

### Environmental Sensors

#### Temperature & Humidity Sensors

##### Probe-Style Temperature & Combination Sensor



**ENVIROMUX-STSM-E25**  
**ENVIROMUX-STHSM-E25**

- Temperature Sensor (ENVIROMUX-STSM-E25)
  - Applications from -4 to 185°F (-20 to 85°C).
  - Temperature accuracy:
    - ◆ ±1.26°F (±0.70°C) for -4 to 41°F (-20 to 5°C).
    - ◆ ±0.72°F (±0.40°C) for 41 to 140°F (5 to 60°C).
- Temperature/Humidity Sensor (ENVIROMUX-STHSM-E25)
  - Applications from -4 to 185°F (-20 to 85°C) and 0 to 90% relative humidity.
  - Temperature accuracy:
    - ◆ ±0.90°F (±0.50°C) for -4 to 14°F (-20 to -10°C).
    - ◆ ±0.72°F (±0.40°C) for 14 to 185°F (-10 to 85°C).
  - Humidity accuracy:
    - ◆ 0 to 80% relative humidity, ±3%
    - ◆ 80 to 90% relative humidity, ±4%
  - Supports dew point measurement
- Length: 25 feet.
- Includes an RJ45 coupler to extend the sensor up to 1000 feet (305 m) using CATx cable (minimum 24AWG).

##### Temperature/Humidity Sensor with 3-Digit 7-Segment LCD Display – 2" Character Height



- Use to detect and view real-time value of the sensor's temperature or humidity reading.
  - Three-digit, seven-segment display with °F, °C and % indicators.
  - Applications from -4 to 140°F (-20 to 60°C) and 0 to 90% non-condensing relative humidity.
- ENVIROMUX-STHS-LCDW**
- Temperature accuracy:
    - ±0.72°F (±0.4°C) for 14 to 140°F (-10 to 60°C).
    - ±0.90°F (±0.5°C) for -4 to 14°F (-20 to -10°C).
  - Humidity accuracy:
    - 0 to 80% relative humidity, ±3%
    - 80 to 90% relative humidity, ±4%

##### Temperature Sensor



**ENVIROMUX-STs**

- Applications from 32 to 122°F (0 to 50°C).
- Accurate to within ±0.9°F (±0.5°C).
- High resistance to external influences on the cable due to digital output signal.

##### Low-Cost Industrial Precision Temperature/Humidity Sensor



**ENVIROMUX-STHS-PRCIND-x**

- Applications from -40 to 185°F (-40 to 85°C) and 10 to 80% relative humidity.
- Accurate to within ±0.4°F (±0.2°C) and ±1.8% relative humidity.
- Available lengths for attached CAT5e cable: 10/25/50/100 feet.

##### Temperature/Humidity/Dew Point Combination Sensor



**ENVIROMUX-STHSB**  
**ENVIROMUX-STHS-99**

- Temperature/Humidity/Dew Point Sensor (ENVIROMUX-STHSB)
  - Applications from -4° to 185°F (-20° to 85°C) and 0% to 90% relative humidity.
  - Temperature accuracy:
    - ◆ ±0.90°F (±0.50°C) for -4 to 14°F (-20 to -10°C).
    - ◆ ±0.72°F (±0.40°C) for 14 to 185°F (-10 to 85°C).
  - Humidity accuracy:
    - ◆ 0 to 80% relative humidity, ±3%
    - ◆ 80 to 90% relative humidity, ±4%
  - Supports dew point measurement.
- Temperature/Wide Range Humidity/Dew Point Sensor (ENVIROMUX-STHS-99)
  - Applications from 32° to 176°F (0° to 80°C)
  - Accurate to within ±2°F (±1°C)
    - ◆ 20% to 80% relative humidity, ±3%
    - ◆ 10% to 90% relative humidity, ±4%
    - ◆ 0% to 99% relative humidity, ±5%
  - Supports dew point measurement
- Supports CAT5/5e/6/6a cable (24 AWG) up to 1,000 ft (305 m) (not included).

