# **X-20**s™

## **Six Relay, Six Input Expansion Module** 6 Relays - 277VAC, 30VDC, 15-Amp | 16 Optically-Isolated Digital Inputs 4-28VDC

**PRODUCT OVERVIEW** 



The X-20s<sup>™</sup> expansion module is used with the X-600M controller. The X-20s has six, high-current relays, each with Form-C contacts (SPDT) and six, optically-isolated digital inputs. A screw terminal strip provides high-current connections to the relays.

The X-20s is suitable for use with controlling relatively heavy loads such as motors, solenoid valves, and lights. Switches can be connected to the X-20s' digital inputs to locally control these loads. The digital inputs can also be used for other monitoring applications such as limit switches, security sensors, or light switches.

Since the X-20s 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, and many other features are available.

Attach multiple X-20s modules or a combination of expansion modules to the X-600M for an I/O combination that is tailored to your specific needs.

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	Input On Time 2	AUTO_GENERATE	AUTO_GENERATE		Welcome: Administra
	Input On Time 3	AUTO_GENERATE	AUTO_GENERATE		andon Changes Log
System	Input On Time 4	AUTO_GENERATE	AUTO_GENERATE		
Network	Input On Time 5	AUTO_GENERATE	AUTO_GENERATE		
	Input On Time 6	AUTO_GENERATE	AUTO_GENERATE		
Devices	Frequency Input 1	AUTO_GENERATE	AUTO_GENERATE		
I/O	Frequency Input 2	AUTO_GENERATE	AUTO_GENERATE	2	
Control/Logic	Frequency Input 3	AUTO_GENERATE	AUTO_GENERATE		
	Frequency Input 4	AUTO_GENERATE	AUTO_GENERATE		
Logging	Frequency Input 5	AUTO_GENERATE	AUTO_GENERATE		
Edit Dashboards	Frequency Input 6	AUTO_GENERATE	AUTO_GENERATE		Select
	I/O List: This shows the type	and reference number of each input and o		mize It can	Add
	generated. <i>I/O Name:</i> This is a unique na must start with an alphabetic ( If nothing is entered a name w	um number of characters is 60. If nothing me given to each I/O. This name is used not a number) character and cannot inclu	g is entered a description will be autor to reference the I/O when writing scri de spaces. The name can be up to 20	natically pts. This name ) characters long.	

Adding the X-20s on the X-600M

# Features:

- 6 isolated relays SPDT
- Relay functions: ON/OFF or Pulse
- Great for heavy-load applications including:
  - ° Motors
  - Solenoid valves
  - ° Lights
  - and much more ...
- Thermoplastic, UL94V-0, 3-wall, 0.375" pitch
- 6 optically-isolated digital inputs
- Digital input functions:
  - Monitor State
  - ° Control Relays
  - ° Control Remote Relays
  - Count
  - Frequency
  - High Time
  - ON Time
- 13 LEDs for outputs, inputs, and power
- Power Supply: 9-28 VDC (24V recommended)

Nacara			
		Welcome: Administrat Commit Changes   Abandon Changes   Logo	
🖌 System	X600M - Dashboard 1		
Network	X600M - Dashboard 1		
] Devices	6 Relay 6 Input Slave (00000a82) Φ		
<b>≵</b> 1/0	Relay 1: Off On Off		
Control/Logic	Relay 2: Off On Off		
Logging	Relay 3: Off On Off		
Edit Dashboards			
	Relay 4: Off On Off		
View Dashboards	Relay 5: Off On Off		
	Relay 6: Off On Off		
	Digital Input 1: Off		
	Digital Input 2: Off		
	Digital Input 3: Off		
	Digital Input 4: Off		
	Digital Input 5: Off		
	Digital Input 6: Off		
	Frequency Input 0 HZ		

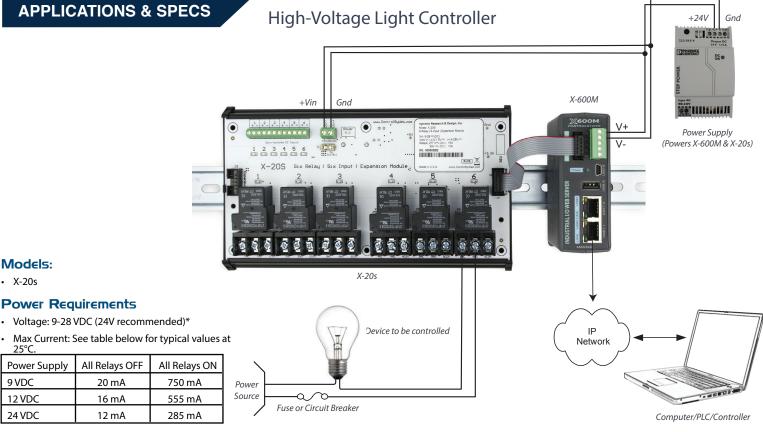
View X-20s components on the X-600M's Dashboard



**X-20**₅™

# Six Relay, Six Input Expansion Module

6 Relays -277VAC, 30VDC, 15-Amp | 16 Optically-Isolated Digital Inputs 4-28VDC



#### Relay Contacts

- Number of Relays: 6
- Max Voltage: 277VAC, 30VDC
- Max Current: 15A
- Contact Type: SPDT
- Load Type: General Purpose
- Contact Resistance: < 30 milliohms initial
- Contact Material: AgSnO2
- Electrical Life: 100K cycles (Typical)
- Mechanical Life: 10M cycles (Typical)
- Environmental Rating: Over voltage Category II, Pollution Degree 2
- Relay Modes: ON/OFF or Pulse
- Pulse Timer Duration: 0.1 to 86,400 Seconds (1-day)

## **Digital Inputs**

- Number of Inputs: 6
- 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: 2.5ms
- Input Isolation: 1500V
- Input Functions: Asynchronous status of the digital inputs
- Number of Counter Inputs: 6
- Maximum Count: 32-bit
- Max Count Rate: 200 Hz

- Edge Trigger: Rising, Falling or Both
- Frequency: 1Hz min, 200 Hz max
- High Time: Pulse width (4,194,304 seconds max)
- On Time: Accumulated time an input is asserted (4,194,304 seconds max)

#### **Connectors**

- Expansion Connector: Ribbon cable, 2x5-position, polarized 0.100" pitch
- Relays: Thermoplastic, UL94V-0, 3-wall, 0.375" pitch
- Inputs: PCB terminal block, screw connection, 3.81mm pitch

#### **LED Indicators**

- Number of LEDs: 13
- o Power on
- ° Relays 1-6
- ° Digital Inputs 1-6

#### **Physical**

- Size:
- ° 8.60in (218.44mm) wide
- ° 4.95in (125.73mm) tall
- ° 2.16in (54.86mm) deep
- Weight: 17 oz (474 g)
- Enclosure Material: PVCEnclosure 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)

## Product Safety Compliance

 UL 61010-1 (Electrical Equipment for Measurement, Control, and Laboratory Use)



