



### Features:

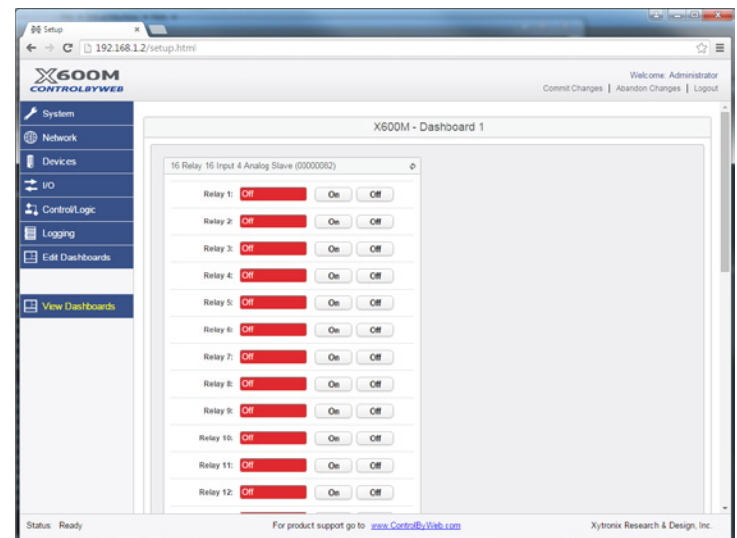
- 16 isolated relays SPST
- Relay functions: ON/OFF or Pulsed
  - Great for moderate-load applications including:
    - Solenoid valves
    - Lights
    - and much more moderate load applications
- PCB terminal block, screw connection, 3.81mm pitch
- 16 optically-isolated digital inputs
- Digital input functions:
  - Monitor State
  - Control Relays
  - Control Remote Relays
  - Count
- Input Debounce
- 4 analog inputs
- 33 LEDs for outputs and power
- Power Supply: 9-28 VDC (24V recommended)

The X-19s™ expansion module is used with the X-600M controller. The X-19s has 16 relays, 16 optically-isolated digital inputs, and 4 analog inputs. Screw terminal strips provide connections to the relays and inputs.

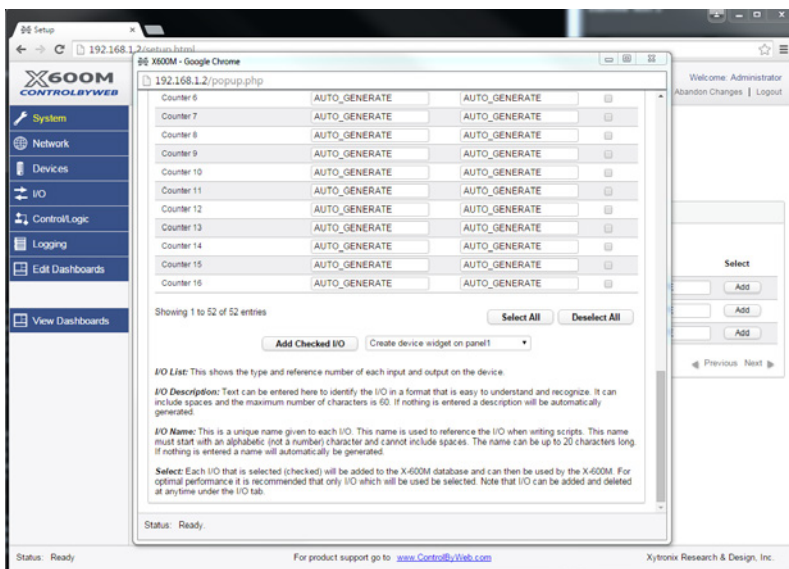
The X-19s is suitable for use in many applications from security systems to industrial controls where a high I/O count is required. It can be used to monitor freezer doors, light switches, and pulsed flow meters as well as control moderate loads such as solenoid valves, and lights.

Since the X-19s functions as a slave device to the X-600M, the advanced features of the X-600M can be utilized with this module. For example scheduling, remote relay control, logging, counting, email alerts based upon single input state change or multiple input state changes, analog slope and offset calculations, and many other features are available.

Attach multiple X-19s modules or a combination of expansion modules to the X-600M for an I/O combination that is tailored to your specific needs.



