GEIST
MONITOR | Watchdog

Watchdog 1400 / Watchdog 1400-P

Web-based climate monitor with output relays, digital sensor support and expanded analog input capabilities.

- Accessible through a web browser
- Three output relays to control external devices
- Built-in temperature sensor
- Six analog inputs for 0-5 VDC sensors
- Four digital sensor ports for external digital-bus sensors
- LCD display cycles through sensor readings
- Multi-level alarms with escalation
- Alarm notifications sent by email and SNMP
- Audible horn triggered by alarm

The Watchdog 1400 combines climate monitoring with remote relay control. Its output relays can be triggered manually, or tied to specific alarm settings. Includes a built-in temperature sensor and six analog inputs. Also available in a Power-over-Ethernet version (Watchdog 1400-P), allowing the unit to be powered via the network cable or with the supplied 6 VDC power supply. Supports up to 16 remote digital sensors and a total cable length up to 600 feet. Configure alarms to get alerts by email or SNMP. Access to data logs and graphs through a simple web interface, provided by a browser (FireFox, IE).
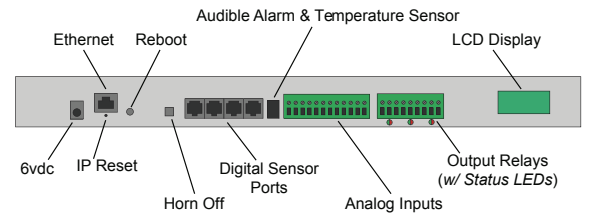
Output Relays
Output relays allow the Watchdog 1400 to control and signal external low-voltage devices. Applications would include:

- Trigger an autodialer to alert personnel by phone
- Send a signal to a building-security system
- Control a larger relay to power external equipment
- Trigger an A/C unit with dry-contact inputs
- Activate a remote warning light or buzzer
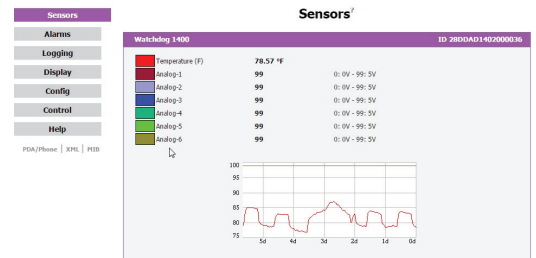
Web Interface
The web interface is the primary way to interact with the Watchdog 1400. This allows a user to remotely check the status of the environment, view graphs and webcam images and update the firmware. Manual relay controls are also provided.

The Watchdog 1400 is configured and administrated through the web interface. Access is user-name and password protected. HTTPS/SSL encryption can be used for added security.

Audible Alarm & Temperature Sensor

Ethernet Reboot LCD Display

6vdc IP Reset Digital Sensor Ports Output Relays (*w/ Status LEDs*)
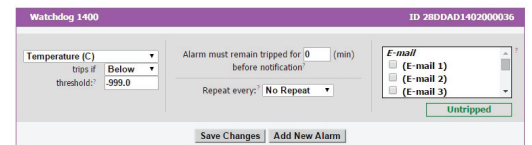
Horn Off Analog Inputs

The Watchdog 1400 occupies a 1-U space, provides environment monitoring and contains output relays controlled either manually or triggered by an alarm.

Web Interface: Sensors Page

View Current sensor readings and graphs on the Sensor page. The names of the analog inputs are user-defined.

Web Interface: Control Page

Use the Control page to customize relay names and relay states to fit your application.
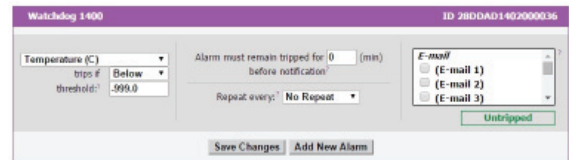
Watchdog 1400 / Watchdog 1400-P

Specifications

On-Board Sensors	
Temperature	
Range	-10 to 60°C (14 to 140°F)
Accuracy (typical)	± 0.5°C (± 0.9°F)

External Sensors	
Digital Sensor Ports	4
Max Digital Sensor Capacity	16
Analog Sensor Ports	6
Max Analog Sensor Capacity	6
Max Analog Input Range	0 to 5VDC, voltage-source or dry-contact
Relay Outputs	3 dry-contact, SPDT
Relay Max. Switching	60VDC @ 0.5A / 30VAC(rms) @ 1A

Hardware Features	
Ethernet	10BaseT
Power	
Input	6 - 18VDC, 400mA (typ.), 2.1mm DC barrel plug (center-positive)
Power Supply Options	North American, British, Universal, None
Power Over Ethernet	IEE802.3af (Watchdog 1400P only)
"Reset" Button	Clear IP address & passwords, or restore all to factory defaults
LCD Display	User-selectable display of current sensor readings
Piezo Alarm Buzzer	Activated by user-set alarm thresholds
Alarm Silencer Button	
Physical	
Dimensions (WxHxD)	19"W (48.26cm) x 2.5"D (6.35 cm) x 1.13"H (2.87 cm) (with included mounting brackets)
Weight	2.6 lbs (1.2 kg)
Mounting	Use brackets provided

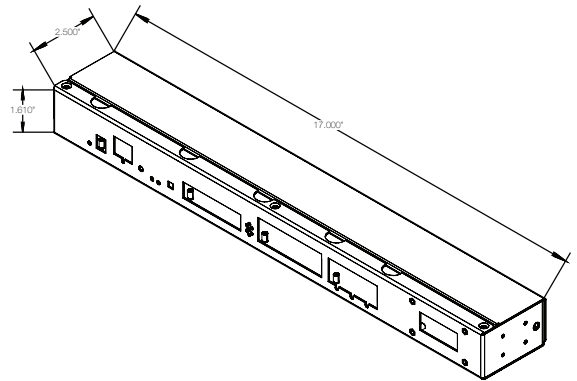| Firmware	
Real Time Sensor Data Feeds	GUI, SNMP, XML
Environment Monitoring	Logging & Graphing, CSV Data Logs, Event Log
Interface with IP Surveillance Cameras	
Alarms	Alarm Escalations, Alarm Repeat & Delay, Business Hours
Web Access	Encryption via TLS/SSL (HTTPS), 3 Access Account Levels
SNMP Support	Versions (v1, v2c, v3), Trap Alerts (Trip / Clear)
Email	Email & Emails-to-SMS Alerts, Periodic Email Status Reports, ESMTP Authentication, SSL/TLS Encryption
Localization	Multiple Languages (English, French, German, Spanish, Chinese, Japanese), Display in °F or °C
US Measurements	
Protocols	IPv4, HTTP / HTTPS, DHCP, NTP, Syslog, Ping
Additional Features	Friendly Names Per Sensor, Configuration Backup, Remote Configuration & Firmware Updates
Warranty	1 Year Standard Warranty

Check relay status and turn relays on or off through the Control Page.

Web Interface: Alarms Page

In response to user-defined alarm states, the Watchdog 1400 can energize output relays, send alerts by email or SNMP, and trigger the buzzer.

†† operating range of standard 6V power supply is 0-50°C. Operation across wider range requires using PoE, or an alternative 6V power supply with extended temperature range.