XAL250 Loop Expander Card Installation Sheet

Operation

The XAL250 Loop Expander Card provides an additional device loop on the control panel. The card expands the control panel's device capability to 500 device addresses total, 250 per loop (125 detectors and 125 modules).
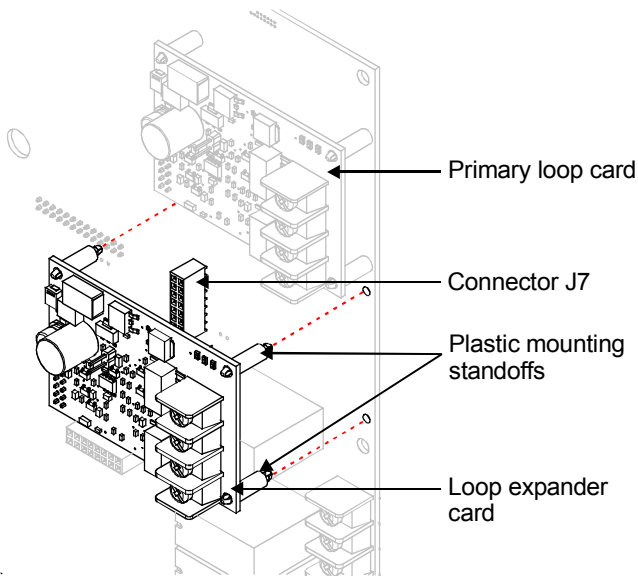
Installation

The loop expander card connects to connector J7 on the main circuit board.

Note: Installation limits are under the jurisdiction of local authority.

To install the loop expander card:

1. Power down the panel and disconnect the batteries.

2. Locate connector J7 on the main circuit board. It is below the primary loop card.

3. Connect the card to connector J7 as shown in the installation diagram. Make sure you properly align the connector pins and plastic mounting standoffs so that they lock into place.

4. Connect the field wiring. See "Wiring."

5. Power up the panel and connect the batteries.

Figure 1: XAL250 installation

Wiring

The card provides either Class B or Class A wiring options.
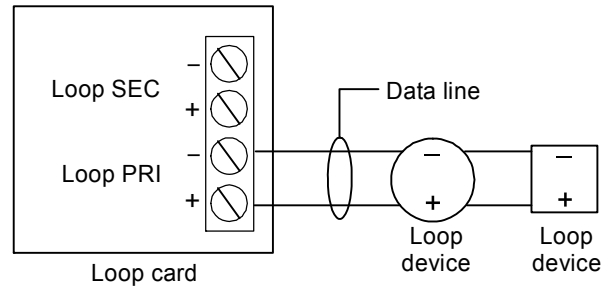
Figure 2: Class B wiring

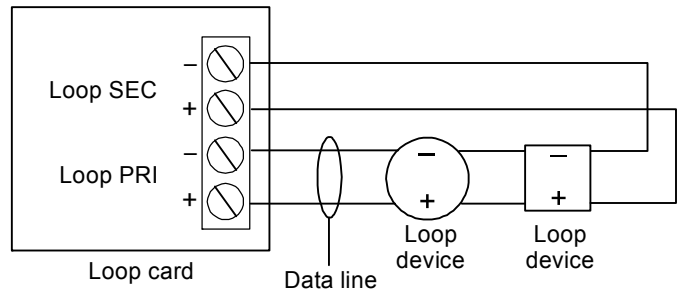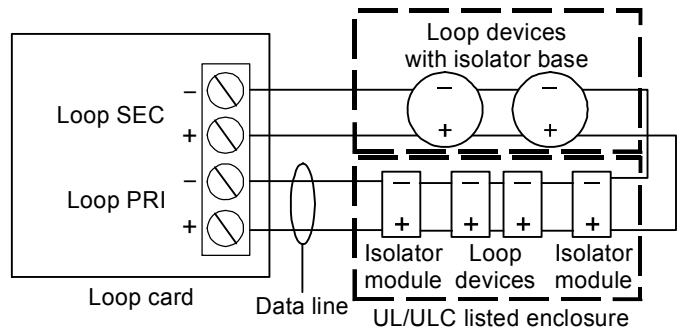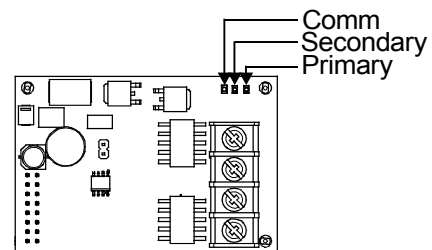

Figure 3: Class A wiring (Style 6)

Figure 4: Class A wiring (Style 7)

XAL250 LEDs

There are three LEDs on the card that indicate loop communication status. Primary is the primary communication circuit. Secondary is the Class A return communication when wiring is Class A. Comm is overall loop communication.

Figure 5: Loop card LEDs

Specifications

Device addresses on loop	250 max. (125 detectors and 125 modules)
Wiring	Class B or Class A
Operating voltage	24 VDC
Operating current (fully loaded loop)	Standby: 60 mA Alarm: 125 mA **Note:** These ratings do not include the use of two-wire smoke modules.
Communication line voltage	Max. 20.6 V peak-to-peak
Terminal rating	12 to 18 AWG (0.75 to 2.5 mm^2)
Circuit current	0.5 A max.
Max. total loop resistance	66 Ω
Max. total loop capacitance	0.5 μF
Isolators	64 isolators maximum (total both isolator bases and modules)
Ground fault impedance	0 to 5 kΩ
Operating environment	
Temperature Humidity	32 to 120°F (0 to 49°C) 0 to 93% RH, noncondensing at 90°F (32°C)

Contact information

For contact information, see www.edwardsfiresafety.com.