

# **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.

## **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













# **NETWORKING**

#### **BACnet & Modbus**

Network Sensors feature embedded BACnet® and 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



#### **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)





#### **PRESSURE**

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





#### **AIR & GAS**

- Non-dispersive infrared sensor (CO2)
- Room, duct and outside air (CO2), space & duct (CO)
- Selectable ranges (CO2) & (CO)
- Replaceable Electrochemical se
- 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



# **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





#### **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®, Modbus)
- Dual analog outputs
- LCD available on some models

# **FLOW**



#### **DUCT AIRFLOW TRANSMITTER**

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





## **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





#### **AIR & LIQUID PRESSURE SWITCHES**

- 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® or Modbus communication



#### **CARBON DIOXIDE**

- · 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® 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**





#### **VARIOUS PRODUCTS**

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





### **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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