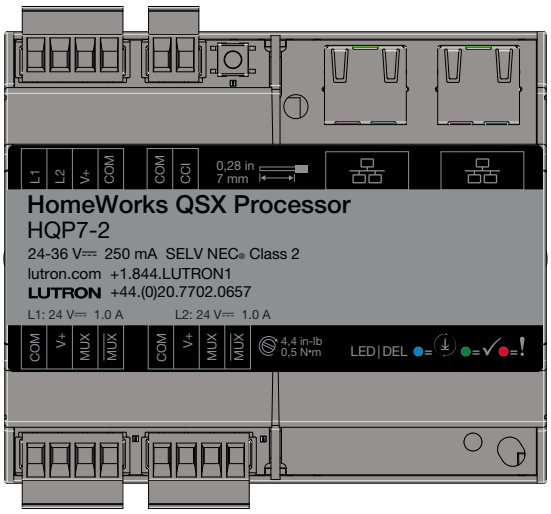
HomeWorks QSX Processor

The HomeWorks QSX processor[1] provides control and communication to HomeWorks system components.

The Ethernet links allow communication to the HomeWorks designer software, integration with third-party systems and communication between multiple processors. HomeWorks QSX processors may be connected using either an Ethernet hub/switch or router, or by using Ethernet directly from a PC to the processor(s). Clear Connect - Type X Gateways cannot be wired directly to the Ethernet port on a HomeWorks QSX processor. See page 5 for details. All processors on a project must be connected to a single network. The HomeWorks designer software and all integration equipment must be connected to the same network as the processors. The HomeWorks QSX processor is required when using the Clear Connect - Type X Gateway for control of residential Ketra light sources. See Lutron Spec Submittal 3691128 at www.lutron.com for the complete details on Clear Connect - Type X Gateway.

The processor is powered from the QSPS-DH-1-75-H power supply. Refer to the HomeWorks designer software to determine link power requirements.

The QSX processor can be installed in a HQ-LV21, L-LV21, L-LV14, or PDx control panel.



Processor Capabilities

Each QSX processor has 1 or 2 links (depending on the model number) that can be individually configured as one of two types:

- HomeWorks QS wired device link
- HomeWorks Clear Connect - Type A

Model Numbers

HQP7-1	HomeWorks QSX 1-link processor[1]
HQP7-2	HomeWorks QSX 2-link processor[1]
HQP7-MDU-1	HomeWorks QSX 1-link MDU processor[1,2]
HQP7-MDU-2	HomeWorks QSX 2-link MDU processor[1,2]

[1] The HomeWorks QSX processor requires Lutron Designer software 16.x or greater to operate.

[2] Only available for multi-dwelling unit projects. Contact your local dealer or Lutron representative for more information.

Customer Assistance:
1.844.LUTRON1 (U.S.A. / Canada)
+44.(0)20.7680.4481 (Europe)

