

QS Link Plug-In Power Supply


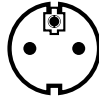

The QS Link Plug-In Power Supply provides power to Lutron QS shading solutions as well as QS system devices and interfaces.

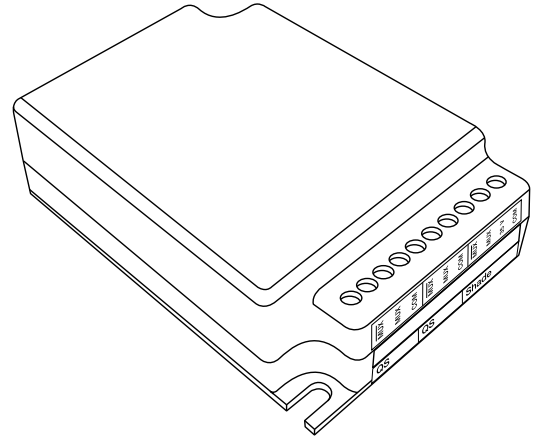
The power supply plugs into a standard receptacle and delivers 35 V_{DC} output voltage which conforms with NEC® Class 2/PELV.

Features

- NEC® Class 2/PELV power supply capable of powering Lutron shades, drapery drive units, keypads & accessories
- Compliant with U.S. Department of Energy Efficiency Level VI regulations for External Power Supplies
- Mounting tabs and small size allow for discrete installation
- Simple wiring topology to connect QS communication between shades and other QS devices/system components
- Includes AC power cord (see below for available plug styles)

Models

QSPS-P1-1-35V	QSPS-P2-1-35V	QSPS-P3-1-35V
		
NEMA 5-15 Plug	CEE 7/7 Plug	BS 1363 Plug



QSPS-Px-1-35V
Link Power Supply

Job Name:	Model Numbers:
Job Number:	

Specifications

Power

- Input: 120 - 240 V~ 50/60 Hz 1.2 A
- Output: 35 V= 0.143 A 5 W
- Capable of powering any one Lutron QS window treatment drive OR up to 8 QS PDU's (see QS Link Wiring Rules on page 5)

Input Wiring

- Designed to be powered by an AC power cord with IEC C13 connector
- Supplied power cord length: 6 ft (1.83 m)
- Use power cord supplied or any approved power cord that is compatible with the installation site
- Power Cord Requirements:
 - IEC C13 Connector
 - 300 V, 140 °F (60 °C) minimum insulation
 - 18 AWG (1.0 mm²) minimum (3-conductor)
 - Minimum length: 6 ft (1.83 m)
 - Maximum length: 10 ft (3.0 m)

Output Terminal Wiring

- 22 AWG – 12 AWG (0,5 mm² – 4,0 mm²) single wire, solid or stranded
- Torque: 5 in-lbs (0,5 N•m)
- Strip length: 1/4 in (6 mm)
- Local connections for 4-conductor shade power/communication, and (2) 3-conductor communication pass-through links

Regulatory Approvals

- U.S. Department of Energy Level VI Compliant
- NRCAN Compliant
- cULus Listed
- IEC Compliant (CE Marked)
- NOM Certified
- FCC Compliant
- CCC Certified

Environment

- Ambient temperature operating range: 32 °F to 104 °F (0 °C to 40 °C)
- Relative humidity: 0% to 90% non-condensing
- For indoor use only; not approved for plenum installation
- Thermal dissipation: 4.5 BTU/hr

