



Remote Monitoring System

The system is a robust, full- featured, web- enabled, Ethernet I/O module with two 15-Amp relays to control power outlets & two 1-Amp relays for low voltage devices, four optically- isolated digital inputs for door ajar alarm, surge suppressor status and Power Supply status, etc., One temperature sensors. It has non-volatile memory for logging, a real-time clock with support for NTP (time server) synchronization and an advanced full-calendar scheduler which can be used to turn on/off relays at preset times. Its web-based user interface makes it easy to set-up and use.

The system has many advanced features such as the ability to initiate a connection to remote servers, BASIC programming, SNMP, email alerts, peer-to-peer communications, internal monitoring, graphing, etc.

The system has Built-in web server so relays and inputs can be controlled and monitored using a web browser (or use our CBW Mobile smartphone app). Additionally, temperature and humidity data can be graphed directly from any HTML5 compatible web browser.

Setup is simple; No app to download, no subscription to buy, no software required, and no programming necessary for setup or use.

Features:

- Four electro-mechanical relays two 15 Amp two 1 Amp
- Four optically-isolated inputs (shared ground)
- One-wire bus for temperature sensors.
- Highly configurable - almost any combination of input/relay control possible.
- Real-Time Clock with NTP server synchronization.
- Automatic daylight savings and leap year adjustment.
- Full calendar scheduling with 100 programmable events.
- No software required.
- Customizable web-based control page. BASIC script support for advanced flexibility. Configurable logging.
- Graphing (logged data)
- Send email alerts based on user-defined conditions.
- Static or DHCP IP address configuration. XML, Modbus/TCP, and SNMP interface options.
- Field updatable.
- Removable 14-Terminal connector for easy installation.
- Rugged DIN-Rail/wall-mountable enclosure.

**Power Requirements:**

Voltage: 120 VAC

I/O: 4 Relays, 4 Inputs

Four Relay Contacts:

(2) Max Voltage: 28VAC,
24VDC Max Current: 1A

(2) Max Voltage: 240VAC,
Max Current: 15A

Optically Isolated Inputs:

Input Voltage Range: 11-28VDC Current:
4.7-25mA

Minimum Hold Time (high or low): 20ms
Maximum Count Frequency: 25Hz Max (Dependant
on Configuration)

Input Functions: Monitor State, Control Relays,
Control Remote Relays, Count, High Timer

Digital Temperature Sensors:

Dallas Semiconductor DS18B20
Temperature Range: -55°C to +125°C
Accuracy: $\pm 0.5^\circ\text{C}$ (from -10°C to
+85°C)

Temperature Sensor Functions:

Sensor Functions: Thermometer, Thermostat, Relay
Control, Remote Relay Control, Email Alarms, SNMP
Traps, Temperature Logging

Real-Time Clock:

Manual or NTP(Network Time Protocol) setup
NTP Sync Period: Once, Daily, Weekly, On Powerup
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: 10/100 Base-T Ethernet Port

Connectors:

Network: 8-pin RJ-45

LED Indicators: 7

- Module Powered
- Relay Coil Energized 1-4
- Network linked
- Network activity

Physical:

Operating Temperature: -22° to
149°F (-30° to 65°C)

Monitor/Control:

Web Browser, XML, Modbus/TCP, SNMP, Remote
Services, Data Logging and Graphing

Logging:

Storage: Nonvolatile Flash
Buffer Architecture: Circular Buffer
Log file size: 512K (max 28,829 logs)
Unlimited data storage from Web Monitoring Service

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