



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
- Horticulture
- Networking
- 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 Bemsiq 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 Bemsiq 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 Bemsiq 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 an 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,



HORTICULTURE

Monitor indoor grow facility and allow control for optimum plant growing conditions.



CLEANROOM

Monitor critical spaces with accuracy and reliability





ROUGH DUTY RH/TEMPERATURE, FIXED PROBE TRANSMITTER



FEATURES

- Wall Mount
- Humidity and Temperature
- Accuracy 1% RH and 0.5°C
- Analog or BACnet® / Modbus Communication
- Stainless Steel Probe with PTFE filter
- LCD Display (HTX 2)
- Additional Parameters of Dewpoint, Enthalpy and Wet Bulb Temperature (HTX 2)
- IP65 (NEMA 4x) Enclosure

ROUGH DUTY RH/TEMPERATURE, REMOTE PROBE TRANSMITTER



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
- Advanced filtering options for various application needs
- 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: 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: 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



PWR SERIES

- 4 selectable pressure ranges per model with LCD program menu configuration
- Field selectable Voltage (0-5V, 0-10V) or Current 4-20mA (2-wire)
- Output Reversal and Port Swapping through LCD menu configuration
- Surge Damping or Pressure Averaging Time capability
- Uni-directional (0 – Max) or Bi-directional (+/- Max)
- 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





LIQUID PRESSURE

- Gage & differential models
- Stainless steel sensor construction
- Models with selectable pressure ranges
- Remote sensors with various cable lengths
- Large variety of ranges



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 and 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



VARIOUS PRODUCTS

- 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