HomeWorks QSX Processor

Specifications

Model Number	HQP7-1; HQP7-2; HQP7-MDU-1; HQP7-MDU-2
Power	Processor (P): 24–36 V⎓ 250 mA Links (L1 / L2): 24–36 V⎓ 1 A per link
Typical Power Consumption	4.2 W; 8 Power Draw Units (PDUs) Test conditions: Two Ethernet links connected, both device links in use
Regulatory Approvals	cULus Listed, FCC Part 15 Compliant, ICES-003 Compliant, NOM Certified, CE Marked, UKCA Marked, RoHS Compliant
Environment	Indoor use only. 32 °F to 104 °F (0 °C to 40 °C), 0% to 90% humidity, non-condensing
Heat Generated	15 BTU/hr — typical
Cooling Method	Passive Cooling
Power Failure Memory	System data stored in non-volatile memory. Timeclock retention for 10 years
Internal Timeclock	±1 minute per year
Miswire Protection	All terminal block inputs are over-voltage and miswire protected against wire reversals and shorts
Low-Voltage Link Wire Type	Two pair — one pair 18 AWG (0.75 mm^2), one pair 18 to 22 AWG (0.34 to 0.75 mm^2) twisted shielded — IEC PELV/SELV/NEC® Class 2 cable
Low-Voltage Power Wire Type	18 AWG (0.75 mm^2)
Communications	Ethernet, RS485 (QS, RF)
Link Capacities	HomeWorks QS Wired Device Link 99 devices/512 switch legs HomeWorks QS Wired Device (MDU models) 50 devices/100 switch legs HomeWorks Clear Connect - Type A Link 99 devices/100 switch legs Switch legs are the smallest controllable outputs and include dimmed or switched circuits, HomeWorks Digital or DALI addressable devices (ballasts, drivers, and interfaces), a single DMX channel, contact closure outputs, and Sivoia QS shade drives.
ESD Protection	Meets or exceeds the IEC 61000-4-2 standard
Surge Protection	Meets or exceeds ANSI/IEEE C62.41 standard
Mounting	Mounts in HQ-LV21, L-LV14, L-LV21, or PDx- control panel
Dimensions	With terminal blocks: 4.25 in (108 mm) x 3.94 in (100 mm) Without terminal blocks: 4.25 in (108 mm) x 3.54 in (90 mm)
Connections	4-pin removable terminal blocks. 1 for HQP7-1, 2 for HQP7-2. One 4-pin removable terminal block* for Power Input. Two RJ45 standard Ethernet connections. *Each terminal will accept up to two 18 AWG (0.75 mm^2) wires.
Limited Warranty	www.lutron.com/warranty or call 1.844.LUTRON1 (U.S.A./Canada) or +1.610.282.3800 (Others) for a printed copy

HomeWorks QSX Processor

HomeWorks QSX System Security Statement

Lutron takes cybersecurity very seriously. We actively monitor the threat landscape and take a proactive approach to security and privacy, continuously working to update and enhance our systems and processes.

At Lutron, we call our approach to cybersecurity **"Secure Lifecycle"**, and we would like to present the following steps we take to protect your security and privacy:

- **Security by Design.** When building a new system, Lutron utilizes a dedicated security team to ensure best practices are implemented. Security is built in. It is not an afterthought or an add-on.
- **Third-Party Validation.** Security is complicated. Lutron has a dedicated team of internal experts, but we also leverage external experts to double-check our work, and to make security recommendations.
- **Continuous Monitoring and Improvements.** Security is a constantly moving target. Lutron uses a dedicated security team to continuously monitor for potential threats and, when needed, send out security patches to update installed systems.
- **Ongoing Support.** Lutron has the resources you need to answer questions about security when they arise.

We incorporate a variety of security features into our product designs. These features include recommendations from the National Institute of Standards and Technology (NIST) among others, and they are aimed at meeting our secure lifecycle protections. While we do not publish a comprehensive list of our security features, the following list is a small example of some of the techniques employed in our system designs for HomeWorks QSX processors, Clear Connect Gateway – Type X devices and associated services (such as mobile applications and cloud resources):

1. Secure and authenticated remote access with unique keys for every HomeWorks QSX system.
2. A secure hardware element ("chip") on all HomeWorks QSX processors and Clear Connect Gateway – Type X to guard the keys used for secure communication and authentication.
3. Enforcing industry-standard encrypted communication and techniques for our integration protocols to the highest extent possible. Any integrated third-party components or systems should be evaluated independently.
4. Secure commissioning – all communication between the system programming software tool/app and the processors is encrypted and authenticated. Programming a system requires permission to access that system.
5. Security updates are pushed out automatically to the lighting system for urgent security patches. Lutron is committed to one year of security support from system start-up date.
6. Use of industry-standard techniques for cloud-based integrations, such as OAuth2.0.
7. Signed processor firmware to ensure a firmware update is authentically from Lutron.

