

**date** 11/10/2015

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#### **DESCRIPTION:** AC-DC POWER SUPPLY SERIES: SWI6-N

#### **FEATURES**

- up to 6 W continuous power
- DOE Level VI, CEC, ErP Stage 2
- no load power consumption < 0.1 W
- compact size
- universal input voltage range
- over voltage, over current, and short circuit protections
- UL/cUL, PSE safety approvals







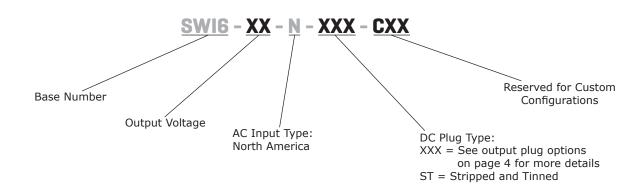




| MODEL      | output<br>voltage<br>(Vdc) | output<br>current<br>max<br>(A) | output<br>power<br>max<br>(W) | ripple<br>and noise¹<br>max<br>(mVp-p) | efficiency<br>level |
|------------|----------------------------|---------------------------------|-------------------------------|--|---------------------|
| SWI6-3.3-N | 3.3                        | 1.5                             | 4.95                          | 100                                    | VI                  |
| SWI6-5-N   | 5                          | 1.5                             | 7.5                           | 100                                    | VI                  |
| SWI6-5.9-N | 5.9                        | 1.2                             | 7.08                          | 100                                    | VI                  |
| SWI6-7.5-N | 7.5                        | 1.0                             | 7.5                           | 100                                    | VI                  |
| SWI6-9-N   | 9                          | 0.67                            | 6.03                          | 100                                    | VI                  |
| SWI6-12-N  | 12                         | 0.6                             | 7.2                           | 120                                    | VI                  |
| SWI6-15-N  | 15                         | 0.5                             | 7.5                           | 150                                    | VI                  |

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. Notes:

### **PART NUMBER KEY**



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### **INPUT**

| parameter                 | conditions/description                  | min | typ | max  | units |
|---------------------------|---|-----|-----|------|-------|
| voltage                   |   | 90  |     | 264  | Vac   |
| frequency                 |   | 47  |     | 63   | Hz    |
| current                   |   |     |     | 0.19 | А     |
| inrush current            | at 230 Vac, full load, 25°C, cold start |     |     | 60   | А     |
| leakage current           |   |     |     | 0.25 | mA    |
| no load power consumption |   |     |     | 0.1  | W     |

# **OUTPUT**

| parameter    | conditions/description | min | typ | max | units |
|--------------|------------------------|-----|-----|-----|-------|
| regulation   |                        |     | ±5  |     | %     |
| hold-up time | at full load           | 10  |     |     | ms    |

# **PROTECTIONS**

| parameter                | conditions/description          | min | typ | max | units |
|--------------------------|---------------------------------|-----|-----|-----|-------|
| over voltage protection  | output shut down                |     |     |     |       |
| over current protection  | output shut down, auto recovery |     |     |     |       |
| 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   |     |     | Vac   |
| isolation resistance | input to output at 500 Vdc            | 10      |     |     | MΩ    |
| safety approvals     | UL/cUL, PSE                           |         |     |     |       |
| EMI/EMC              | FCC Part 15B Class B                  |         |     |     |       |
| MTBF                 | as per Telcordia SR-332, 25°C         | 300,000 |     |     | hours |
| RoHS                 | 2011/65/EU                            |         |     |     |       |

### **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  | %     |

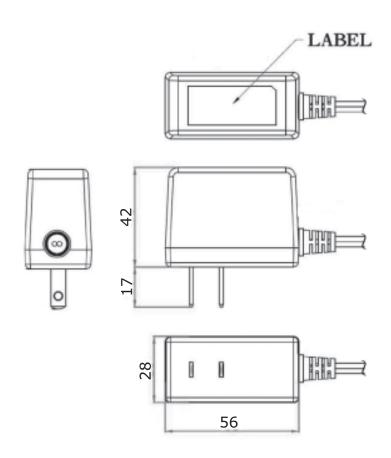
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### **MECHANICAL**

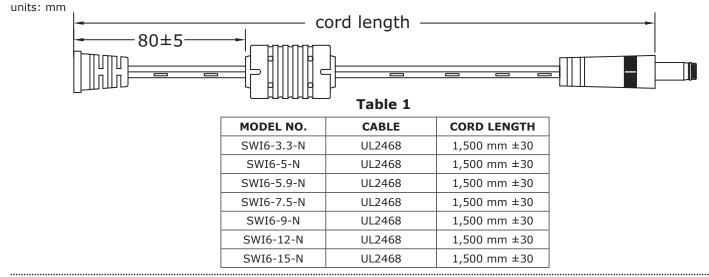
| parameter  | conditions/description | min | typ | max | units |
|------------|------------------------|-----|-----|-----|-------|
| dimensions | 56 x 28 x 42           |     |     |     | mm    |
| inlet plug | North America, 2-pin   |     |     |     |       |
| weight     |                        |     | 78  |     | g     |

### **MECHANICAL DRAWING**

units: mm

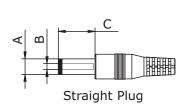


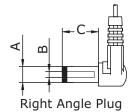
### **DC CORD**



### **OUTPUT PLUG OPTIONS**

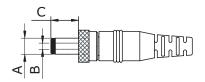
# **Standard DC Plug**





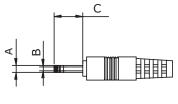
| Size | Α   | В    | С   | Unit |
|------|-----|------|-----|------|
| 5    | 5.5 | 2.1  | 9.5 | mm   |
| 6    | 5.5 | 2.5  | 9.5 | mm   |
| 7    | 3.5 | 1.35 | 9.5 | mm   |
| 8    | 3.8 | 1.35 | 9.5 | mm   |
| 9    | 3.8 | 1.05 | 9.5 | mm   |

### **Locking DC Plug**

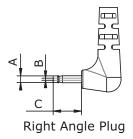


| Size | А   | В   | С   | Unit |
|------|-----|-----|-----|------|
| 10   | 5.5 | 2.1 | 9.5 | mm   |
| 11   | 5.5 | 2.5 | 9.5 | mm   |

### **EIAJ DC Plug**

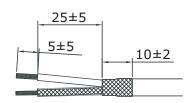




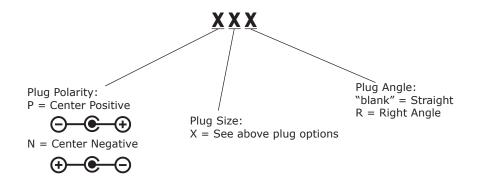


| Size | EIAJ   | Α    | В   | С   | Unit |
|------|--------|------|-----|-----|------|
| 12   | EIAJ-1 | 2.35 | 0.7 | 9.5 | mm   |
| 13   | EIAJ-2 | 4.0  | 1.7 | 9.5 | mm   |
| 14   | EIAJ-3 | 4.75 | 1.7 | 9.5 | mm   |

# **Stripped and Tinned**



# **DC Plug Type**



<sup>\*</sup>Contact CUI for additional plug options

### **REVISION HISTORY**

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 08/07/2015 |
| 1.01 | added models    | 08/12/2015 |
| 1.02 | updated drawing | 11/10/2015 |

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.

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