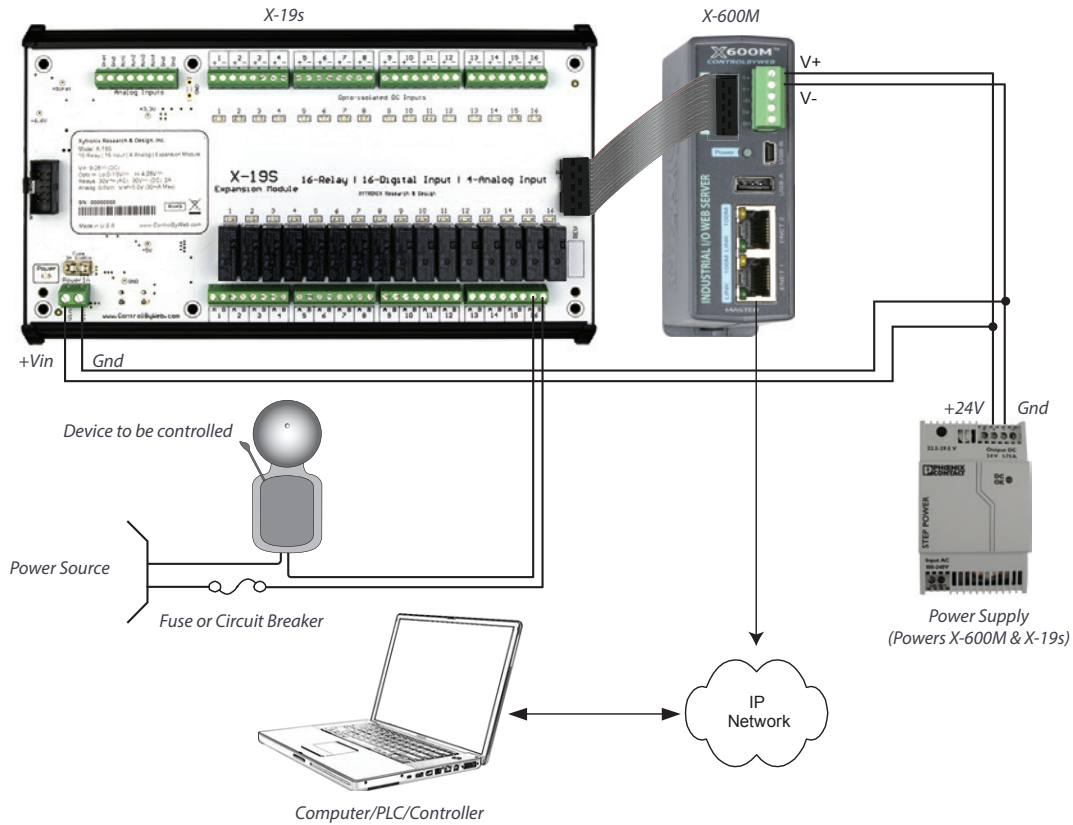
View X-19s components on the X-600M's Dashboard



Adding the X-19s on the X-600M

### APPLICATIONS & SPECS

#### Shift Bell Controller



#### Models:

- X-19s

#### Power Requirements

- Voltage: 9-28 VDC (24V recommended)
- Max Current: See table below for typical values at 25°C.

Power Supply	All Relays OFF	All Relays ON
9 VDC	20 mA	650 mA
12 VDC	16 mA	490 mA
24 VDC	12 mA	250 mA

#### Relay Contacts

- Number of Relays: 16
- Max Voltage: 30VDC, 30VAC
- Max Current: 2A
- Contact Type: SPST
- Load Type: General Purpose
- Contact Resistance: < 100 milliohms initial
- Contact Material: AgSnO2
- 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)

#### Digital Inputs

- Number of Inputs: 16
- Type: Optically-Isolated
- Voltage Range: 4-28VDC
- Vin Hi (Min): 4V
- Vin LO (Max): 1.5V
- Current: 950uA @ 4V, 8.5mA @ 26V
- Minimum Hold Time: 5ms
- Input Isolation: 1500V
- Input Functions: Asynchronous status of the digital inputs
- Number of Counter Inputs: 16
- Maximum Count: 32-bit
- Max Count Rate: 100 Hz
- Edge Trigger: Rising, Falling or Both

#### Analog Inputs

- Number of Inputs: 4
- Type: Single-ended channels
- Input Range: 0-5VDC
- Resolution: 12-bit
- Reference: 5.000V ±.04%, 3ppm, 30mA MAX

#### Connectors

- Expansion Connector: Ribbon cable, 2x5-position, polarized 0.100" pitch
- Relays & Inputs: PCB terminal block, screw connection, 3.81 mm pitch

#### LED Indicators

- Number of LEDs: 33
  - Power on
  - Relays 1-16
  - Digital Inputs 1-16

#### Physical

- Size:
  - 8.60in (218.44mm) wide
  - 4.95in (125.73mm) tall
  - 1.96in (49.78mm) deep
- Weight: 12 oz (342 g)
- Enclosure Material: PVC
- Enclosure Flame Rating: UL94 V1

#### Environmental

- Operating Temperature: -40°F to 150°F (-40°C to 65.5°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)