If you have additional questions or would like to make a vulnerability disclosure to Lutron, please contact Lutron's 24/7 Technical support line at 1.844.LUTRON1 or email us at support@lutron.com

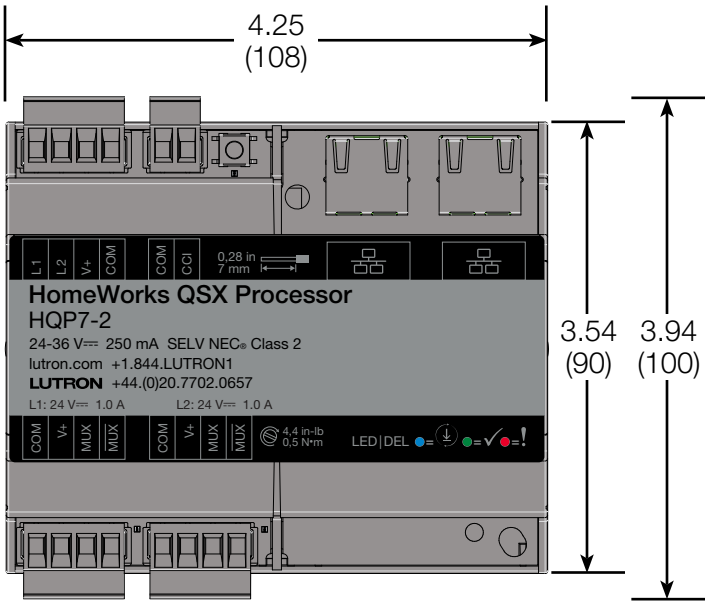
SOC2 report available upon request.

HomeWorks QSX Processor

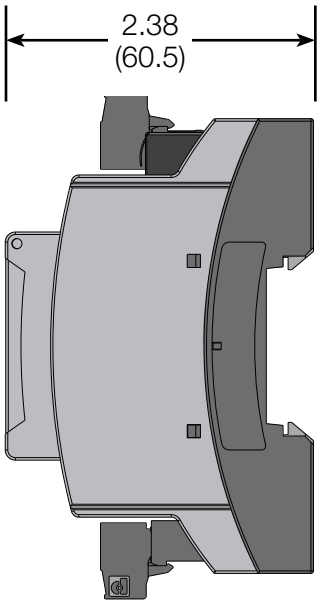
Dimensions

Dimensions shown as: in (mm)

