



GREYSTONE

ENERGY SYSTEMS INC

SENSOR SOLUTIONS

FOR BUILDING MANAGEMENT SYSTEMS

Temperature Sensors
Temperature Transmitters
Humidity Transmitters
Static Pressure Transmitters
Differential Pressure Transmitters
Gauge Pressure Transmitters
Air Flow Transmitters
Air Quality Monitor
Carbon Monoxide Detectors
Carbon Dioxide Detectors
Nitrogen Dioxide Detectors

Current Switches & Sensors
Analog to Pneumatic (I/P) Transducers
Signal Interfaces
Power Supplies
Water Detectors
Cleanroom
BACnet® & Modbus
Wireless Sensors
Gas Detection Solutions –Toxic, Combustible, Refrigerant
Air Pressure Dial Gauge



RoHS
COMPLIANT



GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM



ABOUT GREYSTONE

Greystone Energy Systems Inc. is internationally recognized as one of the largest ISO registered manufacturers of HVAC sensors and transmitters for Building Automation Management Systems. Through leading-edge design technology, prompt technical support, a commitment to providing our customers the highest level of service, and over 40 years of experience designing, manufacturing and supplying HVAC sensors and transmitters, we are proud to have established a worldwide reputation as an industry leader.

In 2021, Greystone became part of the Bemsig Group; a group of innovative and fast-growing companies providing products in building automation and metering. The group is operating in Europe, North America, The Middle East, and Asia, with the ambition to build the most comprehensive portfolio of products within the smart buildings market.

In August of 2024, Quatrosense Environmental LTD. (QEL) joined the Bemsig Group as a subsidiary of Greystone Energy Systems Inc. QEL has built a very strong reputation in the gas detection market, offering a wide range of toxic, combustible, and refrigerant gas detection equipment for commercial and industrial applications, a very complimentary mix to the existing Greystone product line.

In December of 2024, Armstrong Monitoring Company was also acquired by the Bemsig Group as a wholly owned subsidiary of Greystone. The addition of Armstrong strengthens the portfolio with a comprehensive gas detection offering across commercial and industrial sectors. Key application areas include parking garages, warehouses, service bays, and more.



TEMPERATURE

Properly regulate temperature for optimum comfort, building preservation and equipment longevity.



HUMIDITY & DEWPOINT

Protect building structures, contents and processes by accurately monitoring and controlling humidity.



PRESSURE

Monitor, maintain and control the movement of air and liquid pressure for HVAC systems.



AIR FLOW

Measured to insure ANSI/ASHRAE Standards are adhered to and to determine Indoor Air Climate.



POWER

Status indication for various motorized equipment as well as feedback for maintenance requirements.



SIGNAL INTERFACES

Perfect for retrofits, equipment changes, where one signal exists but another signal is required or desired.



INDOOR AIR QUALITY

Air quality detection for Carbon Dioxide, Particulate Matter and VOC's for health and comfort



GAS DETECTION

Gas Detection- Toxic, Combustible and Refrigerant solutions for Health and safety



WATER DETECTION

Detection and alarm for water and other liquids to provide and early warning.



WIRELESS

Monitor and protect equipment from damage due to water leakage.



NETWORKING

BACnet® and Modbus communication protocols monitoring multiple points for system notification.



MISCELLANEOUS

Multiple products such as Relays and Power supplies to assist with project needs,



CLEANROOM

Monitor critical spaces with accuracy and reliability





ROUGH DUTY RH/TEMPERATURE, FIXED PROBE TRANSMITTTER

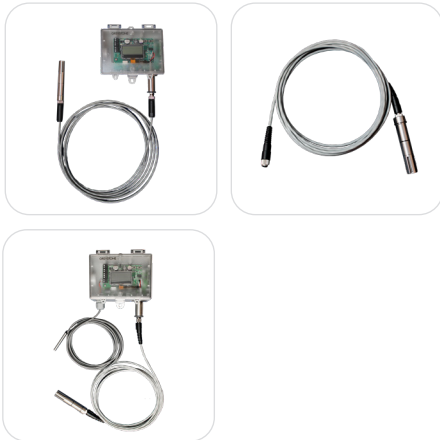


FEATURES

- Wall Mount
- Humidity and Temperature
- Accuracy $\pm 1\%$ RH and $\pm 0.1^\circ\text{C}$
- Analog or BACnet® / Modbus Communication
- Stainless Steel Probe with PTFE filter
- LCD Display (HTX2)
- Additional Parameters of Dewpoint, Enthalpy and Wet Bulb Temperature (HTX2)
- IP65 (NEMA 4x) Enclosure



