Space Temperature/Humidity Transmitter With Display Installation Instructions

AD Enclosure

Separate RH or Temperature transmitter

Corporate Enclosure

Combined RH and Temperature transmitter

Space Temperature/Humidity Transmitter

Designed for temperature or humidity measurement of occupied spaces. Featuring a digital display of the same signal that is sent to the controller. AD enclosure features either temperature or humidity, Corporate enclosure features both temperature and humidity.

Installation

Space sensors can be mounted directly on a wall or to a wall box. For the most accurate results, units should be mounted on an inside wall to a wall box, away from any supply air exhausts and other sources of heat or cold.
The RH sensor and other components are static sensitive. If the PCB must be removed it should be handled by the edges only. Do not touch the RH sensor as it could be damaged.

Specifications

Specification	Temperature	Humidity	Temperature/Humidity
Operating Temperature Range	0 to 70 ºC (32 to 158 ºF)	0 to 70 ºC (32 to 158 ºF)	0 to 70 ºC (32 to 158 ºF)
Power Supply	22-30 Vdc (with 250 ohm load)	22-30 Vdc (with 250 ohm load)	18-30 Vdc (with 250 ohm load)
Display Range	Same as transmitter range	0 to 100 % RH	Same as transmitter range (temp) 0 to 100 % RH
Wiring Connections	Screw Connectors, 14 – 22 awg	Screw Connectors, 14 – 22 awg	Screw Connectors, 14 – 22 awg
Output Signal	4-20mA	4-20mA	4-20mA/4-20mA
Transmitter Accuracy	+/- 0.1% span	+/- 2, 3 or 5 %RH	Same as individual units
Display Accuracy	+/- 0.2 ºC or ºF	+/- 0.5% RH	+/- 1% RH, +/- 0.5 ºC or ºF

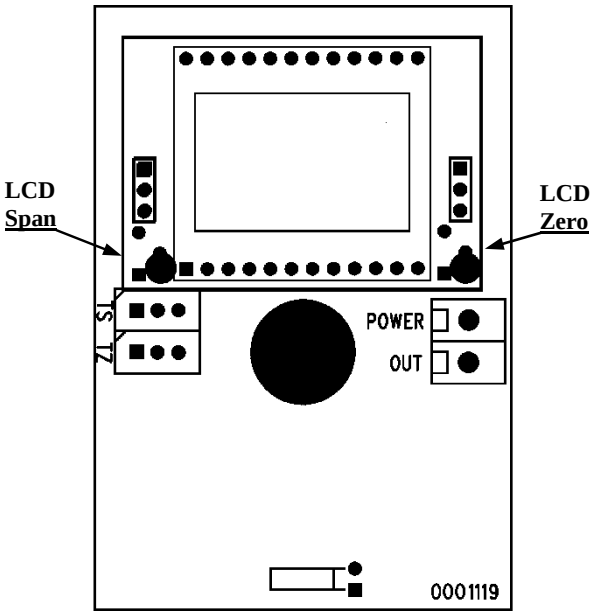
Calibration

Field calibration of these devices is not recommended as it requires the removal of the sensors. However, if it becomes necessary to adjust the calibration, the 4-20 mA output can be adjusted with the TZ & TS pots (temperature zero and span) and the RZ & RS pots (RH zero and span). The displays on the AD units can also be adjusted independent of the 4-20mA signal by the pots that are accessible from the back of the PCB (see the drawings on the following page). The temperature display on the RH/Temperature combination PCB can be adjusted with the pot labeled LCD. It is a single point adjustment. The RH display can not be adjusted on this unit.

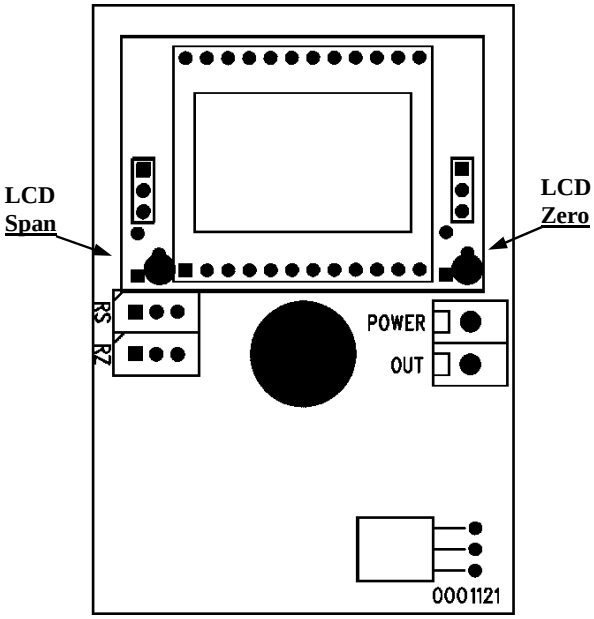
Wiring

The terminals are marked on the board as Power (24Vdc in) and Out (signal output) for the AD units, and as Power (24Vdc in), T_Out (temperature signal output) and RH_Out (RH signal output) for the Corporate unit. These devices are wired as standard 4-20mA loop-powered analog input points.

Temperature Transmitter with LCD



RH Transmitter with LCD



RH & Temperature Transmitter with LCD