

# 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<br>When $I_{in} > 450\text{mA}$ for 75mSec, input latches off |
| Input Surge                       | Transorb protected  |
| Input Undervoltage                | Turn on: 33-42Vdc<br>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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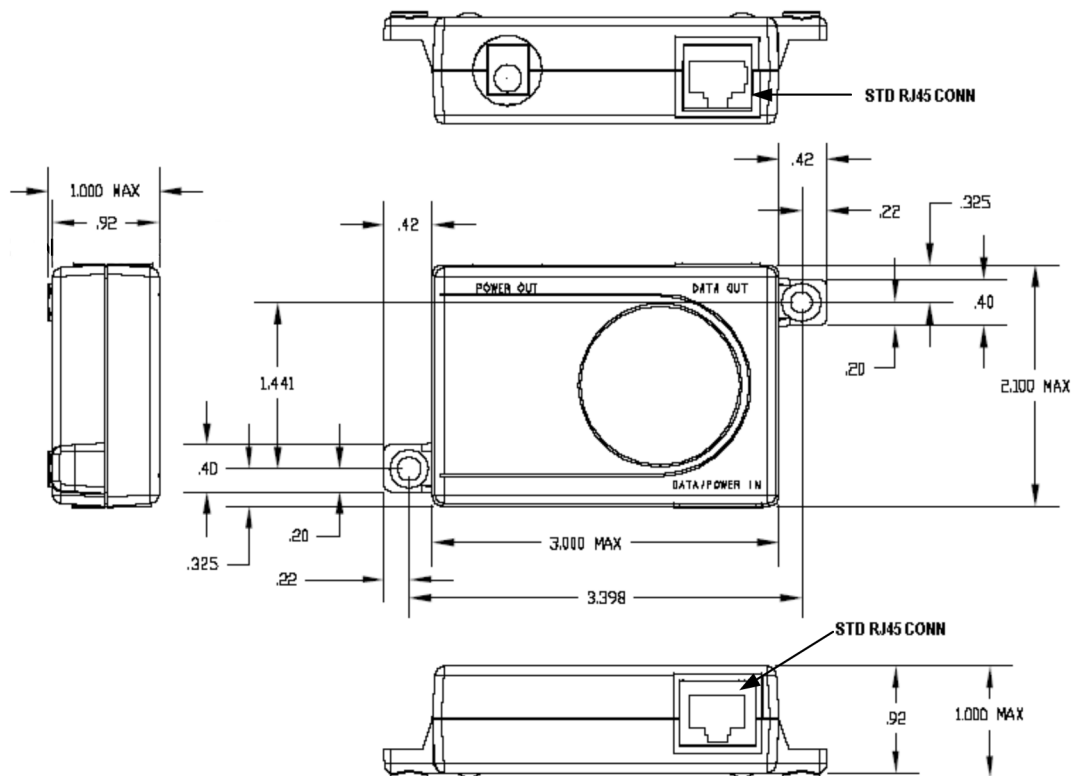
For the most current data and application support visit [www.sipower.com](http://www.sipower.com)

| 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

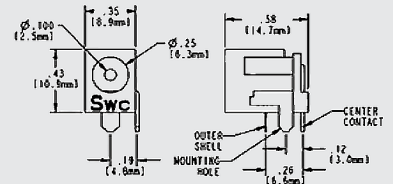


**Standard RJ45 Jack**  
Configuration- For 802.3af compliant units

| 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 |

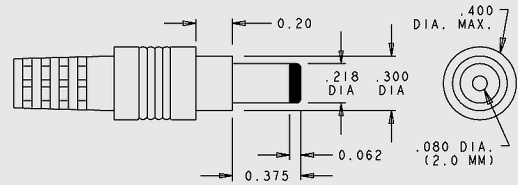
### Power Out Connection

1



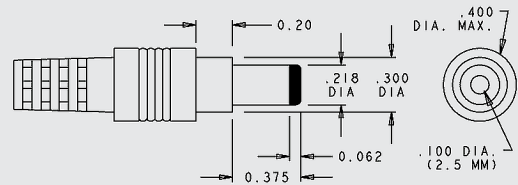
|                  |   |
|------------------|---|
| Description      | Switchcraft RAPC 712A connector or equivalent |
| Pinout Code      | Center contact: positive                      |
| Suggested Mating | Switchcraft 760 plug or equivalent            |

2



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

3



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