



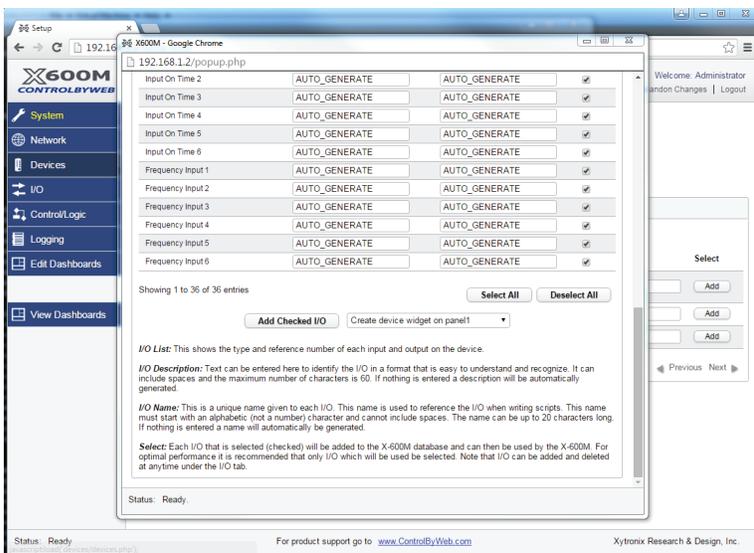
The X-20s™ expansion module is used with the X-600M controller. The X-20s has six, high-current relays, each with Form-C contacts (SPDT) and six, optically-isolated digital inputs. A screw terminal strip provides high-current connections to the relays.

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.

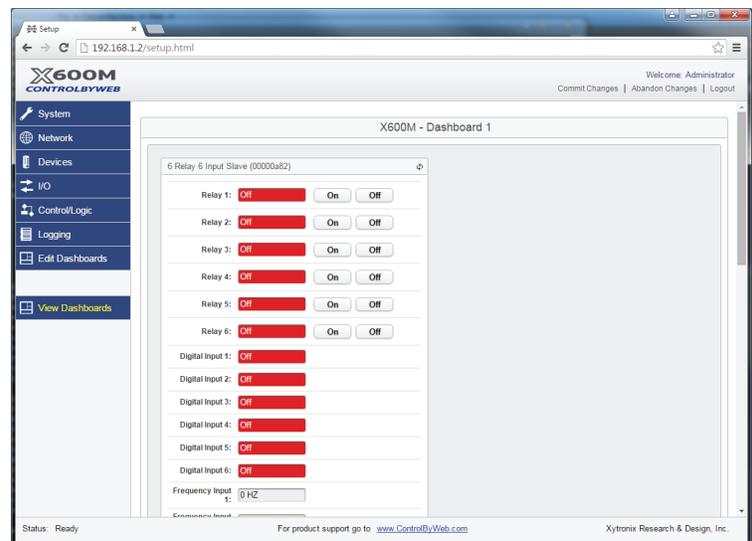
Since the X-20s functions as a slave device to the X-600M, the advanced features of the X-600M can be utilized with this module. For example scheduling, remote relay control, logging, counting, email alerts based upon single input state change or multiple input state changes, and many other features 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.

Features :