ROUGH DUTY RH/TEMPERATURE, REMOTE PROBE TRANSMITTTER



FEATURES

- Integrated condensation prediction logic
- Measures multiple parameters with both Digital communication and Analog outputs
- Hybrid output capability supports both legacy systems and modern IoT platforms
- Field-configurable outputs, ranges, and relay alarm settings
- Installer-friendly testing tools with built-in output & relay test functions
- Greystone Mobile App and NFC streamline installation, reduce commissioning time, and simplify on-site adjustments



NEW ROOM ENCLOSURE



FEATURES

- Four enclosure sizes
- Models with 1, 2, 3, or 4 measurement parameters
- Analog, BACnet® or Modbus
- Mobile App Configuration via NFC
- Cloud configuration storage
- Field replaceable sensor modules
- Large LCD with backlight control
- Configurable LCD for parameter values
- Red/Green/Yellow LED for status indication
- Enclosure designed for quick installation
- Backplate mounted terminals for easy installation
- Removable cover for troubleshooting with unit powered



TEMPERATURE

Room, Duct, Immersion, Strap-On & Outside Air

A comprehensive selection of temperature measuring products that are designed and manufactured for long-term stability and performance. Each product provides a repeatable and accurate output signal for efficient temperature monitoring and control.

Sensors, transmitters and thermostats
Probe Sensors are UL Listed
Various enclosure styles
Multiple configurations available



SENSORS

Precision thermistor or RTD sensing elements
Setpoint adjustment, up/down pushbuttons
Optional override switch, fan speed switch and communications jack (Room Only)



TRANSMITTERS

Precision RTD sensing element
High accuracy transmitter
Choice of scaled ranges
LCD available on some models
3 available output signals



THERMOSTATS

High and low limit thermostats
Precision thermistor sensing element
Multiple configurations available
Relay output with adjustable setpoint

HUMIDITY & DEWPOINT

A comprehensive selection of Humidity & Dewpoint measuring products that are designed and manufactured for long-term stability and performance. Each product provides a repeatable and accurate output signal for efficient humidity monitoring and control.



HUMIDITY

Precision RH and temperature sensing elements
Humidity range: 0 to 100%
Accuracies available: 1%, 2%, 3% & 5%
Choice of precision temperature sensors
Field selectable outputs





HUMIDITY / TEMPERATURE

Precision RH and temperature sensing elements
 Humidity range: 0 to 100%
 Accuracies available: 1%, 2%, 3% & 5%
 Choice of multiple temperature ranges
 Options such as override, fanspeed switch and communications jack (Room only)



DEWPOINT

Precision RH and temperature sensing elements
 4 user selectable measurement variables for room type and 5 user selectable measurement variables for duct and outside Air type
 3 output types available (Analog, BACnet®, Modbus)
 Dual analog outputs
 LCD display

PRESSURE



APD AIR PRESSURE DIFFERENTIAL GAUGE

4" (100mm) aluminum dial gauge
 Back and Side Pressure connection
 2% full scale accuracy
 Polycarbonate with UV protection lens
 Ranges available: 0/0.5", 0/1", 0/2", 0/3", 0/5" WC 0/150, 0/300 0/500, 0/750, 0/1000 Pa
 Easily accessible re-zero adjustment screw
 IP67 rating
 Die-cast black aluminum case



WET PRESSURE



Gauge and Differential models
 4 selectable pressure ranges per model with LCD
 program menu configuration
 Field selectable Output (0-5V, 0-10V) or 4-20mA (2-wire)
 Reverse Output and Port Swapping features
 Surge Damping or Pressure Averaging Time capability
 Uni-directional (0 – Max) or Bi-directional (+/- Max)
 Remote sensors with various cable lengths
 Two options of connectivity available:

- Factory providing Standard FT6 or Armored cable
- Conduit Connection (customer supplied cable)





DRY PRESSURE

Several monitoring configurations
Ranges 0.125" W.C. to 40" W.C. (30 to 2000 Pa)
Uni- or bi-directional pressure ranges
Selectable pressure ranges for each (W.C. & Pa)
Optional LCD display and relay output
BACnet® communication option



