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Energi Savr Node Programming Interface

The QSE-CI-AP-D is a programming interface designed to be used with Energi Savr Node units. It is compatible with the entire Energi Savr Node product family (models starting with QSN- and QSNE-), and works with an intuitive application for Apple iPhone, iPad or iPod touch mobile devices.

Features

- Program all Energi Savr Node modules connected to the same QS link as the Energi Savr Node programming interface using the Energi Savr Node app on Apple iPhone, iPad or iPod touch mobile devices.
- A system is defined as all devices connected on a single QS link. For installations with multiple QS links, one Energi Savr Node Programming Interface is required for every QS link.
- Powered by the QS link, line voltage not required.
- Install using one of the three following methods:
    1. DIN rail
    2. Surface mount
    3. Junction box

Requirements

- The Energi Savr Node Programming Interface is powered by the QS link, and consumes 2 power draw units. For complete information, see "Power Draw Units on the QS Link" Lutron P/N 369405 at www.lutron.com
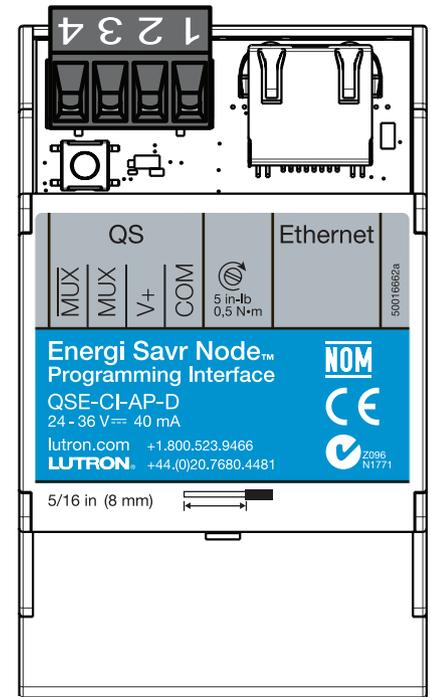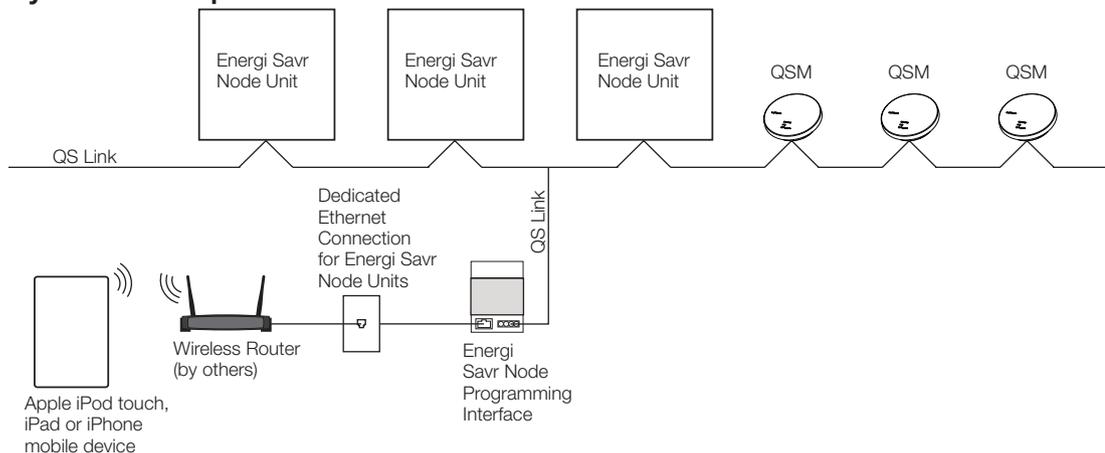
Unit shown at actual size

System Example

Job Name:	Model Numbers:
Job Number:	

Specifications

Power
- SELV / PELV / NEC® Class 2
- Operating voltage: 24–36 V⎓ 40 mA
- Consumes two (2) power draw units on the QS link. Refer to the QS Link Power Draw Units specification submittal (Lutron P/N 369405) for more information concerning Power Draw Units.

