

## PRODUCT OVERVIEW



The X-21s™ Four Relay Expansion Module is used with an X-400/X-600M controller. The X-21s has four relays, each with Form-C contacts (SPDT). A removable terminal connector provides connections to the relays.

### Required Controller

One or more X-21s expansion modules can be connected to an X-400/X600M controller with a ribbon cable. The ribbon cable provides both power and communications to the expansion modules.

### Controller Features

The X-400 and X-600M are multi-function web-enabled industrial I/O controllers. They perform control, logic, and monitoring functions similar to that of a Programmable Logic Controller (PLC). However, unlike a PLC, this controller is designed for web-based applications from the ground up.

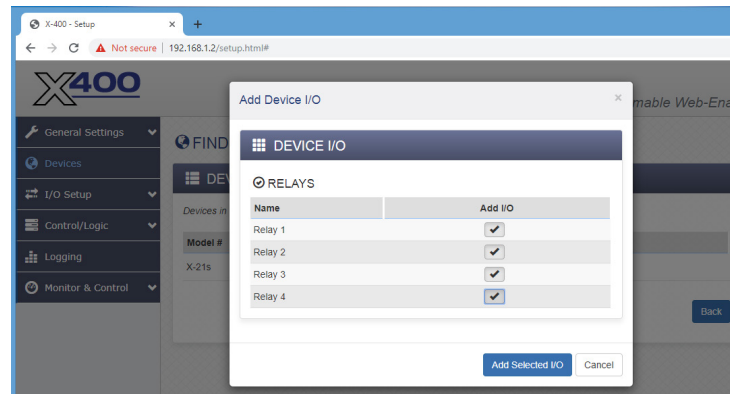
No add-on software or hardware is required. The controllers can be fully configured, programmed and tested using its built-in web server. The web setup pages are intuitive and easy to use and do not require special programming skills.

### Applications

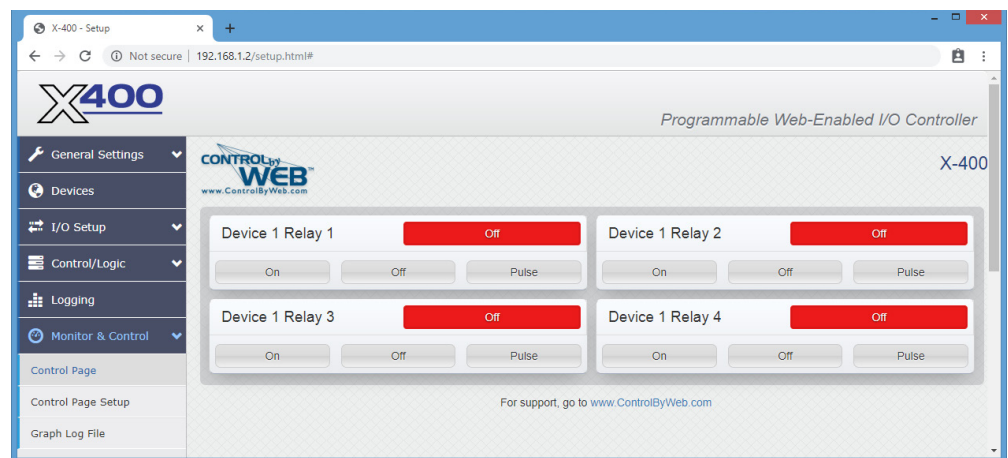
The X-400 and X-600M controllers, together with expansion modules, such as the X-21s, provide an easy, flexible, and reliable way to monitor and control systems and devices over a network. The X-21s is suitable for use with moderate loads such as solenoid valves, alarms, and indicator lights.

## Features:

- Four SPDT relays (125VAC, 28VDC @ 2.5A) independently controlled
- Removable connector
- Four relay LEDs
- Removable terminal connector
- Powered through expansion bus
- Great for moderate-load applications including:
  - Solenoid valves
  - Alarms
  - Indicator lights
  - and much more...



