GREYSTONE
ENERGY SYSTEMS INC

Tech Tip!

# Tidbits Document – HTX1W series Wall mount Temp/RH transmitter at Data Hall

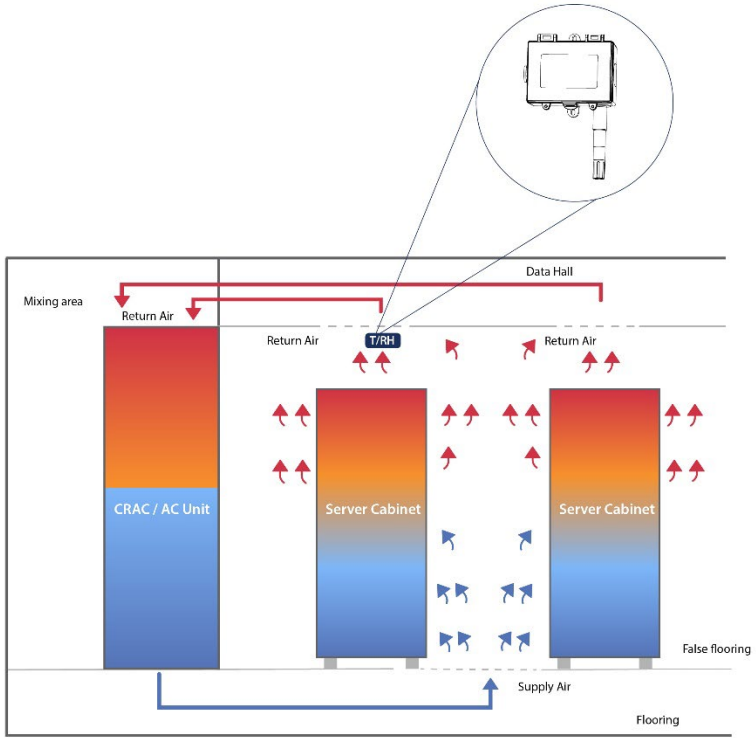


Figure 1: Section

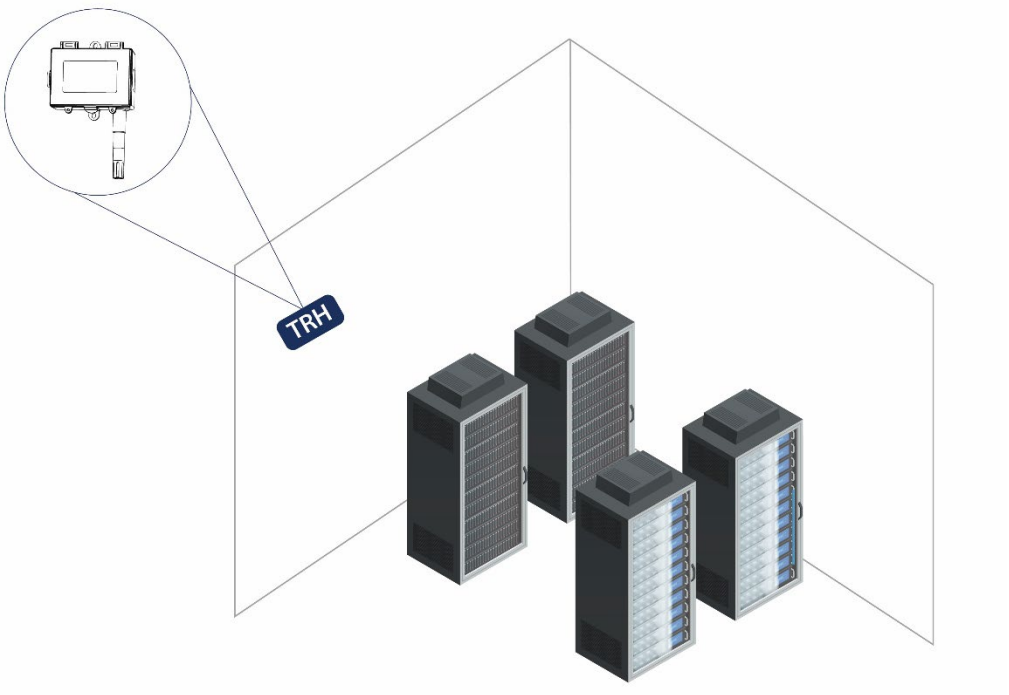


Figure 2: 3D

1. Refer to instruction manual for wiring connections and other suggestions.
2. RH/Temperature transmitter with attached probe to be install directly on a wall or standard electrical box.
3. Identify the hot aisle area to locate the RH/Temperature transmitter. If the rack cage is having multiple racks, use multiple RH/Temperature transmitters or identify the perfect RA path to locate the RH/Temperature transmitter as shown in above typical installation image.
4. Do not mount the Temp/RH probe near doors, open windows, supply air diffusers or other known air disturbances, ensure there is free airflow around the sensor probe to obtain accurate readings.
5. Number of Temp/RH transmitters count to be finalized based on the hot aisle return air flow circulation, and adding more will improve reading accuracy.
6. Avoid areas where the locations exposed to vibrations or rapid temperature change.
7. Follow proper electrostatic discharge (ESD) handling procedures when installing the device or equipment damage may occur.
8. Do not locate the RH/Temperature transmitter cables in the same conduit with the cable used to supply inductive loads such as motors.
9. Connect the 24V ac/dc power supply to the terminals labelled PWR (power) and COM (common) and maintain a minimum voltage of 22V ac/dc.
10. 24V ac power is used, and one side of the transformer is earth grounded. In general, the transformer should NOT be connected to earth ground when using devices with RS-485 network connections.
11. Shielded wire cable connections and ground shield to the DDC panel Earth.
12. Shielded and twisted pair cable (A-, B+ and SHLD) should be used for communication (in a daisy
    chain configuration) type device and the shield to be connected to panel earth.
13. Use separate cable for 24v power supply and calculate consumption in case connecting multiple Temp/RH units to a single power source.
14. Set EOL jumper at the end of RS485 network communication loop
15. Follow local electrical codes and use proper terminations (e.g., cable lugs, shielded cables).