##### Temperature/Humidity/Dew Point Sensor, DIN Mounted



**ENVIROMUX-STHSB-D**

- Applications from -4 to 185°F (-20 to 85°C) and 0 to 90% relative humidity.
- Temperature accuracy:
  - ±0.90°F (±0.50°C) for -4 to 14°F (-20 to -10°C).
  - ±0.72°F (±0.40°C) for 14 to 185°F (-10 to 85°C).
- Humidity accuracy:
  - 0 to 80% relative humidity, ±3%
  - 80 to 90% relative humidity, ±4%
- Supports dew point measurement.
- DIN mountable

##### Low-Cost Precision Temperature & Combination Sensor



**ENVIROMUX-STs-PRC**  
**ENVIROMUX-STHS-PRC**

- Temperature Sensor (ENVIROMUX-STs-PRC)
  - Applications from 14 to 140°F (-10 to 60°C).
  - Accurate to within ±0.2°F (±0.1°C).
- Temperature/Humidity Sensor (ENVIROMUX-STHS-PRC)
  - Applications from 14 to 140°F (-10 to 60°C) and 10 to 80% relative humidity.
  - Accurate to within ±0.2°F (±0.1°C) and ±1.8% relative humidity.
  - Supports dew point measurement

### Environmental Sensors

#### Temperature & Humidity Sensors (continued)

##### Strap-On Pipe Temperature Sensor, Spring-Loaded



- Mount to the outside of an insulated metal pipe (up to 1/4" wall).
- Copper contact transmits surface temperature to thermal sensor.
  - Spring-loaded contact enables minimal removal of pipe insulation.
- NEMA 1 and IP20 rated metal enclosure
- Applications from -40 to 185°F (-40 to 85°C).
- Accurate to within  $\pm 1.0^{\circ}\text{F}$  ( $\pm 0.5^{\circ}\text{C}$ ).

##### ENVIROMUX-STSP-SL-7

- Response time: <1 minute for temperature changes of  $\pm 2^{\circ}\text{F}$ .
- Length: 7 feet.
- Includes an RJ45 coupler to extend the sensor up to 1,000 feet using CATx cable (minimum 24AWG).

##### Industrial Temperature/Humidity Sensor -40 to 185°F (-40 to 85°C)



- Applications from -40 to 185°F (-40 to 85°C) and 0 to 100% non-condensing relative humidity.
- Accuracy:
  - $\pm 0.7^{\circ}\text{F}$  ( $\pm 0.4^{\circ}\text{C}$ ) at 14 to 185°F (-10 to 85°C)
  - $\pm 1.6^{\circ}\text{F}$  ( $\pm 0.9^{\circ}\text{C}$ ) at -40 to 14°F (-40 to -10°C)

##### ENVIROMUX-STHSB-N4085IND-x

- $\pm 3\%$  relative humidity at 0 to 80% non-condensing RH and 86°F (30°C)
- $\pm 4.5\%$  relative humidity at 80 to 100% non-condensing RH and 86°F (30°C)
- Available lengths for attached CAT5e cable: 10/25/50/100 feet.

##### Industrial Precision Temperature/Humidity/Dew Point Sensor



- Applications from -40 to 212°F (-40 to 100°C) and 10 to 80% relative humidity.
  - Sensor probe attached to 10/25/50/75/100-foot cable, hardwired to sensor box.
- Accurate to within  $\pm 0.4^{\circ}\text{F}$  ( $\pm 0.2^{\circ}\text{C}$ ) and  $\pm 1.8\%$  relative humidity.
- Supports dew point measurement.

##### ENVIROMUX-STHS-PRCIND100-Pxx

#### RTD Temperature Transmitters

##### High-Accuracy Platinum RTD Transmitter, -328° to 1562°F



- Temperature range: -328 to 1562°F (-200 to 850°C)
- Accurate to within  $\pm 0.2^{\circ}\text{F}$  ( $\pm 0.1^{\circ}\text{C}$ )
- Configuration: 2, 3, or 4-wire connection
- Signal Output: RS485
- Requires an RTD sensor probe to operate with the ENVIROMUX-2D/5D/16D.

