**SERIES MS2** MAGNESENSE® II DIFFERENTIAL PRESSURE TRANSMITTER

Monitors Pressure, Air Velocity and Air Flow, BACnet or Modbus® Communication Protocol.

- 0% to 50% Models, Optional BACnet or Modbus® Communication Protocols
- DIN mount bracket
- Duct mount bracket
- Wall mount bracket

**FEATURES/BENEFITS**

- Field selectable single or dual sensor output
- Field selectable communication protocols
- Duct, wall or spreader mounting ready unit

**APPLICATIONS**

- Indoor or outdoor air velocity
- HVAC, building automation
- Process control

**OPTIONS**

- LCD display
- Temperature probe
- Humidity probe
- RS-485 communications

**RANGE**

- 0 to 5000 ppm CO2 range

**COMMENTS**

- Field selectable Modbus® and BACnet communications reduces wiring errors due to self heating effects of combined wall sensors

**SERIES MS3** COMMUNICATING CARBON DIOXIDE DETECTOR

Measures CO₂, Humidity, Temperature, Temperature Set Point, and Diffusers

**FEATURES/BENEFITS**

- Field selectable single or dual sensor output
- Field selectable communication protocols
- Duct, wall or spreader mounting

**APPLICATIONS**

- Air velocity/flow in VAV systems
- Duct static pressure in commercial
- Building pressure in pharmaceutical
- Filter monitoring in air handler units

**OPTIONS**

- LCD display
- Temperature probe
- Humidity probe
- RS-485 communications

**RANGE**

- ±10 to 28 in w.c./±2500 to 6975 pa/250 to 700 mm w.c.

**COMMENTS**

- Field selectable Modbus® and BACnet communications reduces wiring errors due to self heating effects of combination wall sensors

**SERIES GSTC** COMMUNICATING CARBON DIOXIDE TRANSMITTER

Measures CO₂, Humidity, Temperature, Temperature Set Point, and Diffusers

**FEATURES/BENEFITS**

- Field selectable single or dual sensor output
- Field selectable communication protocols
- Duct, wall or spreader mounting

**APPLICATIONS**

- Indoor or outdoor air velocity
- HVAC, building automation
- Process control

**OPTIONS**

- LCD display
- Temperature probe
- Humidity probe
- RS-485 communications

**RANGE**

- ±10 to 28 in w.c./±2500 to 6975 pa/250 to 700 mm w.c.

**COMMENTS**

- Field selectable Modbus® and BACnet communications reduces wiring errors due to self heating effects of combination wall sensors

**SERIES TUF** ULTRASONIC ENERGY METER

Flow and Temperature Monitoring Capability, BACnet® or Modbus® Communication

**FEATURES/BENEFITS**

- Flow and temperature monitoring in all demand and ends the need for multiple units

**APPLICATIONS**

- Tenant billing
- Monitoring of water metering, cooling extractors, hot wells

**OPTIONS**

- BACnet® or Modbus®
- RS-485 communications
- LCD display
- Temperature probe
- Humidity probe

**RANGE**

- ±10 to 5000 ppm CO₂

**COMMENTS**

- Field selectable Modbus® and BACnet communications reduce inventory and the need for re-cabling systems

**SERIES EFT** INSERTION ELECTROMAGNETIC FLOW TRANSMITTER

Flow and Temperature Monitoring Capability, BACnet® or Modbus® Communication

**FEATURES/BENEFITS**

- Field selectable Modbus® and BACnet communications reduce inventory and the need for re-cabling systems

**APPLICATIONS**

- Tenant billing
- Monitoring of water metering, cooling extractors, hot wells

**OPTIONS**

- BACnet® or Modbus®
- RS-485 communications
- LCD display
- Temperature probe
- Humidity probe

**RANGE**

- ±10 to 5000 ppm CO₂
**Series AVUL**

**Air Velocity Transmitter**

- **Series AVUL** Digital Differential Pressure Transmitter combines the proven technology for monitoring pressure in a variety of applications, providing an increased level of accuracy and reliability. The transmitter offers a wide range of features and options to meet specific application needs.

