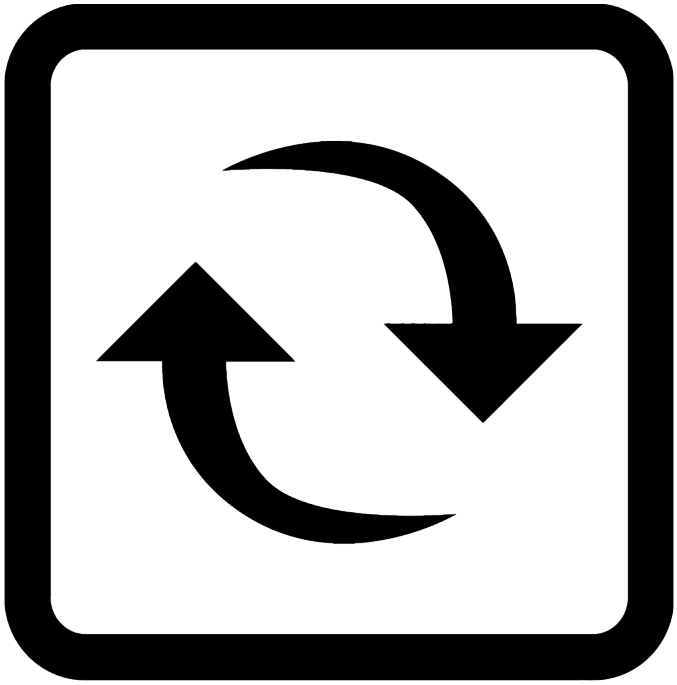
Rack Level Temperature and Humidity



INFRASENSING

Sensor Application Guide

I. Overview

Our Temperature and Humidity sensors are designed to monitor temperature and humidity levels inside data centers, server rooms, cabinets, and other critical facilities.

This document aims to guide the user in installing our ENV-TEMP and ENV-THUM in your facilities and also to provide recommendations for rack level sensor placement.

You may visit the sensor page through:
ENV-TEMP https://infrasensing.com/sensors/sensor_temperature.asp
ENV-THUM https://infrasensing.com/sensors/sensor_humidity_temperature.asp

II. What you need

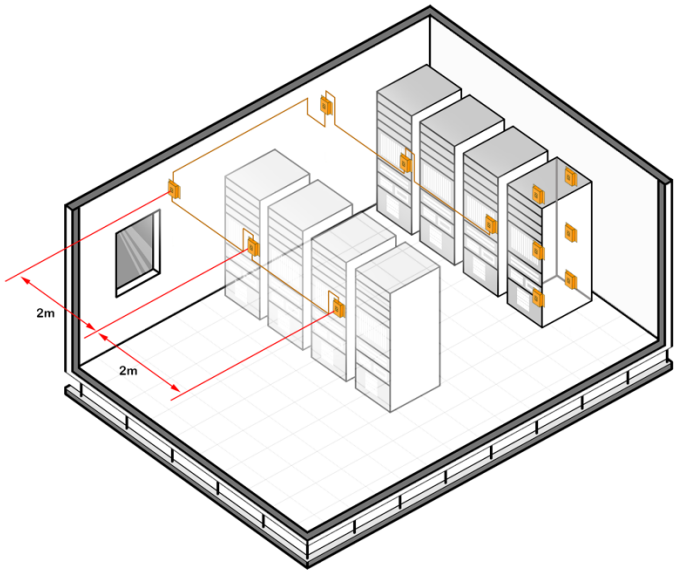
- Power source (PoE or 12V DC)
- BASE-WIRED
- LAN cable
- Sensor probe(ENV-TEMP or ENV-THUM)

III. Recommended sensor placement

ASHRAE standards specify 6 temperature sensors per rack:

- 2 at the bottom of each side of the rack
- 2 in the middle
- 2 at the top

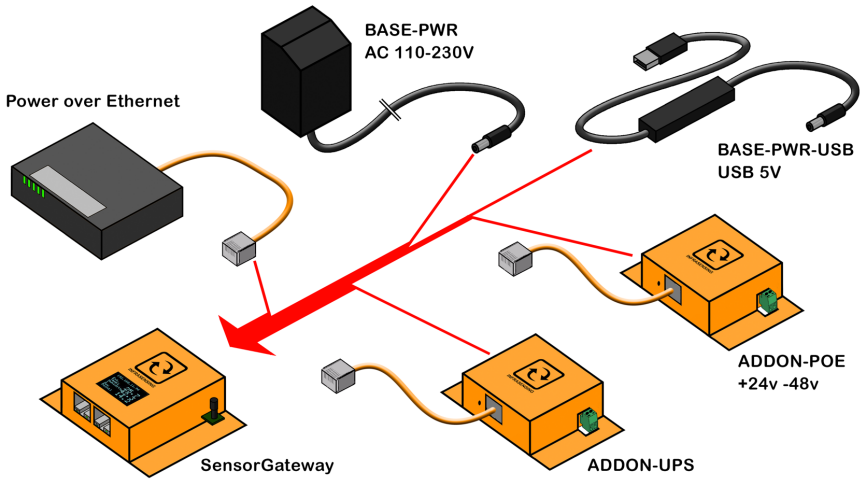
The temperature difference between intake(front or rack) and outtake(back of rack) should not be more than 20°C.