Front View



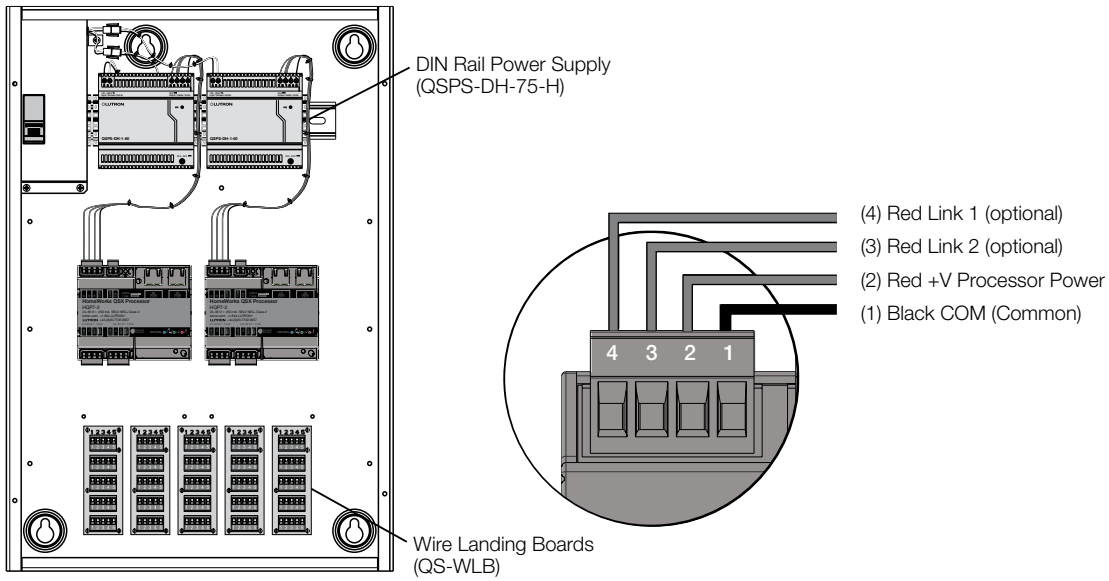
Side View



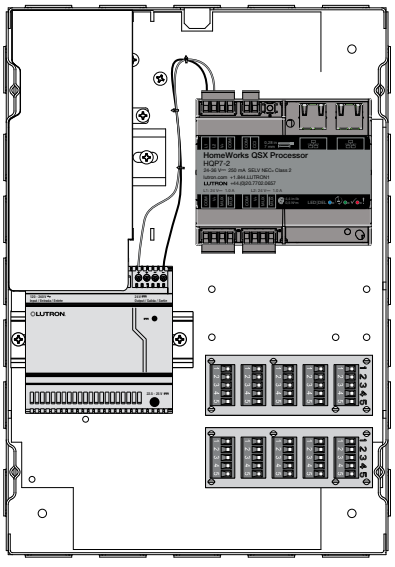
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HomeWorks QSX Processor

