

LS15

Series Line Splitter



PoE

1 Year Warranty

- Power over Ethernet (PoE)
- Converts POE to Separate Power and Data Lines
- High Efficiency: 90%, 24V unit
- Industry Leading Small Profile; 3"x 2.1"x 1"
- Meets IEEE 802.3AF
- Full Thermal Protection
- Short Circuit & Overload Protection
- Input Shutdown
- UVLO / OVLO
- Surge Protection



International Safety Standard Approvals



Specifications

Output Specifications

| | |
|----------------------------------|---------------------------------------|
| Line and Load Voltage Regulation | +/-1% V-out |
| Transient Response | 1% of V-out (50%-100% load deviation) |
| Overvoltage Protection | Transorb protected |
| Output Connection | Standard |
| Output Noise | 1% of V-out, 20MHz BW |

Input Specifications

| | |
|-----------------------------------|---|
| Input | 36-57 Vdc |
| Input Current Overload Protection | Reset power to start unit When $I_{in} > 450\text{mA}$ for 75mSec, input latches off |
| Input Surge | Transorb protected |
| Input Undervoltage | Turn on: 33-42Vdc Turn off: 30-34Vdc |

Environmental Specifications

| | |
|----------------------------|------------------|
| Operating temperature | -40°C to +60°C |
| Storage Temperature | -40°C to +85°C |
| Max ambient operating Temp | 60°C @ Full load |

General Specifications

| | | |
|--------------------------------|--------------------------|--|
| Efficiency | In Midspan configuration | Measured from Data/Power pins of RJ45 connector, to output of std Switchcraft 712A conn. |
| | 5V | 87% min. |
| | 12V | 88% min. |
| | 24V | 90% min. |
| Switching Frequency | | 200kHz +/- 1% |
| Recovery time | | 100Usec to 1% V-out (SR= 1a/10Usec) |
| I-overload | | 120% ± 5% |
| Short Circuit | | Auto recovery when short is removed |
| Thermal Shutdown | | Internally protected against over-temp conditions. |
| Approvals and Safety Standards | | TUV Pending |
| Case and Dimension | | 3.0L x 2.1W x 1.0H (in) |
| Weight | | 58g (2.05oz) |
| Input Connector | | Standard RJ45 connector |

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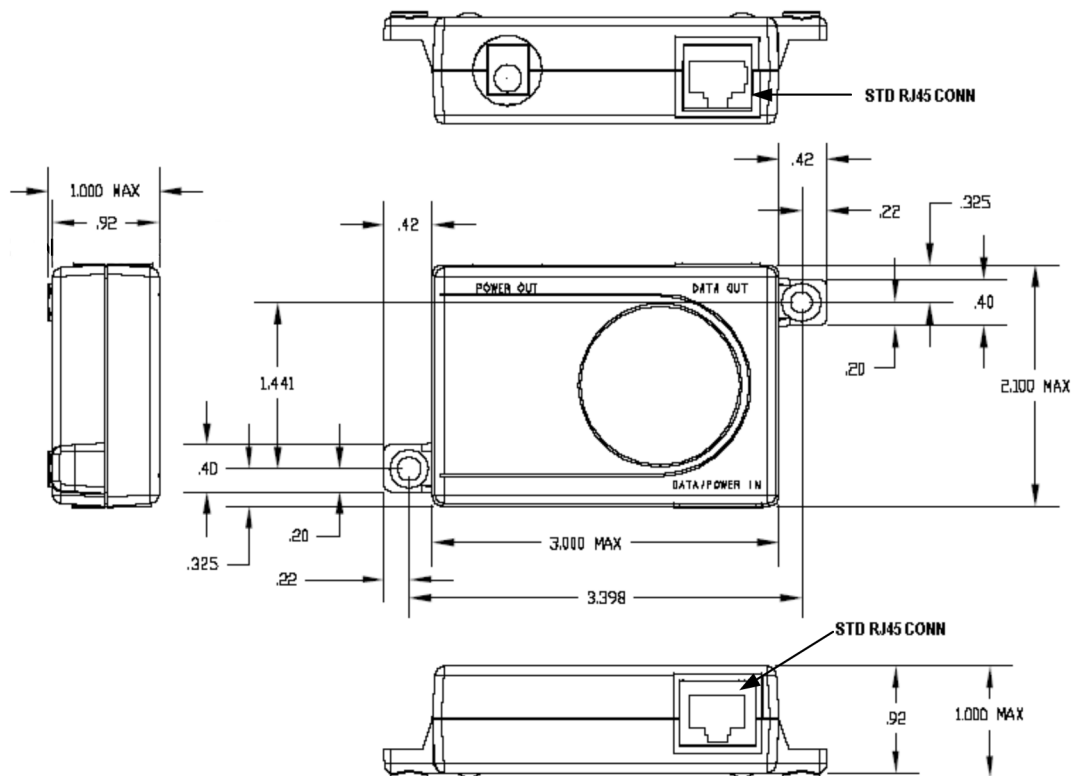
For the most current data and application support visit www.sipower.com

