



SERIES: SWC45-N | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

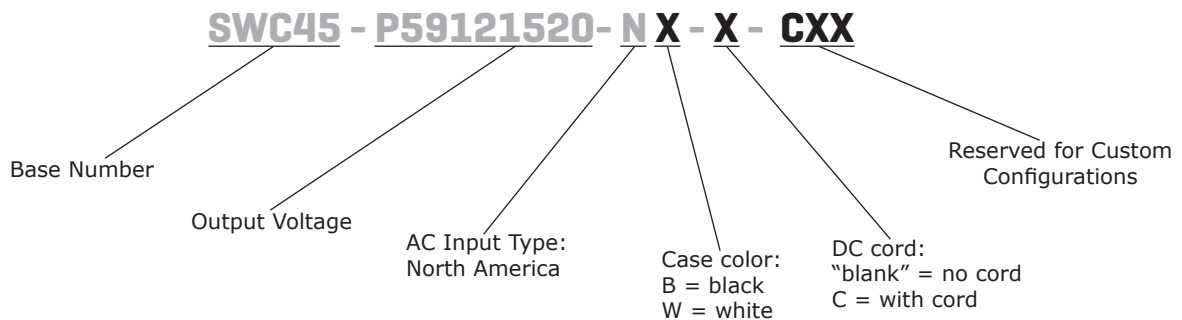
- up to 45 W continuous power
- DoE Level VI compliant
- flip Ac pins
- universal input voltage range
- integrated USB Type C connector
- USB Power Delivery (PD) 3.0
- UL/cUL safety approvals
- Class II construction



| MODEL | output voltage | output current max | output power max | ripple and noise ¹ max | efficiency level ² |
|-------------------|----------------|--------------------|------------------|-----------------------------------|-------------------------------|
| | (Vdc) | (A) | (W) | (mVp-p) | |
| SWC45-P59121520-N | 5 | 3 | 15 | 100 | VI |
| | 9 | 3 | 27 | 120 | VI |
| | 12 | 3 | 36 | 150 | VI |
| | 15 | 3 | 45 | 200 | VI |
| | 20 | 2.25 | 45 | 300 | VI |

Notes: 1. At full load, nominal AC input voltage, 25°C, 20 MHz bandwidth oscilloscope, output terminated with 0.1 µF ceramic and 10 µF aluminum electrolytic capacitors.

PART NUMBER KEY



INPUT

| parameter | conditions/description | min | typ | max | units |
|---------------------------|---------------------------------------|-----|-----|------|-------|
| voltage | | 90 | | 264 | Vac |
| frequency | | 47 | | 63 | Hz |
| current | at nominal input | | | 1.5 | A |
| leakage current | at nominal AC input and frequency | | | 0.25 | mA |
| no load power consumption | at 115/230 Vac, 60/50 Hz (5 Vdc mode) | | | 0.1 | W |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|-------------------|-----------------------------|-----|-----|-----|-------|
| output regulation | | | ±5 | | % |
| start-up time | | | | 3 | s |
| rise time | at nominal input | | | 100 | ms |
| hold-up time | at nominal input, full load | 5 | | | ms |

PROTECTIONS

| parameter | conditions/description | min | typ | max | units |
|--------------------------|--------------------------------|-----|-----|------|-------|
| over voltage protection | output shutdown, auto recovery | | | | |
| | 5 Vdc output | | | 8 | Vdc |
| | 9 Vdc output | | | 11.5 | Vdc |
| | 12 Vdc output | | | 15 | Vdc |
| | 15 Vdc output | | | 19 | Vdc |
| over current protection | 20 Vdc output | | | 3.2 | A |
| | all other outputs | | | 4 | A |
| | hiccup, auto recovery | | | | |
| short circuit protection | hiccup, 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 |
| | | | 4,242 | | Vdc |
| insulation resistance | input to output at 500 Vdc, 10 mA for 1 minute | 20 | | | MΩ |
| safety approvals | UL/cUL (UL 60950-1) | | | | |
| EMI/EMC | FCC Part 15 Class B | | | | |
| MTBF | as per Telcordia SR-332, Issue 2 at 115/230 Vac full load, 25°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 | | 90 | % |