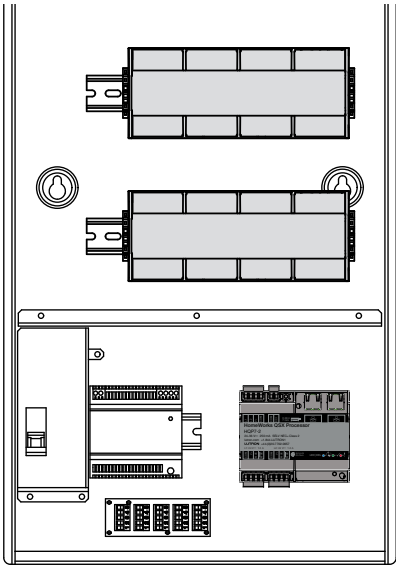
Mounting



L-LV21/HQ-LV21



L-LV14

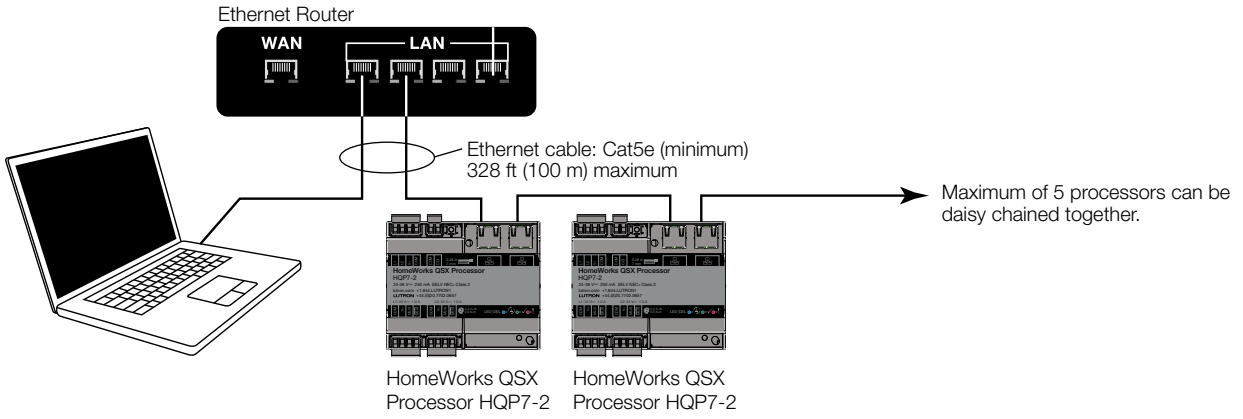


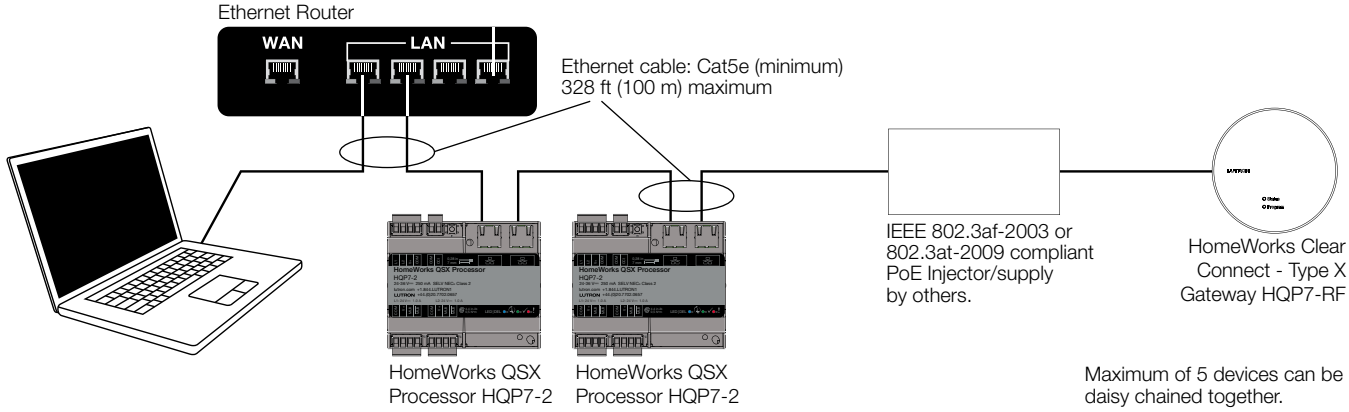
PDx- Control Panel

HomeWorks QSX Processor

Wiring Diagrams — Networking

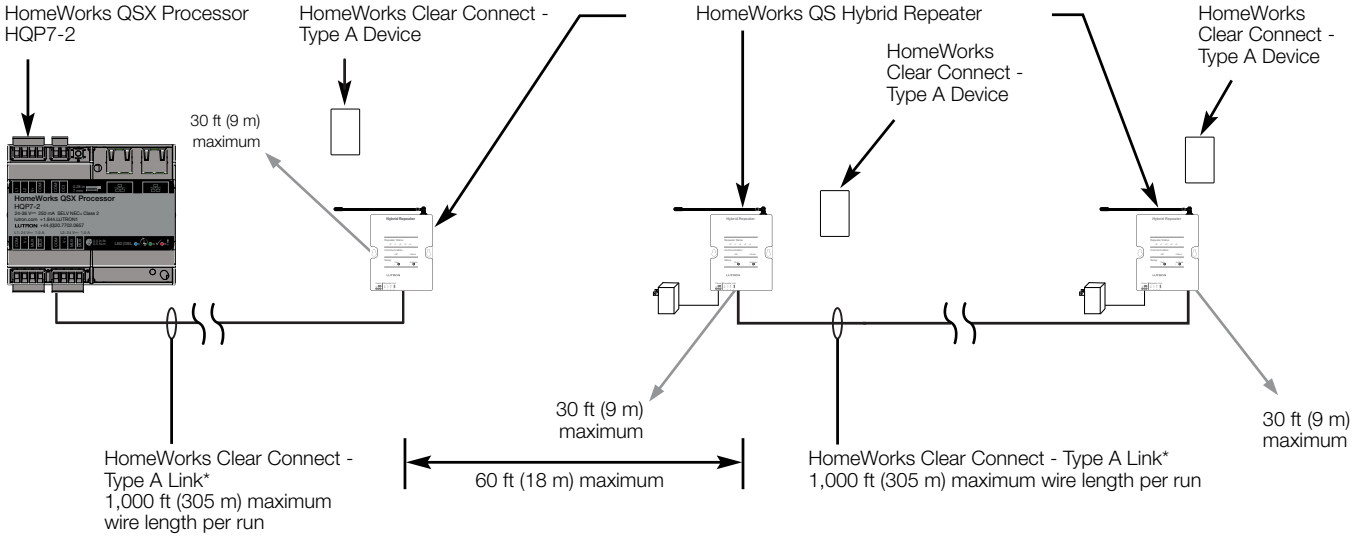
Connection using an Ethernet hub/switch/router





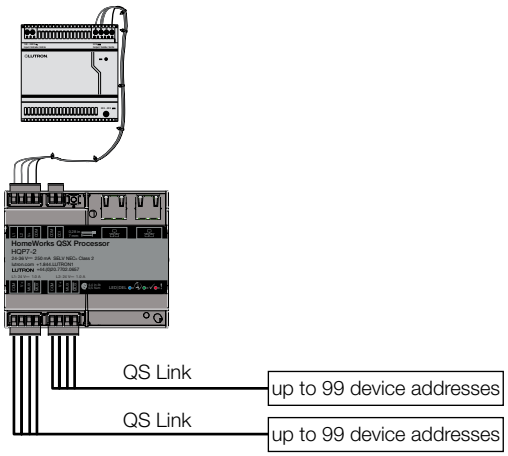
HomeWorks QSX Processor

Wiring Diagrams—HomeWorks Clear Connect - Type A



* HomeWorks Hybrid Repeaters can be powered from the Processor link or a wall-mount transformer. If powering from a wall-mount transformer, Pin 2 does not get connected.

