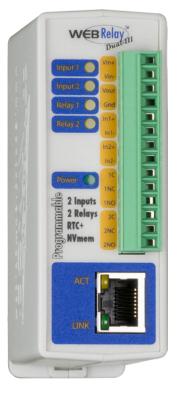
## **PRODUCT OVERVIEW**



The series III WebRelay-Dual™ (X-301) 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.

It has non-volatile memory for logging, a real-time clock with support for NTP (time server) synchronization and an advanced full-calender 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 series III WebRelay-Dual™ 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.

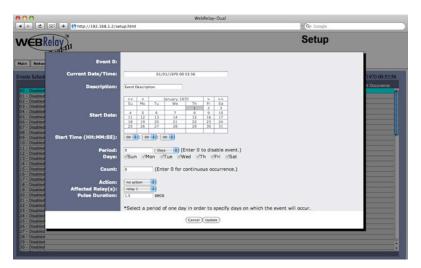
The series III WebRelay-Dual™ is ideal for many applications, including security, remote control, street sign controllers, shift bell controllers, and much more.



Relay Options Page

# Features:

- Up to 100 scheduled events.
- Full calender scheduling.
- Automatic daylight savings and leap year adjustment.
- Synchronize clock with NTP server for precise time keeping.
- · Capacitor-backed clock.
- · Two electro-mechanical relays.
- · Two optically-isolated inputs.
- · Automatic and manual control.
- · Control and configure using a web browser.
- No software required.
- Customizable web-based control page.
- · Settings stored in non-volatile memory.
- BASIC script support for advanced functionality.
- Remote services; X-301 can be configured to initiate connection to a remote server.
- HTTP, SNMP, SMTP, Modbus TCP/IP, DHCP.
- Email alerts.
- Event and periodic logging.
- System voltage and internal temperature monitoring.
- Removable 14-pin terminal connector for easy installation.
- Rugged DIN-Rail/wall mountable enclosure.



Event Scheduling Page



## WebRelay-Dual | 2 Relay, 2 Input Module

Two Optically-Isolated Inputs, Two Relays, 100 Individual Event Scheduler

## **APPLICATIONS & SPECS**

Shift Bell
Controller

Bell

ACME Company

Event Schedule

Current Time: Sat, 31 Oct 2009 00:01:06

Gate Controller Push Button

#### Models:

X-301-I, X-301-24I, X-301-E

#### Power Requirements

- Voltage:
- o X-301-I: 9-28VDC
- X-301-24I: 9-28VDC
- ° X-301-E: POE Class 1 (0.44 to 3.84 Watt) or 5V±5%
- Current: 310mA Max

#### Relays

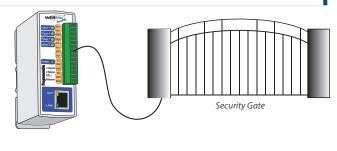
- Number of Relays: 2
- Max Voltage: 28VAC, 24VDC
- Max Current: 3A
- Contact Type: SPDT (Form 1C)
- Load Type: General Purpose
- Contact Resistance: < 50 milliohms initial
- Contact Material: AgSnO2
- Electrical Life: 100K cycles (Typical)
- Mechanical Life: 10M cycles (Typical)
- Environmental Rating: 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:
- o X-301-I: 4-12VDC
- o X-301-24I: 11-26VDC
- o X-301-E: 4-12VDC
- Current:
- ° X-301-I: 4mA @ 4V, 16mA @ 12V
- ° X-301-24I: 3.2mA @ 11V, 8.2mA @ 26V
- ° X-301-E: 4mA @ 4V, 16mA @ 12V
- Minimum Hold Time: 20ms
- Input Isolation: 1500V
- Input Functions: Monitor State, Control Relays, Control Remote Relays, Count, High Timer
- Maximum Count: 32-bit
- Max Count Rate: 25Hz
- Edge Trigger: Rising, Falling or Both

# 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...



#### Real-Time Clock

Remote Security Gate Control

Manual or NTP(Network Time Protocol) setup

Control Page

• NTP Sync Period: Once, Daily, Weekly, On Power-up

IP Network

- · Auto Daylight Savings Adjustment
- · Battery (capacitor) Power Backup

#### 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/Relays/Inputs: 14-Position Removable
- Network: 8-pin RJ-45

#### **LED Indicators**

- Number of LEDs: 7
- Power on
- o Relay coil energized 1-2
- o 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)
- **Weight:** 5 oz (142 grams)
- Enclosure Material: Lexan 940 Polycarbonate Plastic
- Enclosure Flame Rating: UL94 V0

### **Protocols**

• HTTP, XML, Modbus, SNMP, SMTP, Remote Services

## Logging

- Log File Size: 512K (max 28,829 logs)
- Storage: Nonvolatile Flash
- Buffer Architecture: Circular Buffer
- Log data can be periodically read and stored on a computer

#### **Advanced Features**

- · BASIC interpreter
- Remote services Avoid most firewall issues with outbound connection to Web Services

#### Password Settings

- · Password protection on setup page: Yes
- · Password protection on control page: Optional
- Password Encoding: Base 64
- Max Password Length: 13 Characters