MECHANICAL

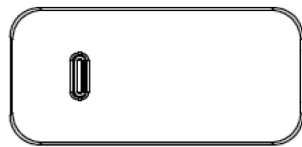
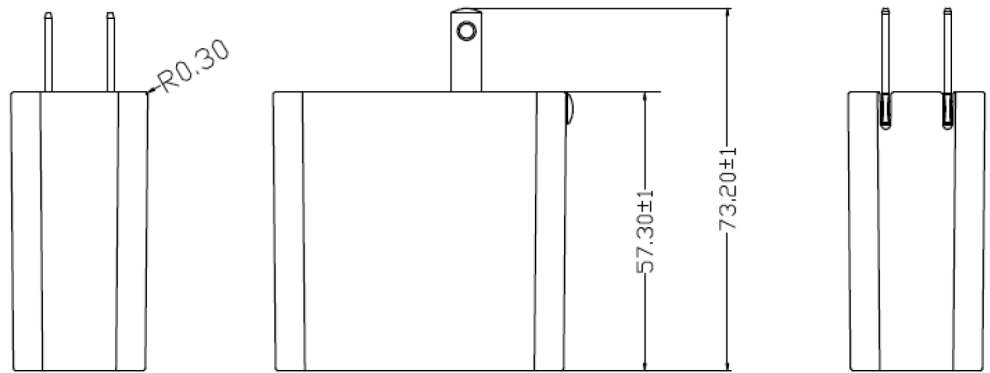
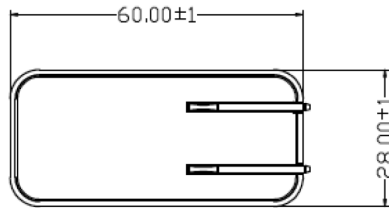
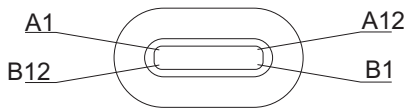
| parameter | conditions/description | min | typ | max | units |
|------------|-------------------------------------|-----|-----|-----|-------|
| dimensions | 60 x 28 x 57.3 | | | | mm |
| inlet plug | North America, 2-pin (flip AC pins) | | | | |
| DC output | USB 3.1 Type C | | | | |
| weight | | | 106 | | g |

MECHANICAL DRAWING

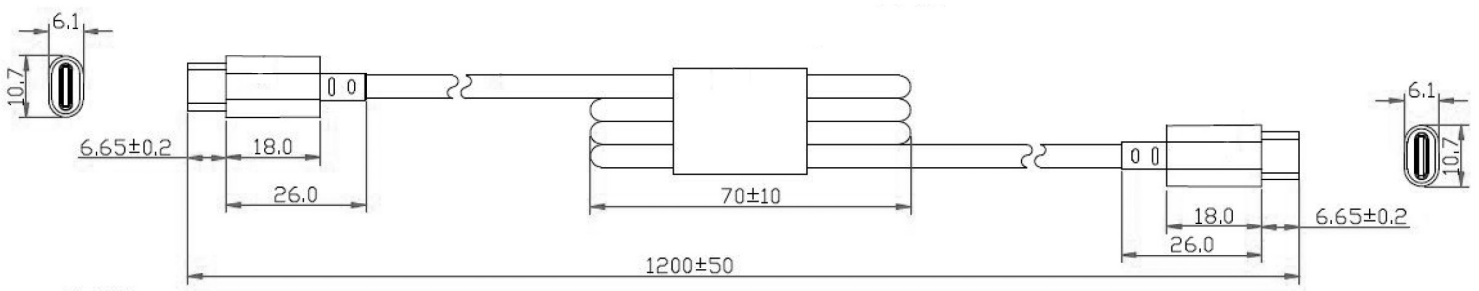
units: mm

| PIN CONNECTIONS | | | |
|-----------------|------------------|-----|------------------|
| PIN | SIGNAL NAME | PIN | SIGNAL NAME |
| A1 | GND | B12 | GND |
| A2 | NC | B11 | NC |
| A3 | NC | B10 | NC |
| A4 | V _{BUS} | B9 | V _{BUS} |
| A5 | CC | B8 | NC |
| A6 | D+ | B7 | NC |
| A7 | D- | B6 | NC |
| A8 | NC | B5* | Vconn |
| A9 | V _{BUS} | B4 | V _{BUS} |
| A10 | NC | B3 | NC |
| A11 | NC | B2 | NC |
| A12 | GND | B1 | GND |

Note: *Not present on DC cord



DC CORD



REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 01/17/2019 |

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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