MONITOR

GBB100 / GBB100 POE

Compact Package offering climate monitoring and relay control with several mounting and wire management options

- Monitor temperature, humidity & dew point
- 4 analog inputs for dry-contact or 8-5 VDC sensors
- Digital sensor port (connect up to 4 sensors using splitters)
- Set alarms and get alerts via email, SMS, SNMP and voice †
- Relay output for external device control
- Control relay via alarm or manually through web

The GBB100 is a self-contained unit with on-board temperature and humidity/dew-point sensors. It has four analog inputs and supports up to 4 digital sensors (using a splitter). There is a relay output for triggering external devices, such as an auto-dialer.

The GBB100 allows users to keep an eye on remote conditions from a secure web interface and receive SNMP, E-mail, text message and voice call† alert notifications when user-adjustable thresholds are exceeded.

Web Interface

Only a web browser is needed to access and configure the GBB100. The web interface provides a remote user with real-time sensor readings with graphs*, access to logs and manual control features. Access to these and other functions is protected by up to three access account levels. The GBB100 provides encryption for secure communication with web browsers using HTTPS.

Other Access Methods

Besides web access, there are several methods to access sensor data from the unit. Current sensor readings and meta-tagged system info is available in XML. Logged data can be downloaded as a CSV file that can be viewed with spreadsheet software.

The device also supports SNMP (v1, v2c, v3*). This allows dozens of Network Monitoring programs such as HP OpenView, IP Sentry, MRTG, or What's Up Gold (Ipswitch) to easily add the GBB100 to the list of monitored devices.
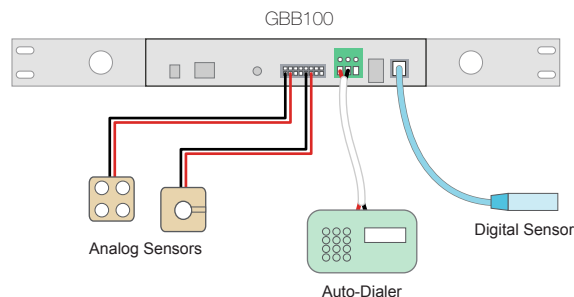
Alarms

A user sets alarm thresholds (up to 50) to define sensor boundaries and indicate what to do if there is a problem. Multiple thresholds are assigned to a sensor for alarm escalation.
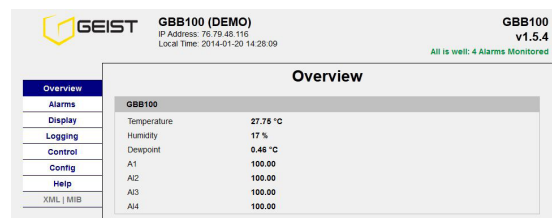
GBB100 is a compact, low cost climate monitor with relay output.

The mounting brackets can be repositioned or removed to simplify installation.

This diagram shows how remote sensors and an external device connect to the unit.

The "Overview" page of the web interface provides real-time sensor values.

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Relay Output

Normally Closed — Normally Open

Relay State
- 🟢 De-Energized
- 🔴 Energized

N C — Common — N O

Remote Sensors

Analog: The GBB100 features four 0—5 VDC / dry-contact analog inputs. Names for the input channels are configured through the web interface.

Examples: Water Sensor, Door Position, Smoke Alarm

Digital: The unit has one digital sensor port for connecting optional plug-and-play sensors like the remote temperature sensor. Once connected, the GBB100 automatically detects and identifies the sensor type. These sensors can be given a "friendly" name to make them easier to identify. Up to four digital sensors can be connected using a splitter with a total aggregate cable length of 600 feet.

Examples: Temperature, Temp / Airflow / Humidity / Dewpoint

Relay Output

The relay output allows users to automate low-voltage devices such as auto-dialers, sirens and warning lights in response to sensor exceeding its user-defined thresholds. When not tied to alarms the relay can be controlled remotely by the user from the web interface.
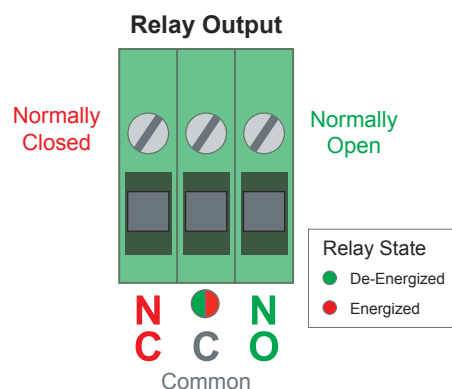
With three terminals (NC, NO, Com) the relay output can be used in applications requiring Normally-Closed or Normally-Open. A bi-color led tells if the relay is energized or de-energized.

Power over Ethernet (GBB100 POE)

The GBB100 POE has built-in Power over Ethernet (POE), allowing the unit to be powered by through the network cable or with the supplied 6 VDC power supply. Please visit the GBB100 POE product page for more information.

Mounting

Mounting brackets are included with the unit, providing several rack-mounting options. Holes in the brackets simplify wire management.

Sensor Details

Built-in Sensors
Temperature: -22 to 185 °F (-30 to 85 °C), +/- 0.5 °C
Humidity: 0 to 100%, +/- 2%
Dewpoint: -22 to 185 °F (-30 to 85 °C)

Output Relay
SPDT relay with 3 screw terminals (NC, NO, Com)
Relay status LED (bi-color, green="on", red="off")
Max switching capacity: DC: 60 V, 30 W
AC: 30 Vrms, 1 A

Remote Sensor Support
Digital: 1 port (connect up to 4 sensors using splitters)
Analog: 4 inputs (dry-contact, 0-5 VDC)

Specifications
Chassis: 1.6" x 8.5" x 2.5" (HxWxD)
19" rack-mount, 1-U space (using supplied brackets)
Power: 6 VDC power supply (included) or
Power over Ethernet (GBB100-P only)
Ethernet: 10/100 Mbps, RJ-45 receptacle
Power indicator: Idle / Activity indicator
Real Time Clock (RTC) with power backup
Reset IP button: restore factory defaults
Warranty: 1 year

Software Features
HTTP / HTTPS: web access
Manual relay control via web interface
Alarms: high/low values, escalations, trigger relay
Alerts via email, SNMP, SMS or voice†
SNMP (v1, v2c, v3*): gets, trap and clear alerts, MIB
XML: meta-tagged sensor values, alarms, config, relay
Syslog: send status messages to Syslog server
Access-control: 3 access levels (view, control, admin)
IP camera interface*: view up to 4 cameras
Graphing & Logging*

† requires auto-dialer
* IPv6, SNMPv3, graphing and camera support by 2012 via firmware update