ENVIROMUX-STSP-SL-7
Strap-On Pipe Temperature Sensor-Spring-Loaded
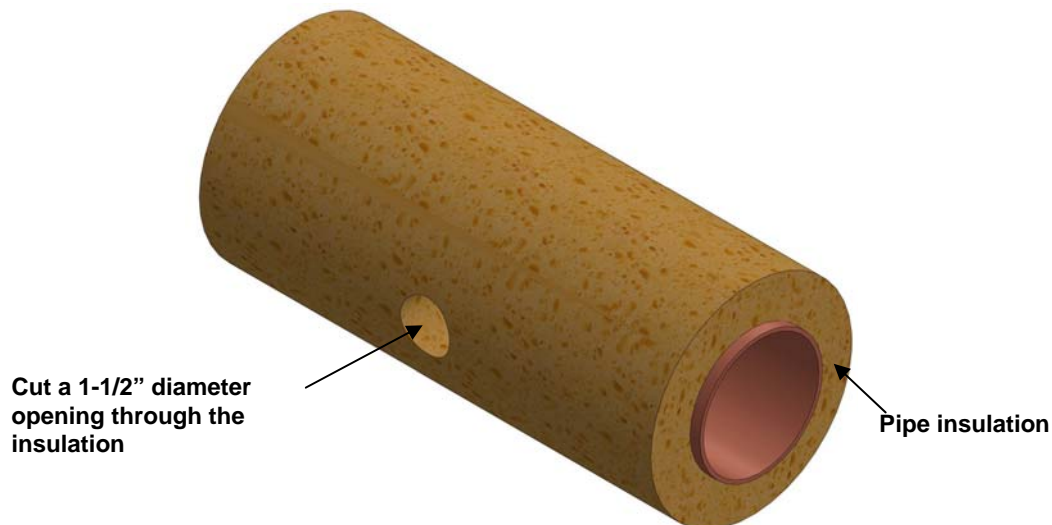# Installation Manual

The ENVIROMUX-STSP-SL-7 is a temperature sensor designed to work in combination with an ENVIROMUX-2D/5D/16D Enterprise Environment Monitoring System.

Features include:

- Mount to the outside of an insulated metal pipe (up to 1/4" wall).
    - Cable ties secure sensor to pipe diameters from 5" up to 14".
    - Mounts with insulation thicknesses from ½" – 2-1/2".
- 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 ±1.0°F (±0.5°C).
- Response time: <1 minute for temperature changes of ±2°F.
- High resistance to external influences on the cable due to digital output signal.
- Re-calibration is not necessary after initial set-up.
- MTBF: 1,942,123 hrs.
- Length: 7 feet.
- Includes an RJ45 coupler to extend the sensor up to 1,000 feet using CATx cable (minimum 24AWG).
- Powered by ENVIROMUX-2D/5D/16D.
- Compatible with ENVIROMUX-2D/5D/16D.
- Regulatory approvals: CE, RoHS.
- Compatible with ENVIROMUX-FSC Fiber Converter/Extender.
    - Use to extend sensor up to 1.2 miles (2 km) from the ENVIROMUX unit.

Installation

1. Cut a 1-1/2" diameter opening in the insulation surrounding the pipe through to the surface of the pipe.

Cut a 1-1/2" diameter opening through the insulation
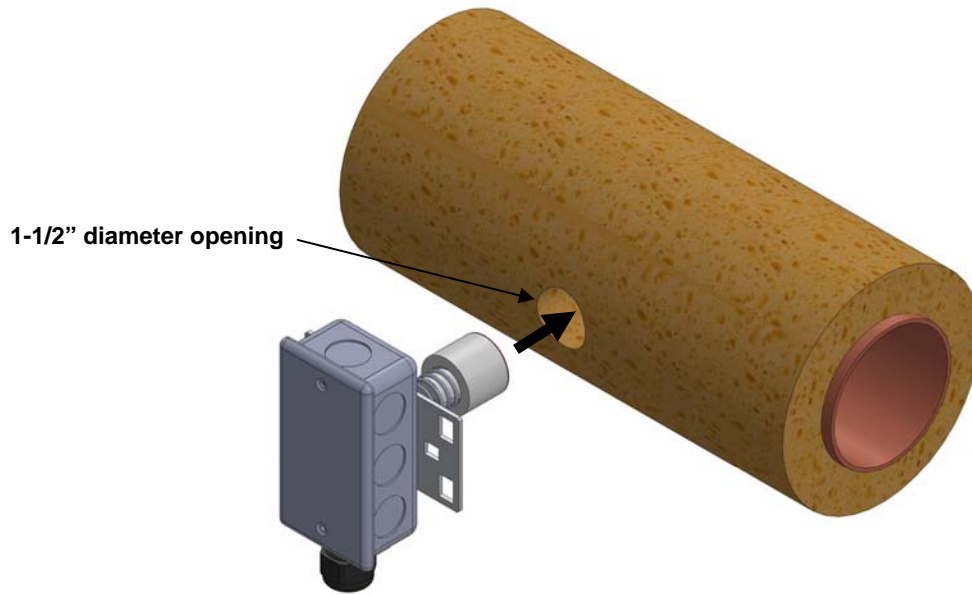
Pipe insulation

2. Clean off any insulation, rust, or other debris inside the opening or from the pipe to promote solid contact of the copper plate to the pipe.

