X-600M™

Web-Enabled Programmable Logic Controller

Ethernet Switch, Expansion Bus, Up to 1,024 I/O Points, 1-Wire Bus, USB, Event Scheduler with Real-Time Clock, Logging & Graphing, Email/Text Notifications, Configurable Web Pages (Dashboard, Panels, Widgets, etc.)

PRODUCT OVERVIEW



The X-600 series modular I/O controller is the ultimate drop-in solution for monitoring and control. Start with the X-600M controller and add I/O modules for a solution tailored to your specific application. This series has so many new features it is OUR BEST YET!

The X-600M™ is a multi-function web-enabled module for control and monitoring over the Internet. The X-600M performs control, logic, and monitoring functions similar to that of a Programmable Logic Controller (PLC). However, unlike a PLC, the X-600M is designed for web-based applications from the ground up.

The X-600M can be setup, controlled, and monitored using its built-in web server and a standard web browser. The web page setups are intuitive and easy to use and do not require special programming skills. No add-on software or hardware is required.

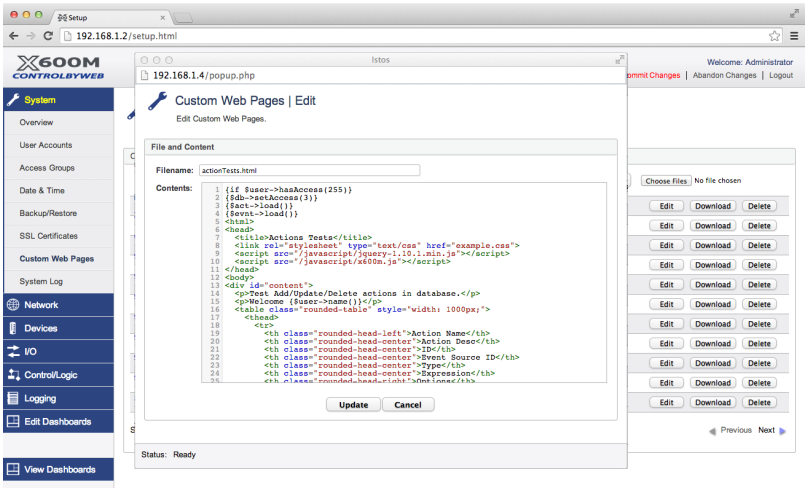
The X-600M functions as a powerful master controller for other ControlByWeb™ modules. Its ribbon-cable expansion bus connector allows for up to 64 expansion modules to be connected directly to the X-600M. It can also control up to 128 other stand-alone ControlByWeb products.

Expansion I/O modules for the X-600M are available with relays, digital inputs, thermocouples, and more.

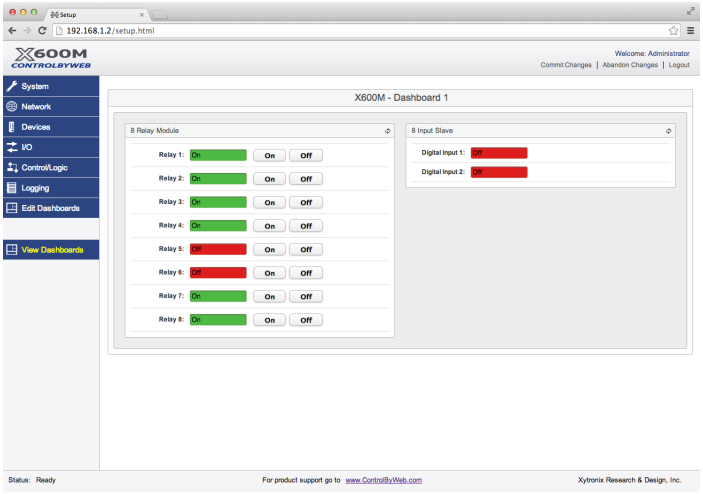
The features of other ControlByWeb products are also included, such as Email notification, scheduling, logging and graphing of logged data, custom Lua scripts, and much more.

Features:

- Powerful built-in web server
- Easily configurable web pages
- Logging & automatic graphing of log files
- Built-In Ethernet switch with two Ethernet Connections
- Expansion bus - Direct connection up to 64 modules (128 modules total)
- Communicates with all ControlByWeb modules
- Up to 1,024 I/O points
- Supports USB Wi-Fi adapters & USB flash drives
- Built-in 1-wire bus for temp/humidity sensors
- Send custom email alerts using encrypted email servers (Gmail, Yahoo, etc.)
- Create logic scripts or full programs using Lua
- Advanced, full-calender scheduling
- Protocols supported: HTTP, HTTPS, XML, SSL, SMTP, Modbus TCP/IP, Remote Services™ server and client, & more.
- Rugged DIN-rail mount enclosure
- Email alerts based on user-defined conditions
- Static or DHCP IP address configuration
- Field updatable
- Removable 14-Terminal connector
- Rugged DIN-Rail/wall-mountable enclosure