##### ENVIROMUX-RTDT-1562

##### Pipe Temperature Sensor



- Mount to the outside of a thin walled steel, copper, or aluminum pipe (up to 1/4" wall).
- Copper contact transmits surface temperature to thermal sensor.
- Weatherproof enclosure designed to IP65 specifications.
- Applications from -40° to 185°F (-40° to 85°C).
- Accurate to within  $\pm 1.0^{\circ}\text{F}$  ( $\pm 0.5^{\circ}\text{C}$ ).
- Response time: <1 minute for temperature changes of  $\pm 2^{\circ}\text{F}$ .

##### ENVIROMUX-STSP-7

- Length: 7 feet.
- Includes an RJ45 coupler to extend the sensor up to 1,000 feet using CATx cable (minimum 24AWG).

##### Wall Mount Temperature/Humidity Sensor



- Applications from 23 to 131°F (-5 to 55°C)
- Temperature accurate to within  $\pm 0.9^{\circ}\text{F}$  ( $\pm 0.5^{\circ}\text{C}$ )
- Relative Humidity accuracy:
  - $\pm 3\%$  from 30 to 70% relative humidity.
  - $\pm 5\%$  from 0 to 30% and 70 to 100% relative humidity.
- Requires the ENVIROMUX-S420MA-24V to operate.

##### ENVIROMUX-STHS-WLM

### Environmental Sensors

#### RTD Temperature Sensors

##### All-Purpose 100 Ohm RTD Sensor, -67°F to 221°F



- Rugged, point-sensitive waterproof sensor with 9" (229 mm) 304 stainless steel probe and brass fitting.
  - Brass fitting with 1/2" NPT male thread.
- Applications from -67 to 221°F (-55 to 105°C).
- Accurate to within  $\pm 0.27^\circ\text{F}$  ( $\pm 0.15^\circ\text{C}$ ).

##### ENVIROMUX-RTDS-A221

- 100 Ohm Pt 385 curve.
- Requires the ENVIROMUX-RTDT-140/240 and ENVIROMUX-S420MA-24V to operate with the ENVIROMUX-2D/5D/16D.

##### Encapsulated 100 Ohm RTD Sensor, 35°F to 140°F



- 0.17" round, 0.50" long housing.
- Applications from 35°F to 140°F (2°C to 60°C).
- Accurate to within  $\pm 0.6^\circ\text{F}$  ( $\pm 0.33^\circ\text{C}$ ).
- 100 Ohm Pt 385 curve.
- 8 feet, 24 AWG 2-wire leads

##### ENVIROMUX-RTDS-E140

- Requires the ENVIROMUX-RTDT-140/240 and ENVIROMUX-S420MA-24V to operate with the ENVIROMUX-2D/5D/16D.

##### Rugged Encapsulated 100 Ohm RTD Sensor, -30°F to 230°F



- 0.18" round, 0.50" long housing.
- Applications from -30°F to 230°F (-34°C to 110°C).
- Accurate to within  $\pm 0.6^\circ\text{F}$  ( $\pm 0.33^\circ\text{C}$ ).
- 100 Ohm Pt 385 curve.
- 8 feet, 24 AWG 2-wire leads

##### ENVIROMUX-RTDS-ER230

- Requires the ENVIROMUX-RTDT-140/240 and ENVIROMUX-S420MA-24V to operate with the ENVIROMUX-2D/5D/16D.

##### Mini Probe 100 Ohm RTD Sensor, -67°F to 240°F



- 0.19" (4.8 mm) round x 0.50" (13 mm) long stainless steel housing.
- Applications from -67 to 240°F (-55 to 115°C).
- Accurate to within  $\pm 0.27^\circ\text{F}$  ( $\pm 0.15^\circ\text{C}$ ).
- 100 Ohm Pt 385 curve.

##### ENVIROMUX-RTDS-MP240

- Requires the ENVIROMUX-RTDT-140/240 and ENVIROMUX-S420MA-24V to operate with the ENVIROMUX-2D/5D/16D.

