# **X-40I**™

**PRODUCT OVERVIEW** 



The X-401<sup>™</sup> is an exciting component in our most advanced series of products.

It is a robust, full-featured, web-enabled, mini Ethernet I/O module with two 3-Amp relays and two optically-isolated digital inputs plus all of the advanced features from our 400-series products.

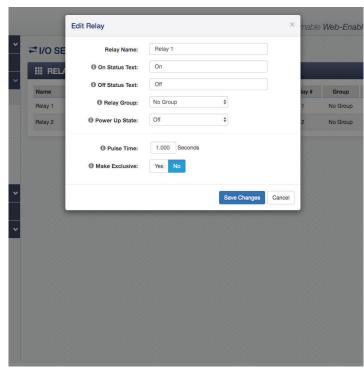
It has non-volatile memory for logging, a real-time clock with support for NTP (time server) synchronization and an advanced scheduler which can be used to turn on/off relays at preset times.

Its web-based user interface means it can be used right out of the box with no programming required.

The X-401<sup>™</sup> has many advanced features including a simple firewall, the ability to initiate a connection to remote servers, BASIC programming, SNMP, email alerts,

peer-to-peer communications, internal monitoring, and more.

The X-401<sup>™</sup> is ideal for many applications, including security, remote control, street sign controllers, shift bell controllers, and much more.



**Relay Options Page** 



- 2 Electro-mechanical relays
- Two optically-isolated digital inputs
- Peer-to-peer communications between 4xx Series modules which provides seamless I/O sharing
- User Permissions: Admin, Manager, User
- Programmable tasks for scheduled events or conditional logic
- 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
- Customizable web-based Control Page
- BASIC script support for advanced flexibility
- Configurable logging
- Graphing (logged data)
- HTTPS/TLS encrypted
- Static or DHCP IP address configuration
- Modbus, SNMP, Remote Service, IP Filtering
- No software required
- Removable 14-Terminal connector for easy installation
- Rugged DIN-Rail/wall-mountable enclosure

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Event Scheduling Page

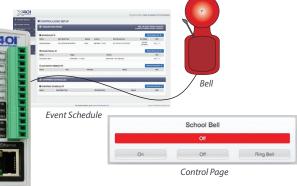
# **X-40I**™

# Dual Relay and Input Module

Two Optically-Isolated Inputs, Two Relays, Programmable tasks for scheduled events

# **APPLICATIONS & SPECS**

## Shift Bell Controller



# Remote Security Gate Control

Gate Controller Push Button

## Power Requirements

- Voltage:
- ° X-401-I: 9-28VDC
- ° X-401-E: POE and/or 9-28 VDC
- ° X-401W-I: 9-28VDC
- ° X-401CW-I: 9-28VDC
- Current: 288mA Max

#### Relays

- Number of Relays: 2
- Max Voltage: 28VAC, 24VDC
- Max Current: 3A
- Contact Type: SPDT (Form C)
- Load Type: General Purpose
- Contact Resistance: < 50 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 Pulsed
- Pulse Timer Duration: 0.1 to 86,400 Seconds (1-day)

#### **Digital Inputs**

- Number of Inputs: 2
- Type: Optically-Isolated
- Voltage Range: 4-26VDC X-401-I: 4-26VDC
- 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: 200 Hz (Dependent on Configuration)
- Edge Trigger: Rising, Falling or Both

# Real-Time Clock

CONTROL

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



## **Capacitor Power Backup**

- Backup Functions: Retain Real-Time Clock, 1 Register, 2 Counters, 2 Relay States
- Backup Duration: 24 hours

#### Network

- Type: 10/100 Base-T Ethernet Port
- Setup: Static or DHCP IP address configuration
- Wireless: WiFi Communication (X-401W/CW models only)
- Cellular: Cellular Modem (X-401CW model only)

#### **Connectors**

- Power/Relays/Inputs: 14-Position, 3.81mm, Removable
- Network: 8-pin RJ-45
- Cell Antenna: Male SMA Connector (X-401CW model only)

#### **LED Indicators**

- Number of LEDs: 7
- ° Power on
- Relay coil energized 1-2
- Digital inputs 1-2
- 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)

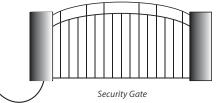
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# Additional Applications

- Traffic Warning Light Controller
- ✓ Electric Door Lock Control
- ✓ Timed Control of Electrical Outlets
- Vacant Home/Building Monitor
- Event Counter
- Extend I/O From a PLC to Another Building

#### More...





- Weight: 5 oz (142 grams)
- Enclosure Material: Lexan 940 Polycarbonate Plastic
- Enclosure Flame Rating: UL94 V0

### WiFi

- Network Standards: IEEE 802.11 b/g/n
- Frequency Band: 2.412 2.462 GHz
- Wi-Fi Security Standards: WPA2, WPA3
- Network Settings: DHCP or Static

#### Protocols

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

### Logging

- Log File Size: 3,072-Kbyte (up to 50,688 logs)
- Storage: Nonvolatile Flash
- Buffer Architecture: Circular Buffer
- Log data can be periodically stored on a computer via FTP or email

CE

Phone: 1-435-750-5999

Email: Sales@ControlByWeb.com

## **Advanced Features**

- Task Builder
- BASIC interpreter
- Remote services

#### Password Settings

IEC CISPR 22, CISPR 24

X-401-I: FCC 47CFR15 (Class B)

X-401-E: FCC 47CFR15 (Class A)

• EU EN55024, EN55022

• Password Length: 6-18 Characters

Electromagnetic Compliance