Edit Custom Web Pages



View Dashboards

Phone: 1-435-750-5999
Email: Sales@ControlByWeb.com

X-600M™

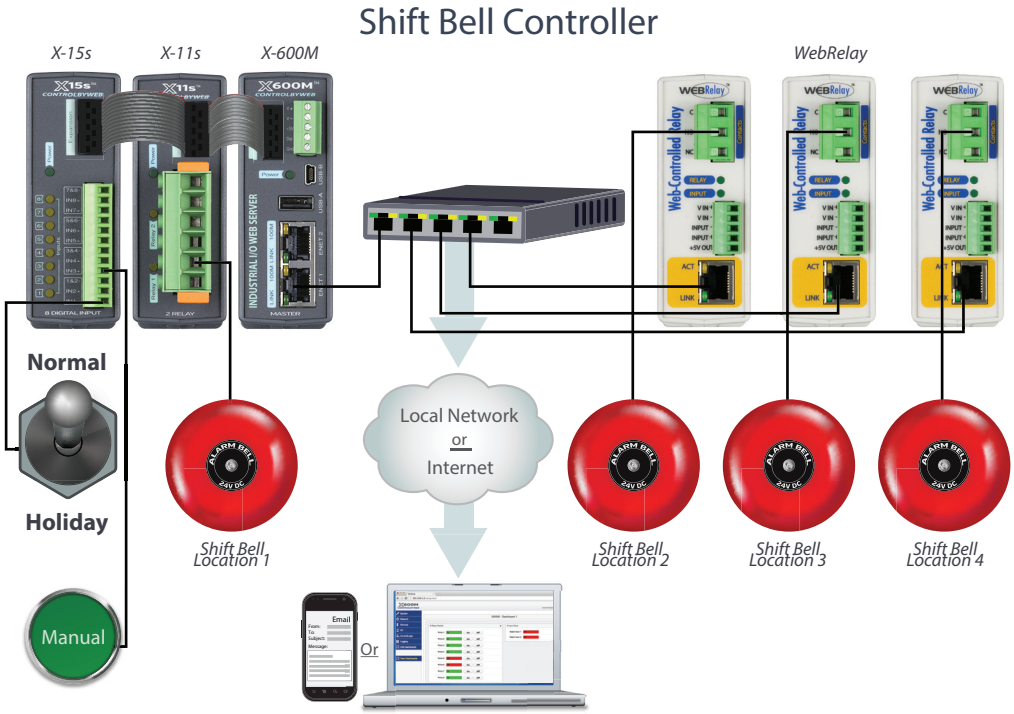
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APPLICATIONS & SPECS

Additional Features

- ✓ **Expandable, up to 1,024 I/O points**
- ✓ **Expansion Bus**
- ✓ **Easy, configurable web pages**
- ✓ **Custom Email Notifications**
- ✓ **More...**



Models:

- X-600M-I

Power Requirements

- Voltage: 9-28VDC
- Max Current: See table below for typical values at 25°C,10/100Mbps.

Power Supply	Input Current (no expansion modules)
9 VDC	173 mA
12 VDC	132 mA
24 VDC	71 mA

Voltage Outputs

- Expansion Bus (X-600M-I): 1.7A max

USB

- Host: USB 2.0 Type A
- Device: USB 2.0 Mini-B

Temperature Sensors

- Maximum Number of Sensors: 32
- Type: Dallas Semiconductor DS18B20 digital 1-Wire thermometer
- Temperature Range: -67°F to 257°F (-55°C to +125°C)
- Accuracy: ±0.5°C (from -10°C to +85°C)
- Sensor Functions: Monitor Temperature, Control Expansion Module's Relays, Control Remote Relays, Log Temperature, Email Alerts
- Humidity Type: Xytronix Model X-DTHS-WM wall mount sensor
- Humidity Range: 0-100% RH
- Accuracy: ±1.8%

Real-Time Clock

- Manual or NTP(Network Time Protocol) setup
- NTP Sync Period: Once, Daily, Weekly, On Power-up
- Auto Daylight Savings Adjustment
- Battery backup (super capacitor), 30 days min
- Accuracy ±10 seconds/month

Nonvolatile Memory

- Industrial grade eMMC NANDrive, single level cell (SLC)
- All user settings are stored in nonvolatile memory. Settings will not be lost when power is disconnected.

Network

- 2ea 10 Base-T or 100 Base-T, 8-pin RJ-45 Ethernet connectors. Built-in 3-port L2 switch
- Setup: Static or DHCP IP address configuration

Connectors

- Power & Inputs: 5-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)
- Network: 8-pin RJ-45

LED Indicators

- Number of LEDs: 5
  - Power on
  - Network linked
  - Network activity

Physical

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

Protocols

- HTTP, HTTPS, SSL, SMTP, Modbus TCP/IP, Remote Services server and client

Logging

- Up to 5 log files
- Stored in Nonvolatile Flash or external USB thumb drive
- 20Mbytes max each log file (internal)
- Unlimited data storage with external USB thumb drive
- Data wraps-around when full

Password Settings

- Password protection on setup page: Yes
- Password protection on control page: Optional
- Password Encoding: Base 64
- Max Password Length: 20 Characters

Electromagnetic Compliance

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

Product Safety Compliance

- UL: E4683-A116 61010-1 3rd Edition
- CSA: C22.2 No. 61010-1-12 3rd Edition
- CCN: QUYX, QUYX7 (Process Control Equipment, Electrical)

CE