**Features/Benefits**

- **Field selectable single or dual range signal output and the option for an LCD display**
- **Modular electronics case includes a 2.5% of the full range accuracy transducer and circuitry to provide for a highly accurate signal output**
- **Infrared communications using infrared light emitting diodes (LEDs) to provide a non-contact means of communication over medium range distances**
- **Three levels of self-diagnostics: pre-calibration, post-calibration, and continuous self-monitoring**

**Applications**

- Measurement of air velocity and flow in HVAC systems
- Ventilation systems
- Energy conservation

**Series MS2**

**MAGNESENSE® II Differential Pressure Transmitter**

- **Series MS2** High Accuracy Differential Pressure Transmitter is designed for accurate and reliable pressure measurement in a variety of applications. It offers excellent stability and long-term reliability, making it suitable for a wide range of industries.

**Features/Benefits**

- **High accuracy: ±0.1% of full scale**
- **Wide range of operating temperatures**
- **Self-diagnostic features for detection of failures**

**Applications**

- HVAC systems
- Process control
- Medical equipment

**Series CDTA**

**Communicating Carbon Dioxide Detector**

- **Series CDTA** Communicating Carbon Dioxide Detector combines the function of two separate sensors, one for monitoring temperature and humidity, and another for carbon dioxide concentration. The transmitter is ideal for applications requiring monitoring of carbon dioxide levels in indoor environments.

**Features/Benefits**

- **Digital temperature/humidity and CO₂ sensors**
- **Modbus® and BACnet MS/TP communications**
- **Self-diagnostic features for monitoring of sensors and communications**

**Applications**

- Commercial buildings
- Industrial environments
- Environmental monitoring

**Series MS/TP**

**Ultrasonic Energy Meter**

- **Series MS/TP** Ultrasonic Energy Meter is a highly accurate and stable energy meter designed specifically for measuring energy consumption. It uses the MS/TP protocol for communicating with controllers and applications.

**Features/Benefits**

- **High accuracy: ±0.1% of reading**
- **Wide range of operating temperatures**
- **Self-diagnostic features for monitoring of sensors and communications**

**Applications**

- Energy monitoring
- Utility billing
- Industrial processes

**Series IEF**

**Insertion Electromagnetic Flow Transmitter**

- **Series IEF** Insertion Electromagnetic Flow Transmitter is an accurate and reliable solution for measuring flow in a variety of applications, including wastewater, HVAC, and process industries.

**Features/Benefits**

- **High performance: ±0.5% of reading**
- **Wide range of operating temperatures**
- **Self-diagnostic features for monitoring of sensors and communications**

**Applications**

- Water, wastewater, HVAC flow
- Process industries
- Industrial processes

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**Options**

- LCD display
- Factory calibration certificate
- BACnet MS/TP or Modbus® RTU over 2-wire RS485.
The SERIES MS2 Differential Pressure Transmitter combines the proven design and technology of the Magnesense II Differential Pressure Transmitter with an additional feature to reduce installation time and simplify wiring. Like the original Magnesense II Differential Pressure Transmitter, the SERIES MS2 is designed to provide a reliable and cost-effective process monitoring solution. In addition, Magnesense II Differential Pressure Transmitters have been included in this model to enable two square root extraction options to be included in a single output signal.

**FEATURES/BENEFITS**
- Field selectable ranges can be quickly established for easy setup
- Sensing elements have been coated to ensure durability and longevity
- Multiple mounting options are available to accommodate almost any application
- Digital Intelligent Temperature Compensation Algorithm (DITCA™) corrects for temperature deviations from the set point to ensure accuracy
- Physical hardware lockout
- Demand control ventilation in schools, office buildings, hospitals, and other indoor environments

**APPLICATIONS**
- Chiller Flow Monitoring
- Boiler Flow Monitoring
- Pump Protection
- Gas Sensing
- Gas Flow in Mechanical Rooms
- NO2, nitrogen dioxide
- Filter monitoring in air handler units
- Building pressure in pharmaceutical environments
- Semiconductor clean rooms
- Industrial grade replaceable CO or NO2 sensors
- Medical ventilation
- Air temperature
- Pressure in gas rooms
- Applications with temperature

**OPTIONS**
- Field selectable BACnet or Modbus® communication protocol
- LCD Display
- Changes to LCD display
- Field selectable BACnet or Modbus® communication protocol