Standards
- CE Certified
- Lutron Quality Systems registered to ISO 9001.2000
- NOM Compliant

Environment
- Ambient Temperature Operating Range: 32 °F to 140 °F (0 °C to 60 °C)
- Relative humidity: less than 90% non-condensing
- For indoor use only

Terminals
- Ethernet port
- QS Link Wiring: 22 AWG to 12 AWG (0.5 mm^2 to 4.0 mm^2)

Mounting
- DIN rail - occupies three DIN rail mount spaces at 2.125 in (53 mm) wide
- Surface mount
- Junction box

Programming Requirements
- An Apple iPod touch, iPad or iPhone mobile device with the Energi Savr Node app is required for programming Energi Savr Node units.
- The Energi Savr Node app for Apple iPod touch, iPad or iPhone is used to program the Energi Savr Node unit in installations requiring an Energi Savr Node programming interface for commissioning. The Energi Savr Node app is available on the Apple App Store or from the iTunes Store online marketplace.
- The Energi Savr Node app cannot be used to program the Energi Savr Node units when installed as part of a Quantum or Athena system.
- The Apple iPod touch, iPad or iPhone communicates with the Energi Savr Node unit via a WiFi router (not included).
- See "Programming Options" section for further information.

Ethernet Connection
- Standard CAT5 (or better) cable connects the QSE-CI-AP-D interface to a wireless router.
- Supports MDI / MDIX auto-crossover (no crossover cable needed).
- Total cable length must be 327 ft (100 m) or less.
- Ethernet network and cable provided by others.
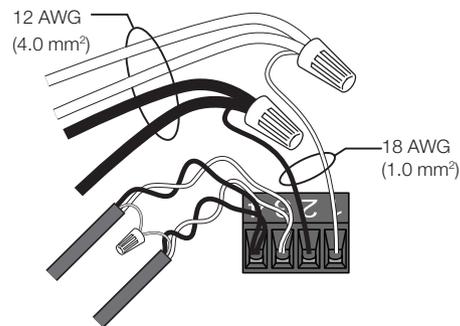
QS Link Limits
- Each Energi Savr Node Programming Interface counts as 1 device towards the 100 device QS link limit.
- QS communication link uses SELV / PELV / NEC® Class 2 wiring. Follow all local and national electrical codes when installing SELV / PELV / NEC® Class 2 wiring with line voltage wiring.
- The total length of the QS link must not exceed 2000 ft (610 m). See table below.

Table 1: QS Link Wiring Options

QS Link Wiring Length	Wire Gauge	Lutron® Cable Part Number
Less than 500 ft (153 m)	Power (terminals 1 and 2) 1 pair 18 AWG (1.0 mm^2)	GRX-CBL-346S (non-plenum) GRX-PCBL-346S (plenum)
	Data (terminals 3 and 4) 1 twisted, shielded pair 22 AWG (0.5 mm^2)	
Up to 2000 ft (610 m)	Power (terminals 1 and 2) 1 pair 12 AWG (4.0 mm^2)	GRX-CBL-46L (non-plenum) GRX-PCBL-46L (plenum)
	Data (terminals 3 and 4) 1 twisted, shielded pair 22 AWG (0.5 mm2)	

QS Link Terminal Connections
- Each QS link terminal can accept only two 18 AWG (1.0 mm^2) wires. Two 12 AWG (4.0 mm^2) conductors will not fit. Connect as shown below using appropriate wire connectors.

12 AWG (4.0 mm^2)

18 AWG (1.0 mm^2)

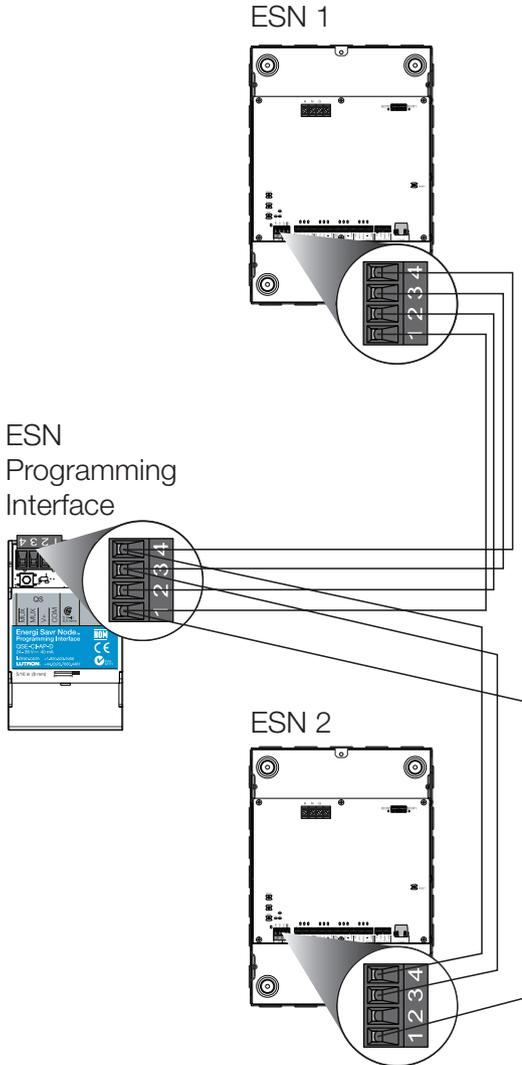| Job Name:	Model Numbers:
Job Number:	