| Ault Part Number | Output Voltage | Output Current Per IEEE 802.3AF* | Output Power | Efficiency (with cable) |
|------------------|----------------|----------------------------------|--------------|-------------------------|
| LS15-05 | 5 V DC | 2.00 A | 10.0 W | 480 mV |
| LS15-12 | 12 V DC | 0.90 A | 10.8 W | 480 mV |
| LS15-24 | 24 V DC | .475 A | 11.4 W | 480 mV |

Notes

* Power limited per Input requirements of IEEE802.3af Table 33-12. I-port Max=350mA @V-port=37V./ I-port Max=260mA @V-port=57V
Higher outputs available for non-compliant systems

Outline Configuration

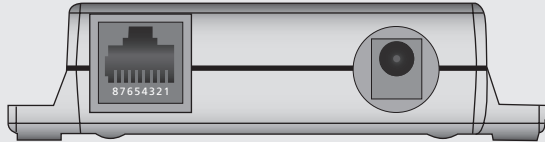


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Data/Power in & Data Out Connection

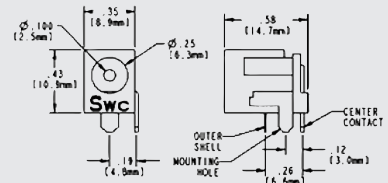


Standard RJ45 Jack
Configuration- For 802.3af compliant units

| Pin | Mode A | Mode B |
|-----|----------------------|----------------------|
| 1 | Pos Vport, Neg Vport | |
| 2 | Pos Vport, Neg Vport | |
| 3 | Neg Vport, Pos Vport | |
| 4 | | Pos Vport, Neg Vport |
| 5 | | Pos Vport, Neg Vport |
| 6 | Neg Vport, Pos Vport | |
| 7 | | Neg Vport, Pos Vport |
| 8 | | Neg Vport, Pos Vport |

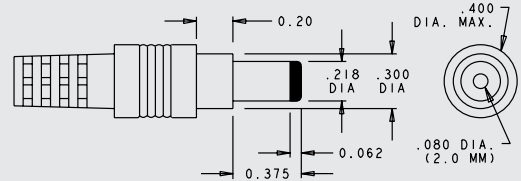
Power Out Connection

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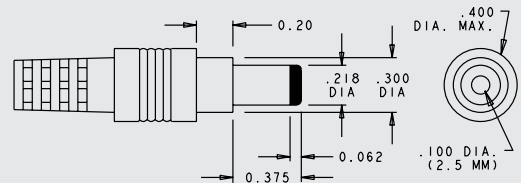
| | |
|------------------|---|
| Description | Switchcraft RAPC 712A connector or equivalent |
| Pinout Code | Center contact: positive |
| Suggested Mating | Switchcraft 760 plug or equivalent |

2



| | |
|------------------|---|
| Description | 12", 18AWG Cable w Switchcraft S760 connector or equivalent |
| Pinout Code | Center contact: positive |
| Suggested Mating | Switchcraft 722A plug or equivalent |

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| | |
|------------------|--|
| Description | 12", 18AWG Cable w Switchcraft 760 connector or equivalent |
| Pinout Code | Center contact: positive |
| Suggested Mating | Switchcraft 712A plug or equivalent |