Before installing the sensor, make sure the pipe surface where the sensor will make contact is clean and free of oil, dirt, or grease.
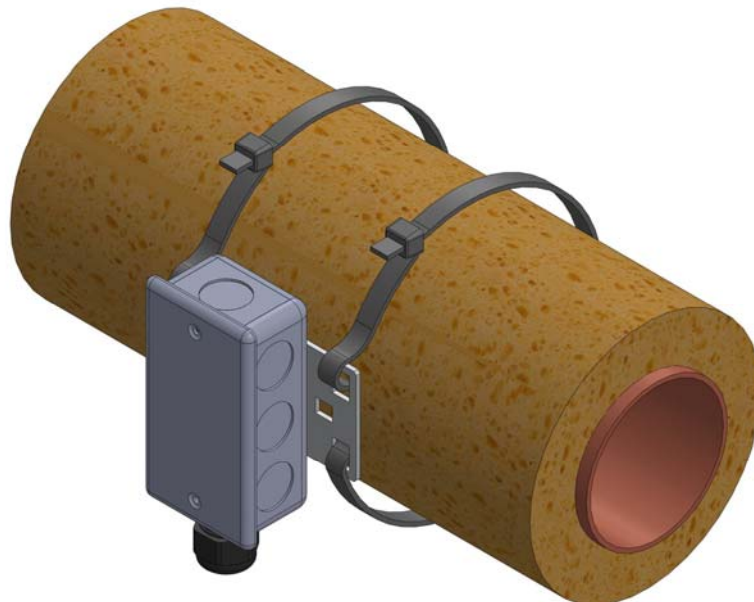
3. Insert the temperature sensor through the insulation and press against the pipe.

Tip: Faster response from the sensor can be achieved by applying a thermal conductive compound to the copper sensor plate before inserting the sensor.
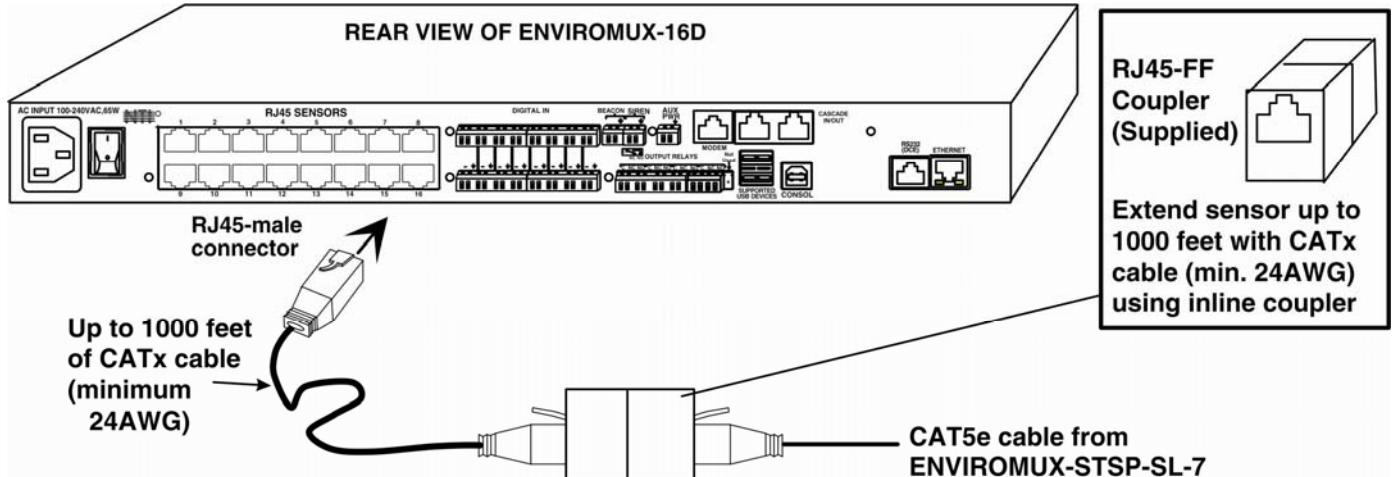
1-1/2" diameter opening

4. Insert the tie straps through the openings in the mounting plate, around the pipe and connect to the other ends.   Tighten the straps and compress the spring such that the mounting plate is pressed against the insulation for a firm mount.

Installation Note: The sensor and spring assembly is designed to work with insulation thicknesses from ½" up to 2-1/2", so if your insulation is thin, you may not be able to press the mounting plate up against the insulation without adding something to fill in the gap.   Whether you fill the gap between the mounting plate and the insulation or not has no bearing on the sensor performance.

5. After the strap on sensor is securely mounted, for added thermal accuracy add insulation back in (backfill) around the spring extension, using the removed insulation, so that no heat or cold from the pipe can escape. If more insulation is desired, only cover the sensor box to the top of the metal cover plate.

6. Plug the cable into an available "RJ45 SENSORS" port on an ENVIROMUX-2D/5D/16D.   If needed, extend the provided cable up to 1000 ft with CATx cable (minimum 24AWG) using the RJ45 coupler provided.

7. Follow the instructions that came with the ENVIROMUX-xD for configuring and monitoring the temperature readings provided by the ENVIROMUX-STSP-SL-7.

Warranty Information

The warranty period on this product (parts and labor) is two (2) years from the date of purchase. Please contact Network Technologies Inc at (800) 742-8324 (800-RGB-TECH) or (330) 562-7070 or visit our website at **http://www.networktechinc.com** for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.