**COMMUNICATION**
- Field selectable BACnet or Modbus® communication protocol

**PRODUCTS**
- TUF-150/400
- TUF-MD 
- TUF-500/1250
- IEF-H N -CND

**SPECIFICATIONS**
- Range: 0-2000 m3/h
- Accuracy: ±0.5% of full range
- Digital Intelligent Temperature Compensation Algorithm (DITCA™) corrects for temperature deviations from the set point to ensure accuracy
- Easy removal without shut down or system drainage
- Low power consumption
- Easy installation
- Wide range of pressure
- Wide range of range

**SERIES DTc**
**CARBON MONOXIDE/NITROGEN DIOXIDE GAS TRANSMITTER**
High Accuracy Electrochemical Sensor, BACnet or Modbus® Communication Protocol Options

**FEATURES/BENEFITS**
- Field selectable ranges can be quickly established for easy setup
- Sensing elements have been coated to ensure durability and longevity
- Multiple mounting options are available to accommodate almost any application
- Digital Intelligent Temperature Compensation Algorithm (DITCA™) corrects for temperature deviations from the set point to ensure accuracy
- Physical hardware lockout
- Demand control ventilation in schools, office buildings, hospitals, and other indoor environments

**APPLICATIONS**
- Chiller Flow Monitoring
- Boiler Flow Monitoring
- Pump Protection
- Gas Sensing
- Gas Flow in Mechanical Rooms
- NO2, nitrogen dioxide
- Filter monitoring in air handler units
- Building pressure in pharmaceutical environments
- Semiconductor clean rooms
- Industrial grade replaceable CO or NO2 sensors
- Medical ventilation
- Air temperature
- Pressure in gas rooms
- Applications with temperature

**OPTIONS**
- Field selectable BACnet or Modbus® communication protocol
- LCD Display
- Changes to LCD display
- Field selectable BACnet or Modbus® communication protocol

**COMMUNICATION**
- Field selectable BACnet or Modbus® communication protocol

**PRODUCTS**
- TUF-150/400
- TUF-MD 
- TUF-500/1250
- IEF-H N -CND

**SPECIFICATIONS**
- Range: 0-2000 m3/h
- Accuracy: ±0.5% of full range
- Digital Intelligent Temperature Compensation Algorithm (DITCA™) corrects for temperature deviations from the set point to ensure accuracy
- Easy removal without shut down or system drainage
- Low power consumption
- Easy installation
- Wide range of pressure
- Wide range of range

**SERIES DF**
**COMMUNICATING CARBON DIOXIDE DETECTOR**
Measures CO2, Humidity, Temperature, Temperature Set Point, and Override

**FEATURES/BENEFITS**
- Field selectable ranges can be quickly established for easy setup
- Sensing elements have been coated to ensure durability and longevity
- Multiple mounting options are available to accommodate almost any application
- Digital Intelligent Temperature Compensation Algorithm (DITCA™) corrects for temperature deviations from the set point to ensure accuracy
- Physical hardware lockout
- Demand control ventilation in schools, office buildings, hospitals, and other indoor environments

**APPLICATIONS**
- Chiller Flow Monitoring
- Boiler Flow Monitoring
- Pump Protection
- Gas Sensing
- Gas Flow in Mechanical Rooms
- NO2, nitrogen dioxide
- Filter monitoring in air handler units
- Building pressure in pharmaceutical environments
- Semiconductor clean rooms
- Industrial grade replaceable CO or NO2 sensors
- Medical ventilation
- Air temperature
- Pressure in gas rooms
- Applications with temperature

**OPTIONS**
- Field selectable BACnet or Modbus® communication protocol
- LCD Display
- Changes to LCD display
- Field selectable BACnet or Modbus® communication protocol

**COMMUNICATION**
- Field selectable BACnet or Modbus® communication protocol

**PRODUCTS**
- TUF-150/400
- TUF-MD 
- TUF-500/1250
- IEF-H N -CND

**SPECIFICATIONS**
- Range: 0-2000 m3/h
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- Easy removal without shut down or system drainage
- Low power consumption
- Easy installation
- Wide range of pressure
- Wide range of range