##### Duct 100 Ohm RTD Sensor, -67°F to 240°F



- Rugged, waterproof sensor with 9" (229 mm) 304 stainless steel probe with 4" (102 mm) electrical strap and a nylon fitting.
  - Nylon fitting with 1/2" NPT female thread.
- Applications from -67 to 240°F (-55 to 115°C).
- Accurate to within  $\pm 0.27^\circ\text{F}$  ( $\pm 0.15^\circ\text{C}$ ).
- 100 Ohm Pt 385 curve.

##### ENVIROMUX-RTDS-D240

- Requires the ENVIROMUX-RTDT-140/240 and ENVIROMUX-S420MA-24V to operate with the ENVIROMUX-2D/5D/16D.

##### All-Purpose 100 Ohm RTD Sensor, -58 to 392°F



- Rugged, point-sensitive waterproof sensor with 0.25" (6.35 mm) round and 6" (152 mm) long stainless steel probe.
- Applications from -58 to 392°F (-50 to 200°C).
- Accurate to within  $\pm 1^\circ\text{F}$  ( $\pm 0.55^\circ\text{C}$ ).
- 100 Ohm Pt 385 curve.
- Includes 15 ft (4.6 m) extension wire.

##### ENVIROMUX-RTDS-A392

- 6 ft (1.83 m) 3-wire lead with 13" (330 mm) lead wires and 1/3" (8 mm) stripped ends.
  - One white, two red.
- Requires the ENVIROMUX-RTDT-1562 to operate with the ENVIROMUX-2D/5D/16D.

#### Liquid & Chemical Detection Sensors

##### Low-Cost Liquid Detection Sensor, Rope-Style



- Detects any conductive liquid or moisture.
- Minimum puddle: 0.06" (1.5 mm) diameter.
- Available water sensor cable (x) lengths: 1/10/50/100/200/400/600 feet.
  - Material: PVC twisted pair with stainless 316 elements
  - Diameter: 0.14" (3.5 mm)
- Available 2-wire cable (y) lengths: 5/10/20/50/100 feet.

##### ENVIROMUX-LD-LCx-y

##### Liquid Detection Sensor, Plenum Rope-Style



- Detects any conductive liquid or moisture.
- Minimum puddle: 0.6" (15 mm) diameter.
- Detects liquid depth  $>0.1"$  (2.5 mm).
- Available water sensor cable (x) lengths: 1/10/50/100/200/400/600/800/1000 feet.
  - Plenum rating: CL2P (UL)
  - Diameter: 0.25 in (6.35mm)
- Available 2-wire plenum cable (y) lengths: 5/10/20/50/100 feet.

##### ENVIROMUX-LDx-y

## Environmental Sensors

### Liquid & Chemical Detection Sensors

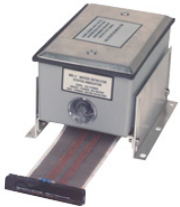
#### Chemical Detection Sensor



ENVIROMUX-CDx-y

- For detecting the presence of chemical liquid.
  - Reliably senses acids, bases, and other conductive liquids.
- Detects liquid depth >0.1" (2.5 mm).
- Minimum puddle: 0.6" (15 mm) diameter.
- Available chemical sensor cable (x) lengths: 1/10/50/100 feet.
- Available 2-wire cable (y) lengths: 5/10/20/50/100 feet.

#### Tape-Style Liquid Detector



ENVIROMUX-TLD-x

- Uses a self-adhesive sensor tape with copper fiber electrodes and a durable netted cover for dependable detection of conductive liquids.
- Continuous tape integrity self-check.
- Floor or under-pipe mounting.
- Minimum puddle: 0.125" (3 mm) diameter.
- Available tape sensor lengths: 10/25/50/100 feet.

#### Spot Liquid Detector, Point Leak Detection Sensor



ENVIROMUX-LD-SPDT

- Features gold-plated probes and microchip technology for dependable detection of conductive liquids.
- Adjustable detection level.
  - Probe height adjustable 0" to 1.5" (0 to 38mm)

#### Outdoor Oil Leak Detection Sensor



ENVIROMUX-SOD-3M

- Use to detect oil or non-conductive liquids in outdoor locations or in areas that are susceptible to leaks.
- The sensor includes two liquid detectors; one looking for conductive liquids (e.g. water), and the other looking for non-conductive liquids (e.g. fuel oil, diesel fuel).
- Normally-open alarm contact.
- IP 65 rated.
- Cable length: 9.84 ft (3m).

