

### Accuracy by Design Products for the HVAC Professional

Greystone Energy Systems Inc., is one of North America's largest ISO registered manufacturers of HVAC sensors and transducers for Building Automation Management Systems.

We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support and committing to on-time deliveries. We take pride in our ISO 9001 certified Quality Management System, assuring Greystone customers of consistent product quality and reliability. GREYSTON

STATUS

#### **Greystone products include:**

- 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
- Current Switches & Sensors
- Analog to Pneumatic (I/P) Transducers
- Signal Conditioning Interface
- Power Supplies
- Water Detectors



GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM

#### **BACnet & Modbus**

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

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



### **TEMPERATURE / HUMIDITY & DEWPOINT**

- Room, duct and outside air models
- Highly stable sensing elements
- Relay and alarm outputs
- LCD available on some models
- Selectable measurement variables (RH, dewpoint, dry-bulb, wet-bulb and enthalpy)





- Precision silicon sensor
- Uni- or bi-directional pressure ranges
- Multiple pressure ranges for each (W.C. & Pa)
- Relay and alarm outputs
- BACnet<sup>®</sup> only





### AIR & GAS

- Non-dispersive infrared sensor (CO2)
- Room, duct and outside air (CO2), space & duct (CO)
- Selectable ranges (CO2) & (CO)
- Replaceable Electrochemical set
- Optional on-board relays with f
- LCD available on some models





### **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
- 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



### 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
- Selection of enclosures
- Relay output with adjustable setpoint



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### **HUMIDITY & DEWPOINT**

### **HUMIDITY**

- Precision RH and temperature sensing elements
- Room, duct and outside air models
- Humidity range: 0 to 100%
- Accuracies available: 2%, 3% & 5%
- Choice of precision temperature sensors
- LCD available on some models
- 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)
- LCD available on some models



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### DEWPOINT

- Precision RH and temperature sensing elements
- Room, duct and outside air models
- 4 user selectable measurement variables (Dewpoint, dry-bulb, wet-bulb and enthalpy)
- 3 output types available (Analog, BACnet<sup>®</sup>, Modbus)

• Converts airspeed into a 4–20 mA or a 0–10 Vdc signal Compensates for changes of air temperature Telescopic sensor facilitates installation

- Dual analog outputs
- LCD available on some models

**DUCT AIRFLOW TRANSMITTER** 

Linear output signal

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### PRESSURE



#### **LOW PRESSURE**

- Several monitoring configurations
- Ranges 0.125" W.C. to 20" W.C. (30 to 2000 Pa)
- Uni- or bi-directional pressure ranges
- Selectable pressure ranges for each (W.C. & Pa)
- Available options include LCD display and relay output
- Optional BACnet communications





### **HIGH PRESSURE**

- Gage & differential models
- Stainless steel sensor construction
- Models with selectable pressure ranges
- Remote & built-in sensor models available
- Large variety of ranges





- High rated SPDT contacts
- Adjustable setpoint
- Adjustable differential
- Full mechanical switching

### SIGNAL INTERFACES





### TRANSMITTERS

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





### **CARBON MONOXIDE & NITROGEN DIOXIDE**

- Replaceable electrochemical sensing element
- Wall or duct mount models
- Ranges up to 500 PPM (CO)
- Ranges up to 10 PPM (NO 2)
- Optional on board relay
- Optional BACnet<sup>®</sup> or Modbus communication



- Room, duct or outside air models
- 0-2000 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<sup>®</sup> or Modbus communication



### **AIR QUALITY**

- Room, Duct or Outside models
- High sensitivity and fast response
- 0 to 2000 ppm CO2 equivalent output signal
- LCD to display air quality information (Room Only)
- Analog stepped output for damper control
- Linear output for logging and control
- Selectable 0-5 or 0-10 Vdc signal
- Tri-color LED to indicate IAQ level (Room Only)
- Optional resistive temperature sensors



### SMOKE DETECTORS

- 24 Vac/dc or 120/240 Vac operation
- Simple change-out of photoelectric sensing head
- Low flow air velocity rating from 100 to 4000 FPM
- UL, CSFM and MEA Listed
- Easy and quick mounting to round or rectangular ducts
- Built-in reset switch that is also an alarm test switch



### 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



### 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

## WATER DETECTION



### WATER DETECTOR

- Single-point or conductivity cable
- Gold-plated sensing probes
- Monitors variety of liquids
- Fail-safe circuitry
- Form C, relay output
- Weatherproof enclosure

### MISCELLANEOUS



EOLL



#### **VARIOUS PRODUCTS**

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



### INTERNATIONAL GREYSTONE



### Head Office & Manufacturing:

Moncton, New Brunswick, Canada

#### North America Sales Offices

Toronto, Ontario, Canada Sherwood, Oregon, US Avon, Indiana, US Somerset, Pennsylvania, US

#### **International Sales Offices**

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