NEO WAVE

OverView

TxTH91-XP

Room Humidity and Temperature Sensor

The **TxTH91-XP** Sensors specialized in monitoring and controlling temperature and humidity levels within indoor environments. With a contemporary design, they can be easily mounted on walls or standard wall boxes. Optional color displays with durable glass fronts are available, and they support communication via Modbus or BACnet protocols.

Features

- Integration compatibility with BACnet MS/TP or Modbus RS485 RTU systems.
- Optional 2.4" color LCD screen for displaying measurements.
- Configuration via Device Configuration Tool.
- Software (Windows) or iOS App (Bluetooth).
- Available in white and black options.
- Customizable user display language with language packs.
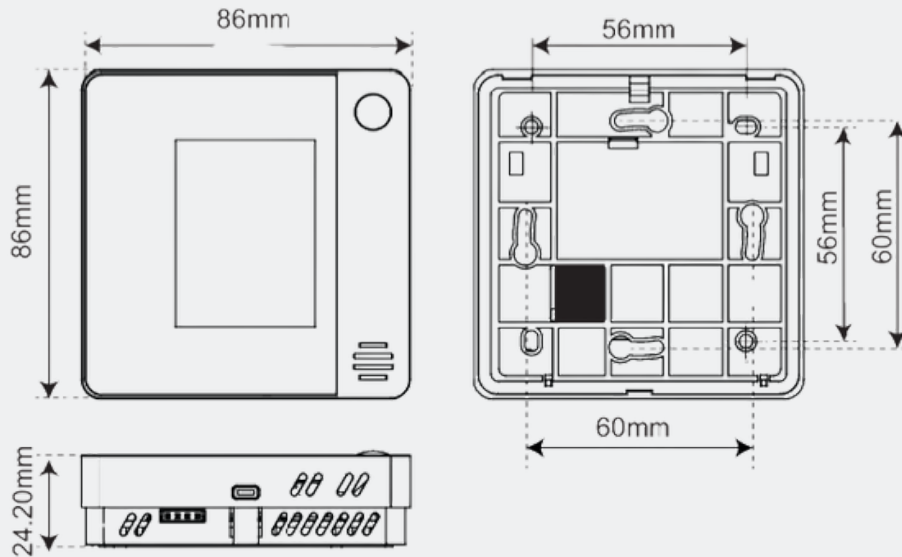- Temperature and humidity room sensors for monitoring

Applications

- Office buildings
- Hospitals and healthcare facilities
- Laboratories
- Data centers
- Greenhouses

01

Dimensions

86mm
86mm
24.20mm
56mm
56mm
60mm
60mm
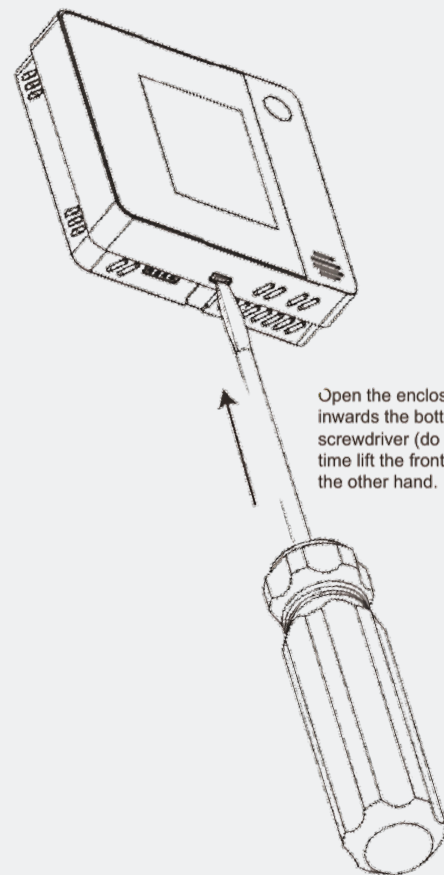
Installation Guidelines

1-Refer to the diagram below for opening the enclosure to access mounting holes and wiring terminals.

2-Place sensors away from heat and cold sources, such as direct sunlight or exterior walls.

3-Optimal performance is achieved when sensors are installed at a height of 150-120 cm.

4-Ensure cable entries and junction boxes are sealed to prevent air flows, which can cause temperature measurement inaccuracies.

5-Use the dedicated hole (black area) marked on the dimensions drawing for cable entry.

6-If surface-mounted cable is needed, the top center of the enclosure has a thin wall section that can be cut.

Open the enclosure by gently pushing inwards the bottom clip with a screwdriver (do not twist) and at the same time lift the front from the bottom with the other hand.

Specifications:

Room Humidity and Temperature Sensor

Power supply			24Vac/dc -10%/+15%, max 80mA with display
Measurements	Temperature	Range	0~50°C(32~122°F)
		Accuracy	+/-0.5°C
	Humidity	Range	0..100%rh
		Accuracy	+/-2%rH (within 20 to 80%rH)
Communication	Physical Interface		1 x RS485 driver, recommended max 63 devices
	Protocol		Modbus RTU or BACnet MS/TP (order relevant model)
	Addressing		Via Software: 1..247 for Modbus, 1..127 for BACnet MS/TP
	Settings		Baud Rate: 9600/19200/38400/57600/76800/115200 (software) Modbus Parity: None/Even/Odd, Modbus Stop Bits: 1 or 2 (Default: 9600/None/1)
Mechanical	Wiring Terminals		Rising Cage Screw Terminals, 0.2 to 2.5mm2 / 26 to 12 AWG
	Enclosure		ABS ULV0 Plastics - White or Black
	Mounting		Wall or Junction Box Mounting (60mm screw distance)
	Dimensions		W86 x H86 x D24mm
Display	LCD Option		Optional 2.4" Full Colour Display with Glass Overlay, 240 x 320px

NEO WAVE®

Selection Code:

Code and description			Remark
TxTH91-XP	Room Humidity and Temperature Sensor		Model
	1	MOD Modbus RS485	Communication Options
	2	BAC BACnet MS/TP	
		1 No Interface	Interface Options
		2 Color Display	
			1 Black	Probe Length
			2 White	

neowave.tech