#### Ultrasonic Level Transmitter



ENVIROMUX-ULT

- Compact sensor with 2" (51 mm) dead band and beam width optimized for small tanks 49" (1,245 mm) or less.
- Provides two-wire 4-20 mA analog output.
- Includes Fob USB interface tool for configuring the transmitter.
- Requires the ENVIROMUX-S420MA-24V to operate with ENVIROMUX-2D/5D/16D.

#### Under Carpet Leak Detector



ENVIROMUX-UCLD-x

- Use to detect conductive fluids and moisture under carpets.
- Available 2-wire plenum cable lengths: 10/25/50/100/200/400/600/1000 feet.

#### Compact-Size Spot Liquid Detector, Point Leak Detection Sensor



ENVIROMUX-SLDO-14

- Use to detect fluids in confined areas.
- One generic relay output
- Adjustable detection level.
  - Probe height adjustable 0" to 0.75" (0 to 19mm)
- Cable length: 14 feet

#### Spot Liquid Detector with Built-In Visual & Audible Alarm



ENVIROMUX-SLDO-A

- Use to detect conductive fluids in confined areas
- Water level detection range: 0.03 to 0.53" (0.79 to 13 mm).
- Audible alarm signal: 85 dB at 1 foot distance.
- Red LED for visual alarm signal.
- Cable length: 4.9 ft (1.5 m).

#### Capacitive Chemical Spot Leak Detector



ENVIROMUX-SCD-CAP-5M

- Use to detect liquids in confined areas, such as in drip pans.
  - Capacitive sensor is ideal for monitoring liquids with low conductivity, such as pure water, diesel fuel, acetic acid, ethanol, methanol, liquid ammonia, and carbohydrate solution.
- NPN output can be normally-open or normally-closed.
- IP 67 rated.
- Cable length: 16.4 ft (5 m).

## Environmental Sensors

### Smoke Detection Sensor

#### Smoke Detection Sensor – 120VAC Wire-In with Battery Backup



ENVIROMUX-SDS-120V

- Ionization smoke detector.
- Applications from 40°F to 100°F (4°C to 38°C).
- Front loading battery door.
- One button design for easy testing and HUSH mode activation control.
- Voltage supply: 120VAC.
- Audio alarm: 85dB at 10ft.
- Links with up to 24 devices.
- Use compatible relay (ENVIROMUX-RLY-SDS120V) for connection to the ENVIROMUX system.
- Contact ratings: 10A at 120VAC, 5A at 30VDC.

#### Smoke Detection Sensor – UL Approved



ENVIROMUX-SDS

- Photoelectric smoke detector.
- Smoke sensitivity: 0.98-2.4%/ft.
- Built-in 135° F (57° C) thermal heat sensor.
- Operating temperature: 14 to 122°F (-10 to 50°C).

#### Low-Cost Smoke Detection Sensor – CE Approved



ENVIROMUX-SDS-CELC

- Photoelectric smoke detector.
- Smoke sensitivity: 0.5 dB/m ±0.1 dB/m.
- Applications from 14 to 122°F (-10 to 50°C).
- Operating temperature: 14 to 122°F (-10 to 50°C).

#### Smoke Detection Sensor – UL Approved, TAA Compliant



ENVIROMUX-SDS-TAA

- Photoelectric smoke detector.
- Smoke sensitivity: 0.98-2.4%/ft.
- Built-in 135° F (57° C) thermal heat sensor.
- Voltage supply: 8-35VDC.

### Gas Detector/Sensors

#### Gas Detector – Methane, Butane, Propane



ENVIROMUX-GD-MBP

- Use to detect leaks of combustible gas (methane, propane, butane, acetylene, etc.)
- Continuous air monitoring.
- Audible alarm signal: 94 dB at 1 foot.
- Relay specifications: level selectable, normally open or normally closed, 250V AC, max 5A.

