5 Vdc output models | | | 8 | A |
| | 9, 12 Vdc output models | | | 5 | A |
| | 15 Vdc output models | | | 4 | A |
| short circuit protection | 24 Vdc output models | | | 2.5 | A |
| | 48 Vdc output models | | | 1.2 | A |
| | 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 | | Vac |
| | input to frame ground at 10 mA for 1 minute | | 1,500 | | Vac |
| isolation resistance | input to output at 500 Vdc | 10 | | | MΩ |
| | input to frame ground at 500 Vdc | 10 | | | MΩ |
| safety approvals | UL/cUL (60950-1, 62368-1), PSE ³ , LPS | | | | |
| EMI/EMC | FCC Part 15B Class B, CE | | | | |
| MTBF | as per Telcordia SR-332, 25°C | 300,000 | | | hours |
| RoHS | yes | | | | |

Notes: 3. PSE not present on 48 Vdc output models

ENVIRONMENTAL

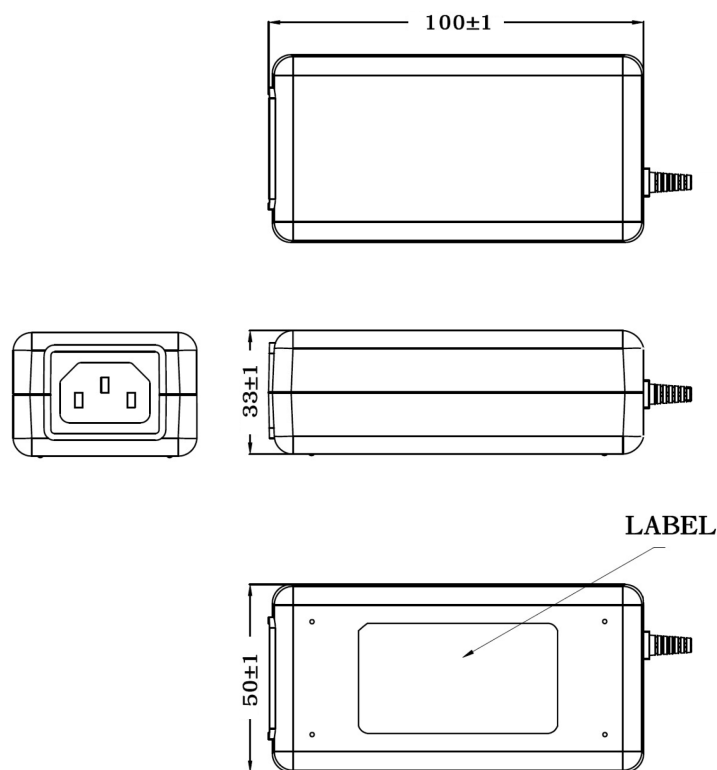
| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | | 0 | | 40 | °C |
| storage temperature | | -20 | | 80 | °C |
| operating humidity | non-condensing | 20 | | 80 | % |
| storage humidity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

MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|------------|------------------------|-----|-----|-----|-------|
| dimensions | 100 x 50 x 33 | | | | mm |
| inlet plug | IEC320/C14 | | | | |
| weight | without ac cord | | 170 | | g |

MECHANICAL DRAWING

units: mm
tolerance: ± 1.0 mm



DC CORD

units: mm



Table 1

| MODEL NO. | CABLE | CORD LENGTH |
|------------|----------------|-------------------|
| SDI24-5-U | UL2468, 18 AWG | 1,000 mm ± 30 |
| SDI24-9-U | UL2468, 18 AWG | 1,500 mm ± 30 |
| SDI24-12-U | UL2468, 20 AWG | 1,500 mm ± 30 |
| SDI24-15-U | UL2468, 20 AWG | 1,500 mm ± 30 |
| SDI24-24-U | UL2468, 22 AWG | 1,500 mm ± 30 |
| SDI24-48-U | UL2468, 22 AWG | 1,500 mm ± 30 |