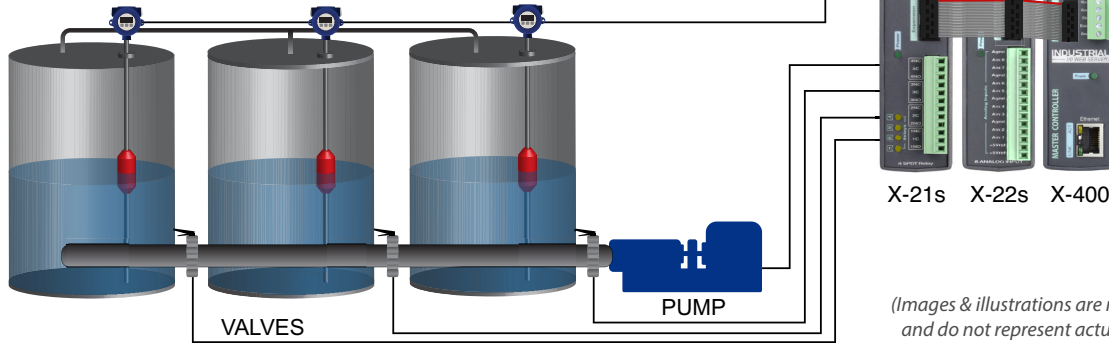
Adding the X-21s on the X-400



View X-21s components on the X-400's Dashboard

### APPLICATIONS & SPECS

#### TANK BATTERY WITH LEVEL MONITORING SENSORS



(Images & illustrations are not to scale and do not represent actual wiring)

### Applications

- ✓ Solenoid Valves
- ✓ Alarms
- ✓ Indicator Lights
- ✓ More...

#### Models:

- X-21s

#### Power Requirements

- Voltage: 9-28 VDC (supplied via the X-400 or X-600M controller, 24V recommended)
- Max Current: See table below for typical values at 25°C.

Power Supply	All Relays OFF	All Relays ON
9 VDC	17 mA	270 mA
12 VDC	13 mA	189 mA
24 VDC	7 mA	110 mA

#### Relay Contacts

- Number of Relays: 4
- Max Voltage: 125VAC, 28VDC
- Max Current: 2.5A (total for each group of 4 relays with shared commons)
- Contact Type: SPDT (Form 1C)
- Load Type: General Purpose
- Contact Resistance: < 100 milliohms initial
- Contact Material: AgNi
- Electrical Life: 100K operations (Min)
- Mechanical Life: 5M cycles (Min)
- Environmental Rating: Over voltage Category II, Pollution Degree 2
- Relay Modes: On/Off or Pulsed
- Pulse Timer Duration: 0.1 to 86,400 Seconds (1-day)

#### Connectors

- Relays: 12-Position, 3.81mm, Removable
- Expansion Connector: Ribbon cable, 10-conductor, polarized, 2x5-position, 0.100" pitch Provides power and communications for expansion modules (Communications: RS-485)

#### LED Indicators

- Number of LEDs: 5
  - Power on
  - Relay coil energized 1-4

#### Physical

- Size:
  - 1.41in (35.7mm) wide
  - 3.88in (98.5mm) tall
  - 3.1in (78mm) deep (not including connector)
- Weight: 4.8 oz (136 g)
- Enclosure Material: Lexan 940 Polycarbonate Plastic
- Enclosure Flame Rating: UL94 V0

#### Environmental

- Operating Temperature: -40°F to 122°F (-40°C to 50°C)
- Storage Temperature: -40°F to 185°F (-40°C to 85°C)
- Humidity: 5-95%, non-condensing
- Altitude: Up to 2,000m
- Indoor use or NEMA-4 protected location

#### Electromagnetic Compliance

- IEC CISPR 22, CISPR 24
- FCC 47CFR15 (Class B)
- EN55024 ITE Immunity (2010)
- EN55022 Emissions (2010)

#### Product Safety Compliance

- IEC 61010-1