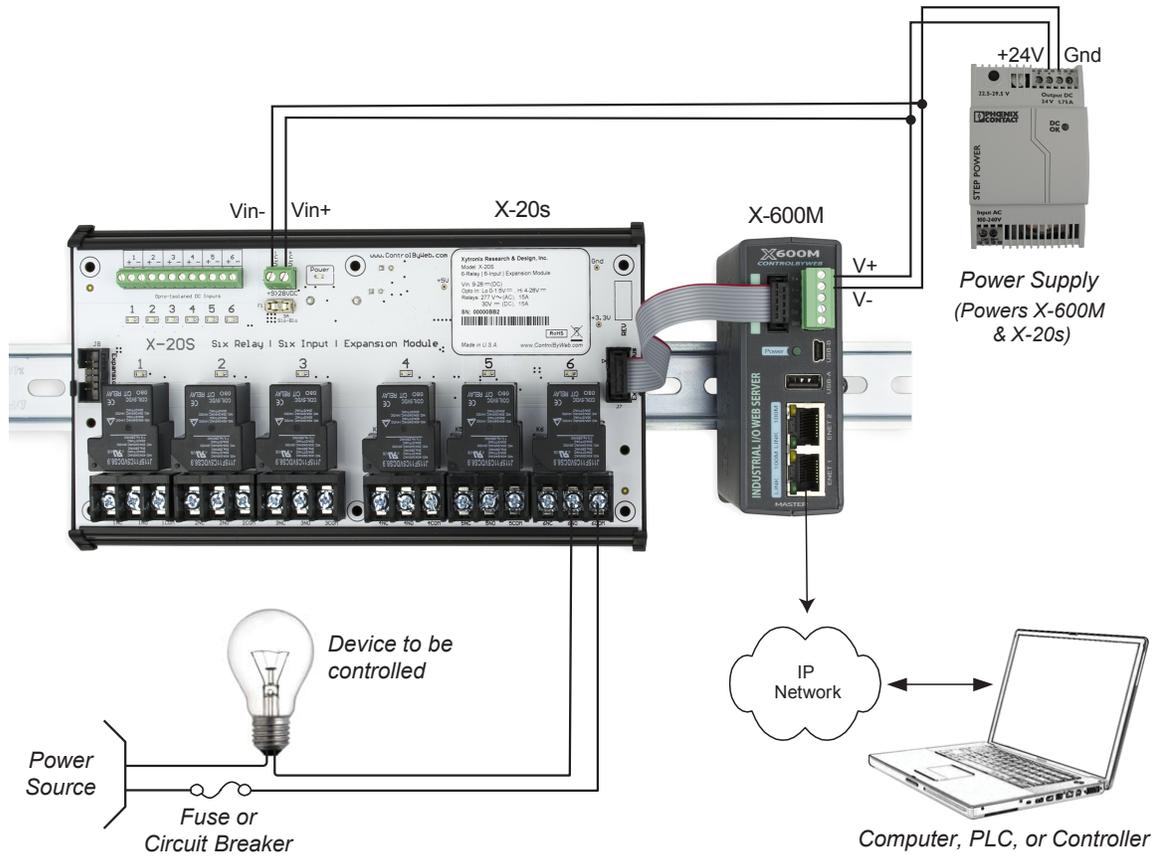
- 6 isolated relays SPDT
- Relay functions: ON/OFF or Pulse
- Great for heavy-load applications including:
 - Motors
 - Solenoid valves
 - Lights
 - and much more ...
- Thermoplastic, UL94V-0, 3-wall, 0.375" pitch
- 6 optically-isolated digital inputs
- Digital input functions:
 - Monitor State
 - Control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



Adding X-20s on the X-600M



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



Model: X-20s

POWER REQUIREMENTS

Input Voltage: 9-28 VDC (24V recommended)

Current: See table below for typical values at 25°C.

Power Supply	Relays OFF	Relays ON
9 VDC	20 mA	750mA
12 VDC	16 mA	555mA
24 VDC	12 mA	285mA

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 (Power on, Relays 1-6, Digital Inputs 1-6)

ENVIRONMENTAL

Operating Temperature: -40°C to 65°C (-40°F to 149°F)
 Storage Temperature: -40°C to 85°C (-40°F to 185°F)
 Humidity: 5-95%, non-condensing
 Altitude: Up to 2,000m
 Indoor use or NEMA-4 protected location

MECHANICAL

Size:
 8.60in (218.44mm) wide
 4.95in (125.73mm) tall
 1.96in (49.78mm) deep
 Weight: 17 oz (474 g)
 Enclosure Material: PVC
 Enclosure Flame Rating: UL94 V1

ELECTROMAGNETIC COMPLIANCE

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