Performance

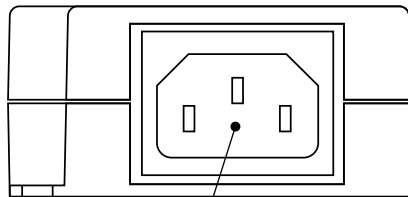
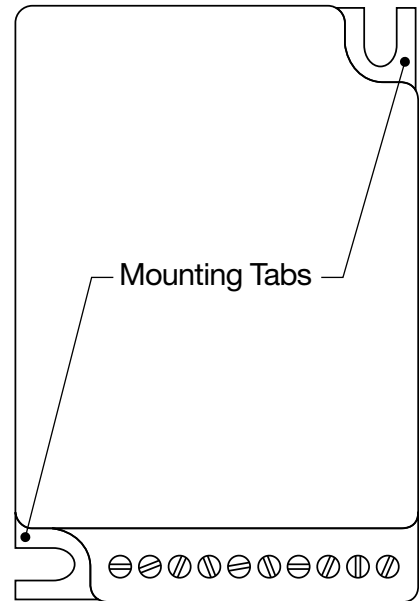
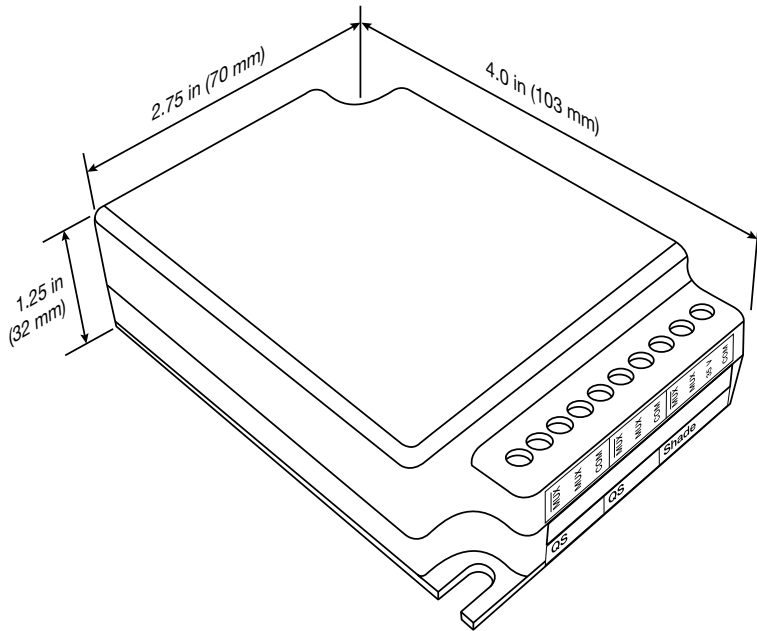
- +/- 6 kV surge protection (ANSI/IEEE C62.41 - 1991)
- +/- 16 kV ESD protection (EIC 61000-4-2 AIR DISCHARGE)
- Self-recoverable short circuit/miswire protection on power output terminals
- Self-recoverable overload/over temperature protection

Warranty

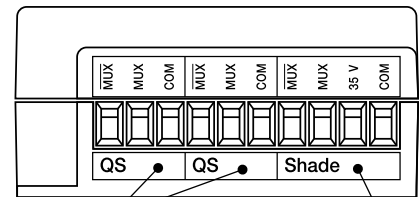
- Covered by Lutron Shading Solutions standard warranty; see: lutron.com/TechnicalDocumentLibrary/Window_Systems_Warranty.pdf

Job Name:	Model Numbers:
Job Number:	

Features and Dimensions



Line Voltage Input



3-Conductor Communication Pass-Through

4-Conductor Shade Power and Communication

Installation

- The power supply is designed to plug into a standard receptacle.
- The power supply can be mounted using the mounting tabs and fasteners of appropriate type for the mounting surface. Hand tighten only. Do not use a power tool to tighten the fasteners.
- It is recommended to mount power supplies in a location that will remain accessible. Leave enough cable to allow for servicing, arranged and secured to prevent interference with window treatments or other moving devices.

Job Name:	Model Numbers:
Job Number:	

System Wiring Overview: QS Link power supply

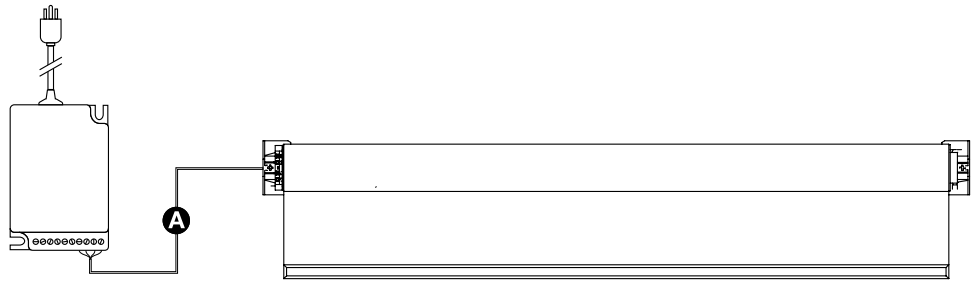
A Power and communication link (4 conductor)

Provides power and communication to QS shades and/or keypads

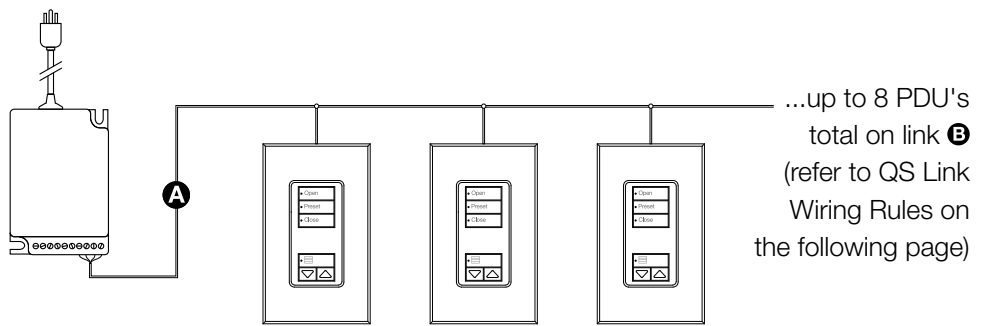
B Communication link (3 conductor)