Powering the QSE-CI-AP-D

- The QSE-CI-AP-D consumes 2 power draw units on the QS link and counts as one device toward the 100 device QS link limit.
- The QSE-CI-AP-D may also be powered by a QS Link power supply (QSPS-P1-1-50, QSPS-P2-1-50, or QSPS-P3-1-50) or a QS shade panel power supply (QSPS-P2-10-60 for 230 V∼, or QSPS-P1-10-60 for 120 V∼).
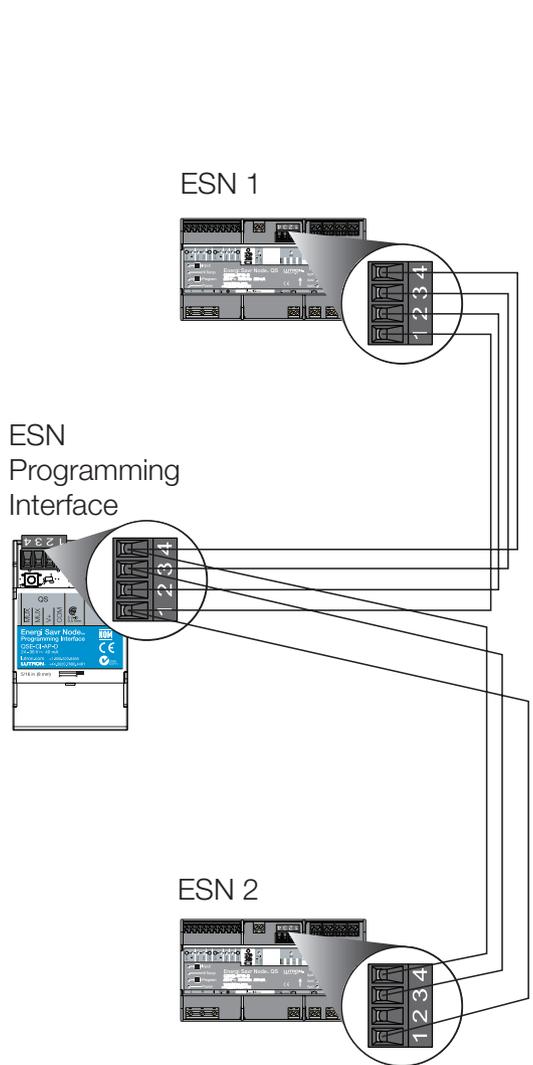
Wiring Example: Using a QS Link Power Supply
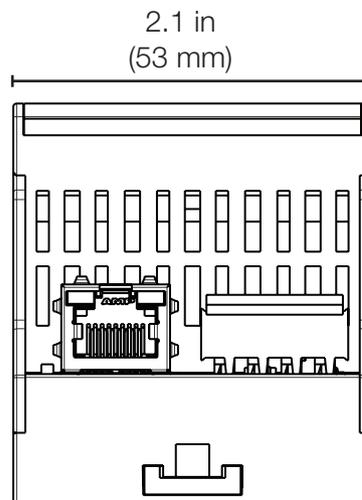
ESN = Energi Savr Node Unit