AC CORD

units: mm



NORTH AMERICA



EUROPE



UNITED KINGDOM



AUSTRALIA



CHINA



SOUTH KOREA



BRAZIL



SOUTH AFRICA



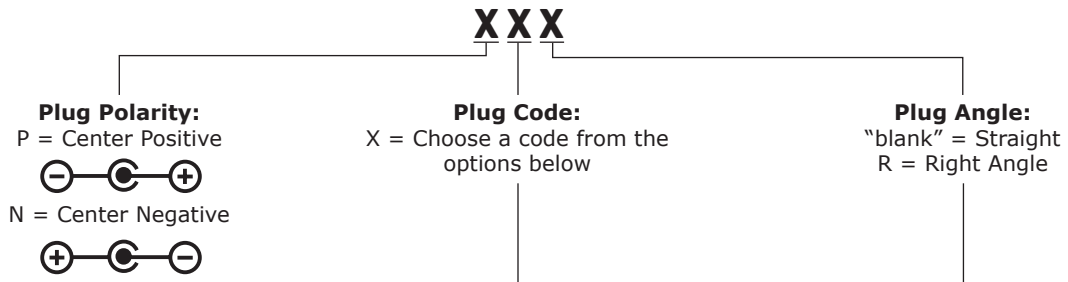
JAPAN



Table 2

| AC INPUT | CORD LENGTH |
|----------------|--------------|
| North America | 1,830 mm ±30 |
| Europe | 1,830 mm ±30 |
| United Kingdom | 1,830 mm ±30 |
| Australia | 1,830 mm ±30 |
| China | 1,830 mm ±30 |
| South Korea | 1,830 mm ±50 |
| Brazil | 1,830 mm ±30 |
| South Africa | 1,830 mm ±50 |
| Japan | 1,830 mm ±30 |

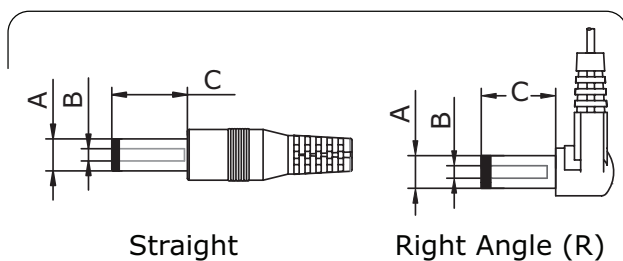
DC PLUG TYPE PART NUMBER KEY



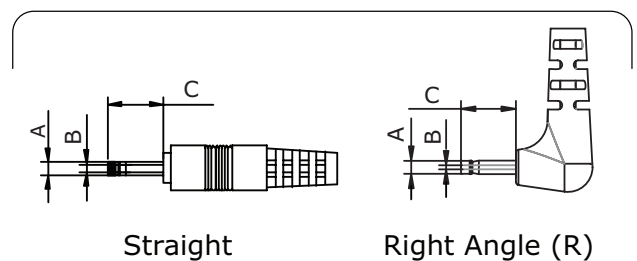
| Plug Polarity | | Code | | Dimensions (mm) | | | Plug Angle | |
|---------------|-------------|--------|-------------------|-----------------|------|-----|------------|-------|
| Center Pos. | Center Neg. | Option | Type | A | B | C | Straight | Right |
| • | • | 5 | Standard | 5.5 | 2.1 | 9.5 | • | • |
| • | • | 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

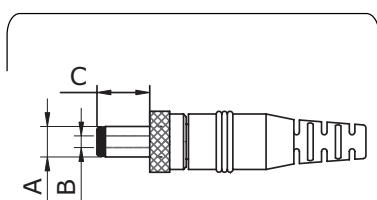
Standard



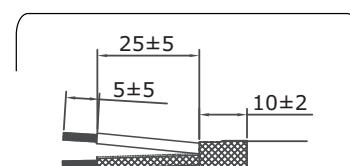
EIAJ



Locking



Stripped & Tinned



REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 10/26/2018 |

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



Headquarters
20050 SW 112th Ave.
Tualatin, OR 97062
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.com

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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.