AIR & LIQUID PRESSURE SWITCHES

High rated SPDT contacts
Adjustable setpoint
Adjustable differential
Full mechanical switching

FLOW



DUCT AIRFLOW TRANSMITTER

Converts airspeed into a 4–20 mA or a 0–10 Vdc signal
3 field selectable ranges
Temperature output
Optional alarm relay
Optional LCD and Modbus output



LIQUID FLOW SWITCH

For pipes up to 203.2mm (8") in diameter
Working pressure of up to 13.5 Bar (195.8 PSI)
Liquid temperatures up to 120°C (248°F)
IP65 enclosure

POWER



SWITCHES

Solid or split-core
Auto-ranging eliminates lost jumpers
Self-powered and no insertion loss
True digital switching with zero leakage
Small compact size
Fixed or field adjustable models
Input / Output isolation via current transformer
UL Listed

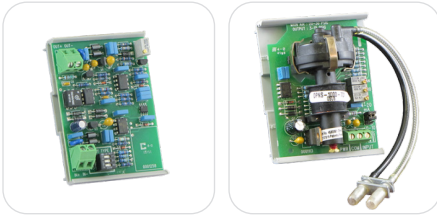


SENSORS

Solid or split-core
No field adjustment necessary, factory calibrated
0–5 Vdc, 0–10 Vdc or 4–20 mA models
Average measurement or True RMS
Input / Output isolation via current transformer
Small compact size
UL Listed



SIGNAL INTERFACES



TRANSMITTERS

- Analog to pneumatic
- Analog rescaling
- Analog signal isolation
- Analog to resistance
- Analog to multiple relay

INDOOR AIR QUALITY



IAQ MULTI-SENSE

- Measures 5 or 6 parameters
- Field replaceable sensor modules
- BACnet® or Modbus Communications
- Full-Colour configurable touchscreen LCD
- Configurable alarm relay
- Modern, quick-mount enclosure



CARBON DIOXIDE

- Room, duct or outside air models
- 0-10,000 or 20,000 (Dual-channel) PPM CO2 ranges
- Patented self-calibration algorithm
- Guaranteed 5 year calibration interval
- Menu driven set-up
- Models with temperature & RH
- Optional BACnet® or Modbus communication



PARTICULATE MATTER

- Detection of environmental dusts and other particles
- Selectable PM1, 2.5, 4 & 10 Particle Sizes
- LCD displaying PM level
- Tri-color LED to indicate IAQ level
- Analog, BACnet® or Modbus output
- Room, Duct and Outside



VOLATILE ORGANIC COMPOUNDS (VOC)

- Detection of volatile organic compounds (VOC's)
- VOC output based on IAQ Index
- Optional RH or Temperature
- Tri-color LED to indicate IAQ level
- Analog (2), BACnet® or Modbus output
- Optional alarm relay
- Room or Duct models



GAS DETECTION



Greystone is dedicated to safeguarding building occupants and property by leading the way in manufacturing toxic & combustible gas detection equipment. Our extensive range of products ensures we can meet the needs of both commercial & industrial applications for toxic and combustible gas detection.

CARBON MONOXIDE & NITROGEN DIOXIDE

Replaceable electrochemical sensing element
Wall or duct mount models
Ranges up to 500 PPM (CO)
Range 10 PPM (NO₂)
Optional on board relay
Optional BACnet® or Modbus communication
UL2075

FEATURES

Maintaining Safety with High-Tech Gas Detection Solutions
Variety of model tailored to meet diverse applications such:
Commercial and industrial toxic and combustible gas detection applications.

CONTROLLERS

Multi-Channel control and embedded alarm unit
Digital communication through numerous RS-485 port
Analog communication on a 4-20mA or 2-10 VDC signals scalable
Wireless Communication with smart devices
Onboard relays – Option for remote relay module
Multiple alarm configurations – Optional output for Horn and strobe
Modbus RTU and BACnet®/IP Capable
24 VAC/VDC operation
Touchscreen or back-lit display for easy monitoring.
On board and remote annunciation
Nema 4X enclosure

SENSORS

Electrochemical, Catalytic Bead and Infrared Sensing technology
Pre-calibrated sensors ready for hassle-free replacement, no calibration needed
On-board user-programmable relays
Open-source set-up and calibration procedures
Removable terminal blocks for easy wiring
Digital display of TWA, STEL, concentration and relay status
Stand-alone operation
Digital communication protocol with BACnet® MS/TP or RS485
Analog communication to BAS 4-20mA or 2-10VDC signal
24 VAC/VDC operation
Integral buzzer with three tones
NEMA 4X enclosure with knockouts
Wall mount and Duct mount in optional
Splash guard available



• **COMBUSTIBLE** • **TOXIC** • **REFRIGERANTS**

WATER DETECTION

A selection of water detection products that are designed and manufactured for long-term stability and performance. Each product provides a repeatable and accurate output for efficient water detection and notification.