120-277 V∼ UL Products

ESN 1

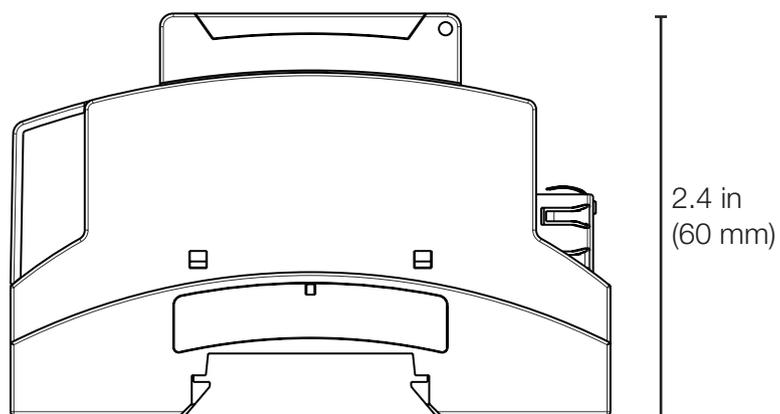ESN Programming Interface

ESN 2

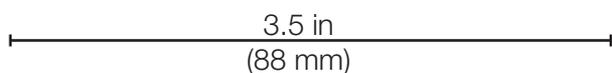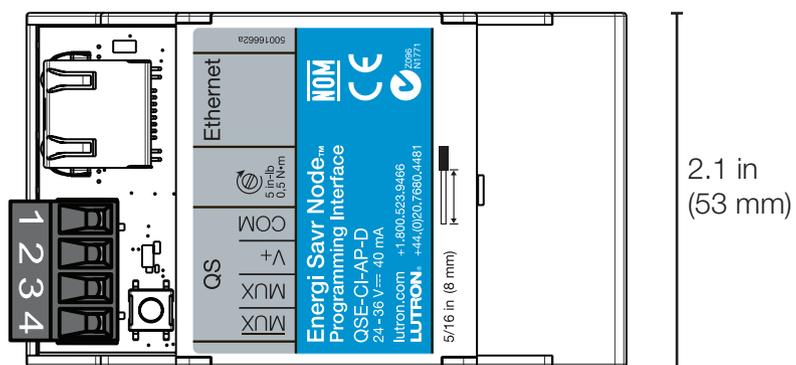The ESN Programming Interface is powered by ESN 1 only. Terminal 2 terminates at the ESN Programming Interface.
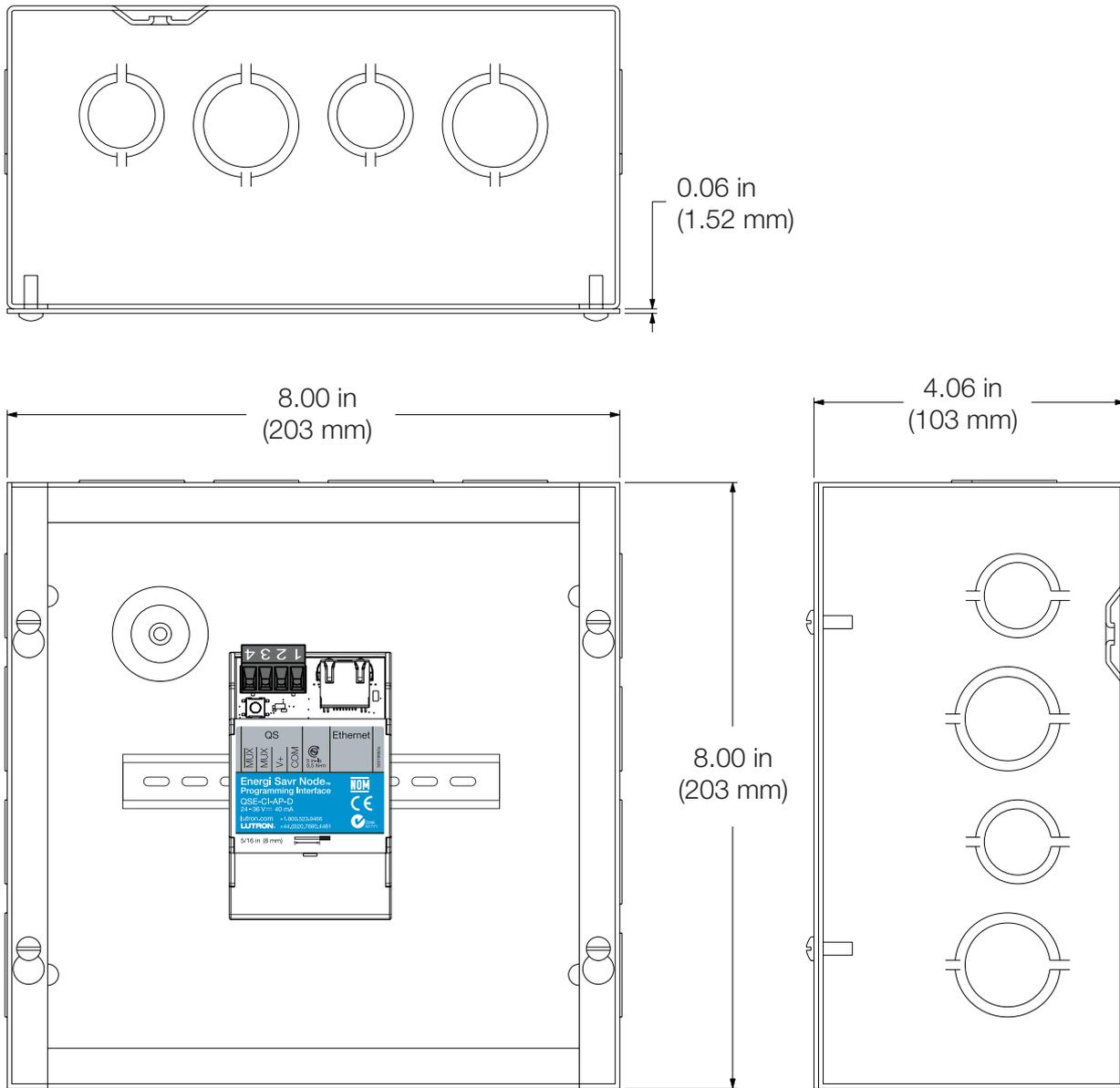
230 V∼ CE Products