Wiring Diagrams—QS Wired Device Link

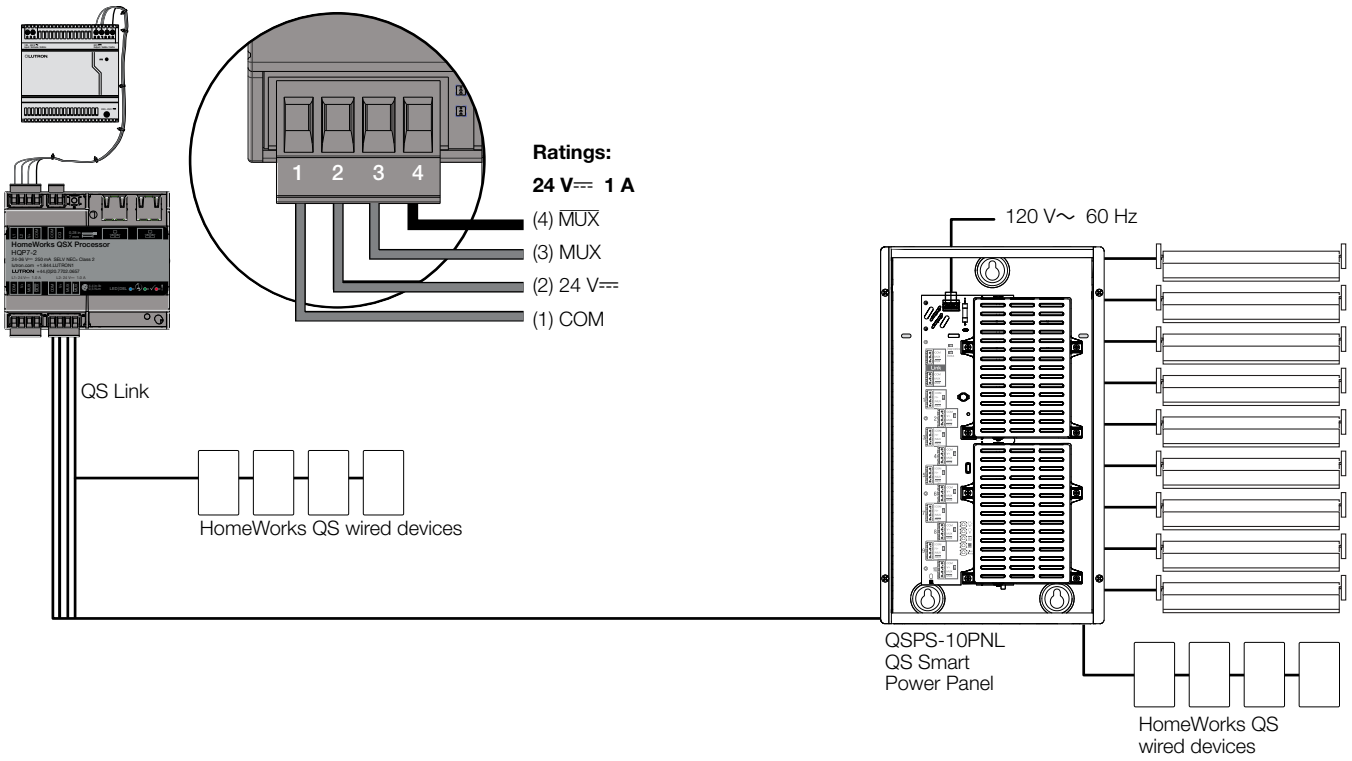


Maximum 1 A current draw per link when powering both links from the same power supply.

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HomeWorks QSX Processor

Wiring Diagrams—QS Wired Device Link with Shades / Draperies (Controllable Window Solutions)



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