Used as a communications pass-through connection for QS Link devices

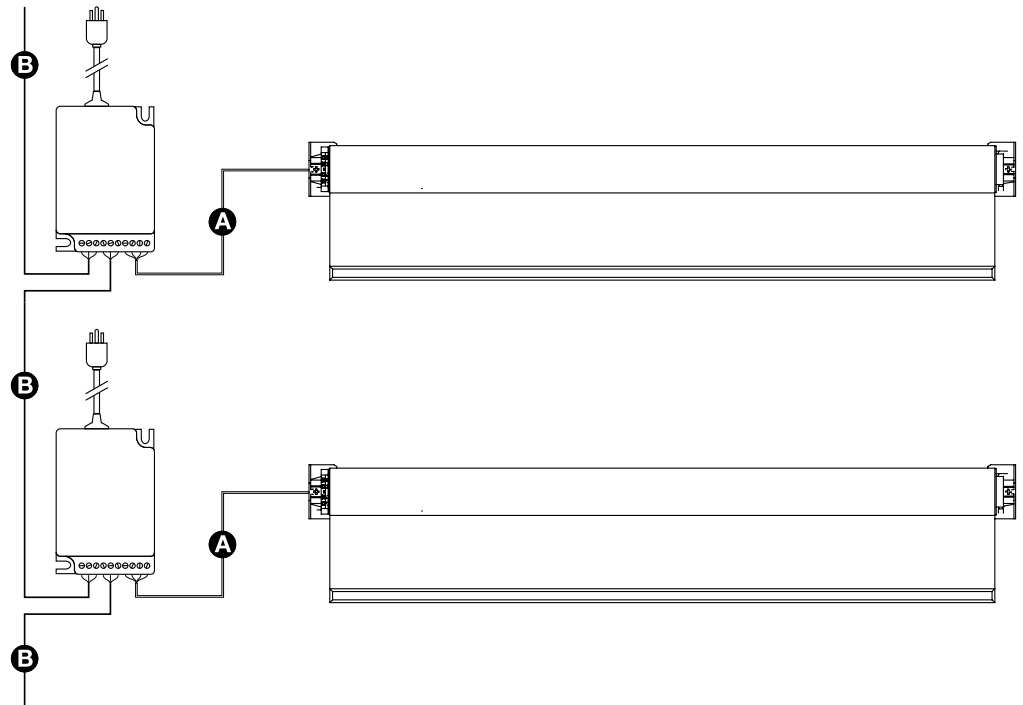
Example: Powering one window treatment drive unit (maximum 1 window treatment drive unit per power supply)



Example: Powering keypads



Example: 2 power supplies / 2 window treatment drive units, with communication link



Job Name:	Model Numbers:
Job Number:	

QS Link Wiring Rules

The following rules must be observed for proper operation.

- QS wiring is NEC® Class 2/PELV. Follow all applicable local and national codes for proper circuit separation and protection.
- Power (35 V and COM): 12 - 18 AWG (4,0-1,0 mm²)
- Communication (MUX and MUX): 22 AWG (0,5 mm²) twisted/shielded pair
- +35 V must NEVER be connected between power supplies
- Total length of QS link wiring must not exceed 2000 ft (610 m)

Maximum devices powered from one QSPS-Px-1-35V		Maximum total wire length of link wiring based on wire gauge			
Shades	+	Controls	12 AWG (4.0 mm ²)	16 AWG (1.5 mm ²)	18 AWG (1.0 mm ²)
1 Sivoia QS shade/drapery drive unit	+	Up to 1 Power Draw Unit*	250 ft (75 m)	100 ft (30 m)	50 ft (15 m)
None	+	Up to 8 Power Draw Units*	2000 ft (610 m)		1500 ft (450 m)

*For more information, refer to the QS Link Power Draw Unit Specification Submittal (P/N 369405)

Options available from Lutron with power and communication conductors in one cable:

Gauge	Lutron Model Number
12 AWG (4,0 mm ²)	QSH-CBL-L-500
16 AWG (1,5 mm ²)	QSH-CBL-M-500
18 AWG (1.0 mm ²)	GRX-CBL-346S-500

It is the responsibility of the installer to ensure plenum installations are compliant with all applicable local and national codes.

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