ESN 1

ESN Programming Interface

ESN 2

Mechanical Dimensions (using DIN rail only)

2.1 in
(53 mm)

3.5 in
(88 mm)

2.4 in
(60 mm)

2.1 in
(53 mm)

Job Name:	Model Numbers:
Job Number:	

Mechanical Dimensions (using metal enclosure LUT-8X8-ENC)

0.06 in
(1.52 mm)

8.00 in
(203 mm)

4.06 in
(103 mm)

8.00 in
(203 mm)

Job Name:	Model Numbers:
Job Number:	

Programming with Apple iPod touch, iPad or iPhone

- Use the intuitive programming application for the Apple iPod touch, iPad or iPhone to program systems with multiple Energi Savr Node units and QS Sensor Modules (QSMs) on the QS link.
- See the Energi Savr Node Handheld Programming Guide (P/N 040384) at www.lutron.com for more information on programming your Energi Savr Node system.
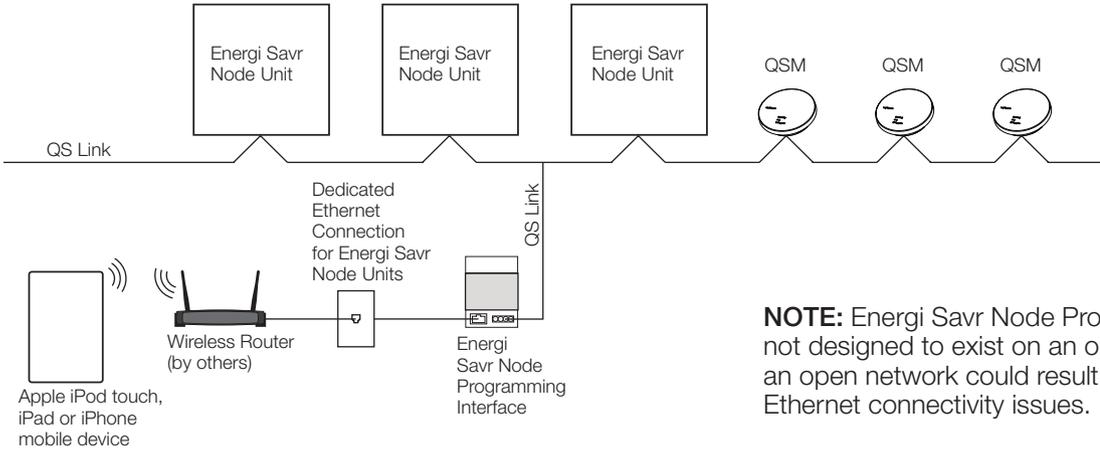
NOTE: Energi Savr Node Programming Interface units are not designed to exist on an open network. Connection to an open network could result in reduced performance and Ethernet connectivity issues.

Features unlocked by programming application and interface

- Sensors and controls can be shared between Energi Savr Node units on the QS link (SELV/PELV/NEC® Class 2 Dry Contact Switch inputs cannot be shared between Energi Savr Node units on the QS link)
- Associate multiple QSMs to one or more Energi Savr Node units on QS link

Associate up to 100 of each type of input to multiple Energi Savr Node units connected to a single QS link.

- Inputs can be connected to Energi Savr Node units or QSMs

Link input limits:

- 100 wired or wireless occupancy sensors on the QS link
- 100 wired or wireless daylight sensors on the QS link
- 100 wired wallstations or Pico wireless controllers on the QS link
- 16 wired or wireless daylight sensors on an EcoSystem link

LUTRON SPECIFICATION SUBMITTAL   Page

Job Name:	Model Numbers:
Job Number:	