#### Carbon Monoxide Detector, CO



ENVIROMUX-CMD

- Continuous air monitoring.
- Pre-set alarm points alert at:
  - 70 ppm after 60 to 240 minutes
  - 150 ppm after 10 to 50 minutes
  - 400 ppm after 4 to 15 minutes

#### Carbon Dioxide Sensor, CO2



ENVIROMUX-CO2

- Measures CO2 in a range of 0 to 2,000 ppm.
- 0 to 5 VDC output.
- Continuous automatic air pressure compensation.
- Requires the ENVIROMUX-S5VDC sensor converter to operate.

#### Hydrogen Gas Detector



ENVIROMUX-H2

- Use to detect leaks of hydrogen gas in battery monitoring/charging rooms, substations, uninterruptible power supplies (UPS), and hydrogen fueled back-up power systems.
- Alarm set point: 10% LEL hydrogen gas.
- SPDT Alarm and normally-closed output relay.

#### Hydrogen Sulfide Detector



ENVIROMUX-H2S

- Use to monitor the presence of Hydrogen Sulfide from failed UPS (uninterrupted power supply) lead acid batteries, in paper mills, refineries, waste disposable facilities, etc.
- Measures H2S in a range of 0 to 50 ppm.
- 5A SPDT fan relay controls exhaust fans, valves, or louvers.
- Alerts are based solely on the measured H2S levels reported by the ENVIROMUX-H2S.

## Environmental Sensors

### Air Flow/Velocity Sensors

#### Air Flow Sensor



**ENVIROMUX-AFM**

- Reacts to any condition causing insufficient flow of air.
- Switch contact is closed when air flow is >8.2 ft/s.
- Connection: 2x single strand AWG26, length 18 in.

#### Low-Cost Air Velocity Sensor



**ENVIROMUX-AV-LC-7**

- Reliable sensor for measurement of air velocity.
- Flow range: 0-9843 ft/min (0-50 m/s).
- Accuracy:  $\pm 98$  ft/min ( $\pm 0.5$  m/s) from 0 to 2953 ft/min (0 to 15 m/s).
- Length: 7 feet.
- Includes an RJ45 coupler to extend the sensor up to 1,000 feet using CATx cable (minimum 24AWG).

### Air Flow/Velocity Sensors

#### Air Velocity Sensor



**ENVIROMUX-AV  
w/Converter  
ENVIROMUX-S5VDC**

- Measures air velocity.
- Flow range: 0-2000 ft/min (0-10 m/s).
- Accuracy:  $\pm 5\%$  of measuring value at 68°F (20°C).
- Requires the ENVIROMUX-S5VDC sensor converter to operate.

### Weather & Outdoor Sensors

#### Outdoor Temperature Sensor



**ENVIROMUX-ST5-O**

- Applications from -40 to 185°F (-40 to 85°C).
- Accurate to within  $\pm 0.9^\circ\text{F}$  ( $\pm 0.5^\circ\text{C}$ ).
- Weatherproof enclosure.

#### Wind Speed Sensor/Anemometer



**ENVIROMUX-WSS**

- Rugged anemometer
- 3-cup rotor pressed on a stainless steel shaft
- Reed switch and magnet providing one pulse per rotation
- Rotor diameter: 5 inches
- Speed range: ~ 3 mph to 125+ mph (~5 kph to over 200 kph)
- 100 feet of exterior grade wire

#### Barometric Pressure Transmitter



**ENVIROMUX-BPT**

- Use for determining atmospheric air pressure.
- Pressure range: 20.8 to 32 in Hg (10.2 to 15.7 psi)
- Accuracy:  $\pm 0.14$  Hg ( $\pm 0.07$  psi)
- Repeatability:  $\pm 0.03$  Hg ( $\pm 0.014$  psi)
- Pressure Hysteresis:  $\pm 0.02$  Hg ( $\pm 0.01$  psi)
- Long-Term Stability:  $\pm .014$  Hg/year ( $\pm 0.007$  psi/year)
- Requires the ENVIROMUX-S420MA-24V to operate with ENVIROMUX-2D/5D/16D.