You may check this link for more information about rack level monitoring:
https://infrasensing.com/sensors/temperature_best_practices.asp

IV. Installation

4.1. Supply power to the BASE-WIRED via PoE(power over ethernet or 12V DC adapter/BASE-PWR) Other power options include BASE-PWR-USB, ADDON-POE, and ADDON-UPS.

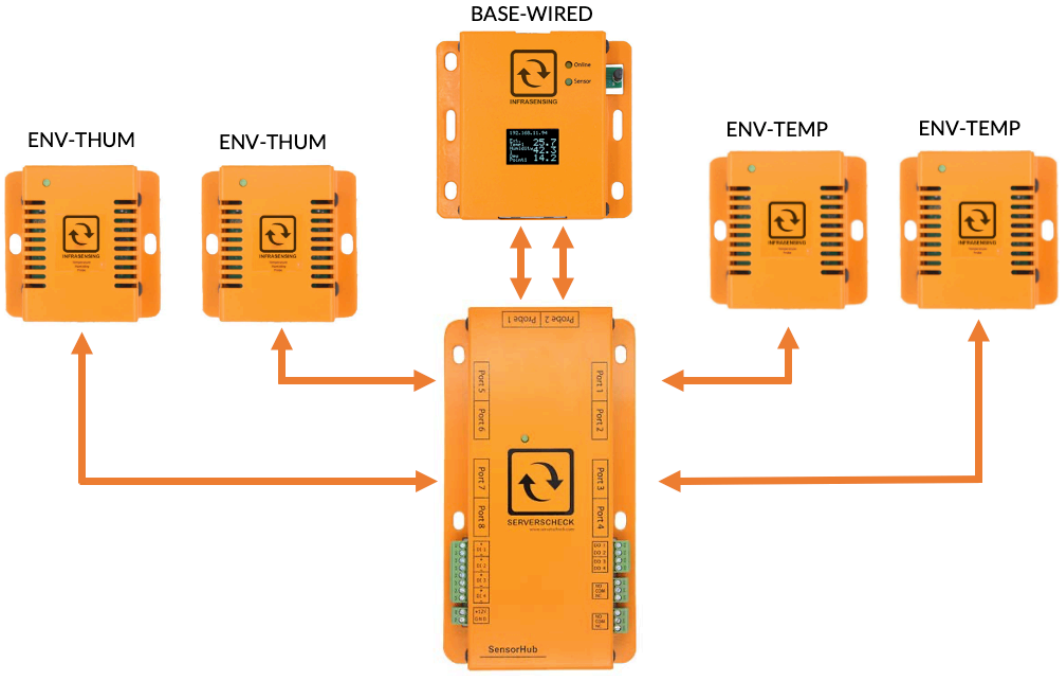


4.2. Connect the BASE-WIRED to the sensor probe.

- Via direct LAN connection

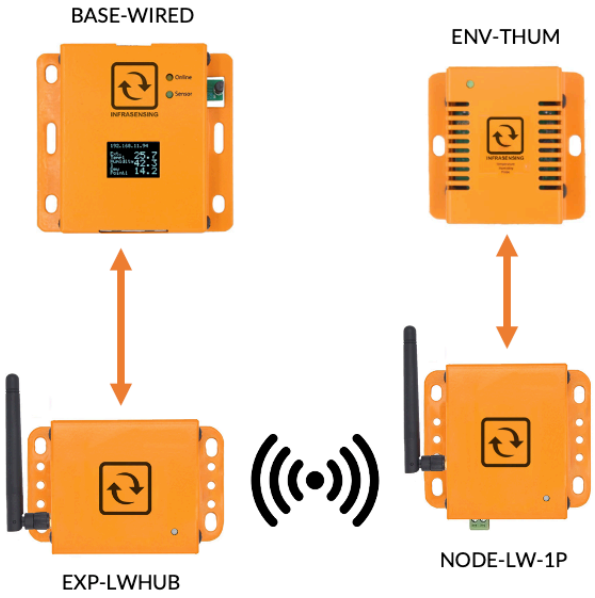
You can connect up to 2 sensor probes to the BASE-WIRED

- Via SensorHub(EXP-8HUB)



You can connect up to 8 sensor probes to the BASE-WIRED using the EXP-8HUB

- Via LoRa (EXP-LWHUB and NODE-LW-1P)



You can wirelessly connect your sensor probe to the BASE-WIRED, each LoRa hub can support up to 20 LoRa node. The LoRa Hub's power is supplied by the BASE-WIRED while the LoRa Node's power can be supplied by 12/24V DC or a USB-C type.