

|                                                                                   |                                                                                         |           |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------|
|  | <h1>Installation Guide</h1>                                                             | IN-IC2-01 |
| <b>Title:</b>                                                                     | RH-Temp Combo Sensor (DPWC155SCO) Installation For i-Controller 2.0 & i-Controller 2.0e |           |

## Overview

The relative humidity and temperature combination sensor for indoor applications provides both humidity and temperature readings using one device. Before proceeding with these instructions, first determine whether your unit is equipped with an IC2.0 controller or an IC2.0e controller. Examples of both controller types can be found at the top of page 2. Once you have identified the controller installed on your unit, follow the instructions located directly beneath the corresponding controller image for wiring instructions.

## Specifications

| General                |                                    |
|------------------------|------------------------------------|
| Input Power            | 12 to 24 VAC                       |
| Enclosure              | Plastic                            |
| Relative Humidity (RH) |                                    |
| Sensing Element        | Digitally profiled capacitive      |
| RH Accuracy            | ±5% RH over the range 10%-90% RH   |
| Operating Range        | 10-90% RH                          |
| Analog Output          | 0-10VDC; 3-wire (observe polarity) |
| Scaling                | 0-100% RH (0-10VDC)                |
| Temperature            |                                    |
| Accuracy               | ±0.7°C from -10°C to 60°C          |
| Analog Out             | Resistive, 2-wire, no polarity     |

Table 1. Sensor Specifications

## Mounting Location

Mount the sensor indoors in a central location within the zone to be measured, away from doors, windows, vents, heaters, and outside walls that could affect temperature readings. The sensor should be at least four feet from the floor, and no higher than necessary to prevent tampering.

## Installation

1. Insert a screwdriver into the gap on the left side of the sensor enclosure to release front cover latch and separate front part of the enclosure away from the rear mounting plate.
2. Use the mounting holes in the back plate to mount the plate on a junction box, or against a wall or riser. *(Do not mount the plate upside down or sideways. Mount plate with terminal blocks at the bottom).*
3. If necessary, drill or cut a hole in the wall to allow sensor cable to run through the wall into the back of the mounting plate.
4. Must use either a 3 and 2-wire conductor cable or a 5-wire conductor cable. Wire as indicated below in figure 1 for i-controller 2.0 and figure 2 i-Controller 2.0e.
5. To prevent electromagnetic interference from causing erratic sensor readings, keep the sensor cable away from any parallel line-voltage power, variable frequency drive (VFD) output or high-current conductors.

**Title:**

RH-Temp Combo Sensor (DPWC155SCO) Installation For i-Controller 2.0 &amp; i-Controller 2.0e

## I-Controller 2.0

Single controller only



## I-Controller 2.0e

Controller with expansion board



### I-Controller 2.0 Space sensor 1 wiring

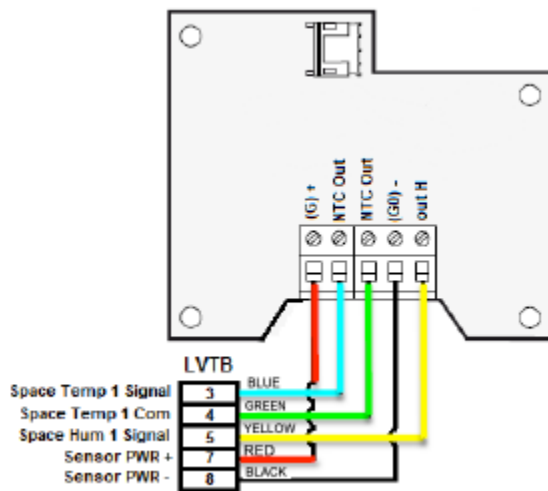
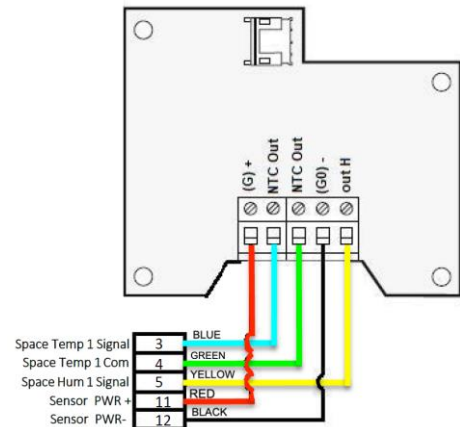


Figure 1. Sensor Terminal Connections

### I-Controller 2.0e Space sensor 1 wiring



### I-Controller 2.0e Space sensor 2 wiring

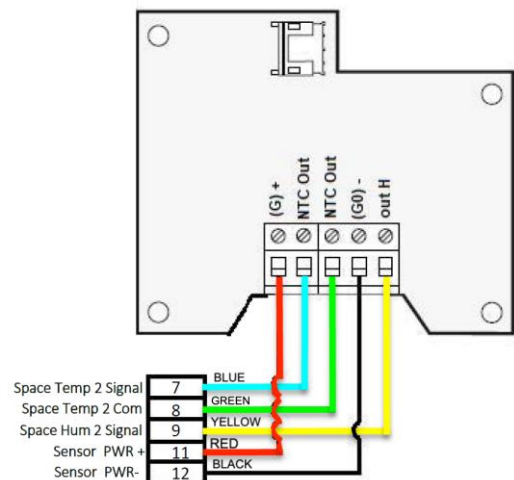


Figure 2. Sensor Terminal Connections