Monitor up to 8 digital inputs

PRODUCT OVERVIEW



The X-408[™] is a fully-featured, webenabled digital input monitoring device.

It is ideal for applications that require discrete input monitoring over an IP network.

Digital inputs can be connected to: Buttons/Switches, water sensors, float switches, security sensors, limit switches, counters, flow sensors, and more.

The values from the digital inputs can be monitored over any TCP/IP network including private networks, IP-based industrial control networks, and the Internet.

Users can operate the X-408 using a web browser, the CBW Mobile app, or custom applications written for a computer, PLC, or other automation controller.

Frequency/Counter Inputs

Configure an input for discrete, counter, or frequency measurement.

Peer-to-Peer Communication

Share real-time input states with other ControlByWeb devices.

Email/Text Alerts

Customizable email/text alerts based on input states.

Logging/ Graphing

Log and graph digital input states over time.

I/O Mirroring

Mirror the state of the inputs' to relays on remote devices.

Communication Protocols

The X-408 supports a number of Ethernet protocols including: HTTP/HTTPS, Modbus TCP/IP, SNMP V1,V2 & V3, NTP, SMTP(Encrypted), and FTP/FTPS. The status of the device can be retrieved in human readable formats XML and JSON.

The X-408 supports TLS V1.2 encryption as well as cloud integration (optional) for easier configuration and access. Specifically the X-408 supports HTTPS connections, can send encrypted emails, can communicate with remote devices using TLS, and send logged data to FTP servers over an encrypted connection.

INCLUDES 400-SERIES ADVANCED FEATURES

The X-408 also has other robust features found in other 400-Series products: Task Builder, encryption, intuitive user interface, much more.

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Features:

- ° Eight optically-isolated digital inputs
- Each input can be configured as:
 - o Discrete On/Off
 - Counters
 - Frequency measurements
- Monitor, log, and control 32 remote modules, or up to 100 I/O
- o User Permissions: Admin, Manager, User
- Tasks
 - 50 Scheduled
 - o 50 Conditional
 - 20 Override Schedules
- Send email alerts based on user-defined conditions (supports encrypted email servers, such as Gmail)
- Real-Time Clock with NTP server synchronization
- Automatic daylight savings and leap year adjustment
- No software required
- ° Customizable web-based Control Page
- BASIC script support for advanced flexibility
- Configurable logging
- Graphing (logged data)
- HTTPS/TLS encrypted
- o Static or DHCP IP address configuration
- Modbus, SNMP, Remote Service, IP Filtering
- Field updatable
- ° Removable 14-Terminal connector for easy installation
- Rugged DIN-Rail/wall-mountable enclosure



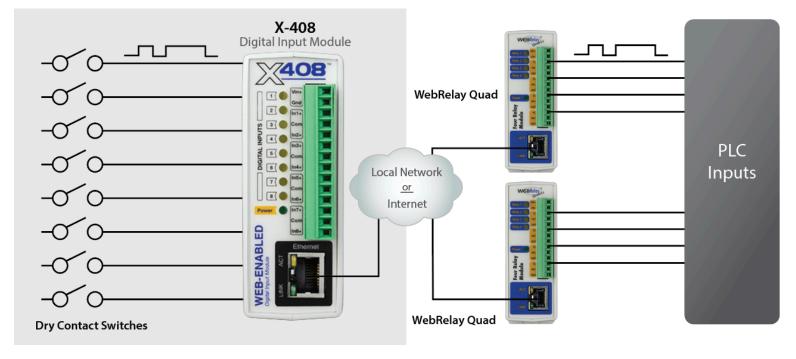
Example Control Page



Monitor up to 8 digital inputs

APPLICATIONS & SPECS

I/O Mirroring using the X-408 and other ControlByWeb Products



Power Requirements

- Voltage:
 - X-408-I: 9-28 VDC
 - X-408-E: POE and/or 9-28VDC
- Max Current: 240mA

Real-Time Clock

- · Manual or NTP(Network Time Protocol) setup
- · NTP Sync Period: Once, Daily, Weekly, On Power-up
- · Auto Daylight Savings Adjustment

Digital Inputs

- Number of Inputs: 8
- Type: Non-Isolated
- Voltage Range: 4-26 VDC
- Current: 950uA @ 4V, 8.5mA @ 26V
- Minimum Hold Time: 20mS
- Input Functions: Monitor State, Control Relays, Control Remote Relays, Scalable Counter, On Timer, Total On Timer, Frequency
- Maximum Count: 24-bit
- Max Count Rate: 20Hz Max (Dependent on Configuration)
- Edge Trigger: Rising, Falling or Both

Capacitor Power Backup

- Backup Functions: Retain Real-Time Clock, External Variables, Relay State, and Counters
- Backup Duration: 3 days minimum

Network

- Type: 10/100 Base-T Ethernet Port
- Setup: Static IP address assignment. TCP port selectable

Connectors

- Power/Input/Relays: 14-Position, 3.81mm, Removable
- Network: 8-pin RJ-45

LED Indicators

- Number of LEDs: 3
- o 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
- o 3.88in (98.5mm) tall
- ° 3.1in (78mm) deep (not including connector)
- Weight: 5 oz (142 grams)
- Enclosure Material: Lexan 940 Polycarbonate Plastic
- Enclosure Flame Rating: UL94 V0

Protocols

 HTTP, HTTPS, SSL, XML, Modbus TCP/IP, SNMP, SMTP, Remote Services

Logging

- Log File Size: 512K (up to 8,448 logs)
- Storage: Nonvolatile Flash
- Buffer Architecture: Circular Buffer
- Log data can be periodically read and stored on a computer

Advanced Features

- Task Builder
- BASIC interpreter
- Remote services

Password Settings

- Password protection on setup page: Yes
- Password protection on control page: Optional
- Password Encoding: Base 64
- Max Password Length: 18 Characters

Electromagnetic Compliance

- · IEC CISPR 22, CISPR 24
- EU EN55024, EN55022
- X-408-I: FCC 47CFR15 (Class B)
- X-408-E: FCC 47CFR15 (Class A)

Product Safety Compliance

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