WATER DETECTOR

- Monitors wide variety of liquids
- Spot, remote probe or conductivity cable
- Single or Dual Channel
- 1 or 2 Form C, relay outputs
- Fail-safe circuitry
- Status LED
- Height adjustable, IP65 enclosure
- UL Listed



WIRELESS SENSORS



WIRELESS
BASE UNIT



WIRELESS ROOM
TRANSMITTERS



WIRELESS INPUT MODULE

Greystone's wireless product line is one of the first wireless MESH systems that can be fully operated with a battery. Every transmitter acts simultaneously as a repeater, removing the need for external repeater units in the network. Utilizing the latest wireless technology innovations, Greystone's MESH network ensures extreme reliability even in the most challenging radio environments. In addition, with an external power supply, there is a possibility to run a wireless network with minimal latency in applications where speed is a high priority.



NETWORKING

BACnet® & Modbus

Network Sensors feature embedded BACnet® or Modbus communication and are available in several configurations for the most efficient monitoring and control solutions.

Native BACnet® or Modbus MS/TP protocol
Setup/calibration fully menu driven
Powered by either an AC or DC source



INDOOR AIR QUALITY
TEMPERATURE
GAS DETECTION
HUMIDITY
PRESSURE
CLEANROOM

MISCELLANEOUS



MISCELLANEOUS

Regulated DC power supplies
General purpose relays
Damper-end switch
Light level detector
Remote LCD display

CLEANROOM



CLEANROOM

Humidity, Temperature & Pressure
BACnet®, Modbus or Analog Outputs
In-room or Remote Monitoring
Individual alarms for ALL parameters
Large Easy-To-Read Display



INDUSTRIES & CUSTOMERS

Greystone Energy Systems is proud to be a leading supplier of quality assured and approved sensors and transmitters for the HVAC/R industry. With a robust, competitively priced product line and superior technological competence, customers benefit on both price and performance.

Our customers’ satisfaction and successes are our successes, so we strive to deliver devices that enhance the end user’s ability to monitor and control equipment and environments with peace of mind. Whether it is a controls contractor for building automation jobs or an OEM seeking devices that enhance their own equipment’s functionality, our sales team are at the ready to deliver high quality products that fulfill our customer’s specific project requirements.

Typical installations of our HVAC senors and transmitters.

- Commercial Buildings

Hospitals

Refrigeration

Pharmaceuticals
- Green Houses

Parking Garages

Educational Institutes

Sports Venues
- Data Centers

Airport Terminals

Manufacturing Facilities

Correctional Facilities

We value our customer’s experience and our sales team is committed to providing second to none customer service. Since its inception, Greystone’s leadership has had a global focus on growth, expanding into the United States in 1987, into South East Asia in 1989, and further expanding into the Middle East in 1998. Most recently our market expansion has focused on South and Central America. With this global vision and representatives in 14 global locations, including offices in Canada, United States, United Arab Emirates, India, Singapore, Malaysia, and Australia, customers can be assured our sales team’s years of combined industry experience and market knowledge will deliver the service, care and knowledge they deserve.

INTERNATIONAL GREYSTONE



WORLD CLASS BUILDINGS THAT HAVE GREYSTONE PRODUCTS



Burj Khalifa | Dubai, UAE



Barangaroo Skyscrapers | Sydney, Australia



Galaxy Macau Hotel Macau | China



Pearson International Airport
Toronto, ON Canada



Delhi Metro | Delhi, India



Ng Teng Fong General Hospital | Singapore



One World Trade Center
New York City NY, USA



PART OF
BEMSIQ
GROUP

Greystone Energy Systems Inc.

321 Desbrisay Avenue, Moncton
New Brunswick, Canada E1E 0J2

Phone : +1-506-853-3057

Fax : +1-506-853-6014



mail@greystoneenergy.com

www.greystoneenergy.com

