

**DriSteem Part Number: 405883-108**

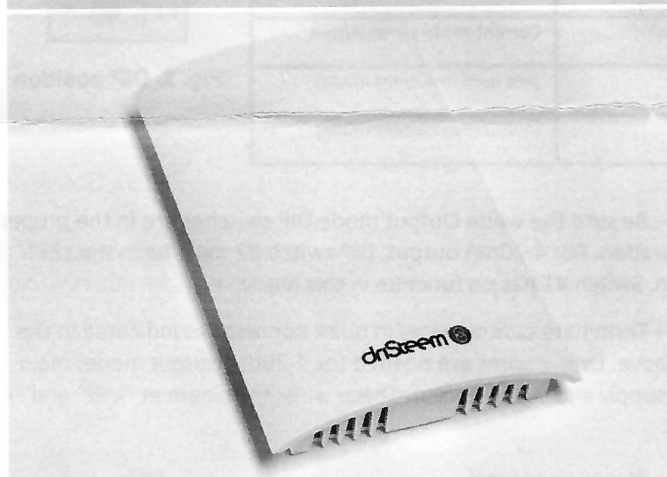
**Description: TRANSMITTER RH ROOM AERO**

Manufacturer Part Number: THHRAZ2A-D

# AeroSeries

Wall Humidity Transmitter 4-20mA

## PRODUCT INSTALLATION DATA



## GENERAL

High quality room relative humidity sensor in an attractive low-profile plastic enclosure. Humidity elements have high accuracy and very low drift over 5 years.

The onboard DIP switches enable user to select proper relative humidity analog output signal in the field for 0-5V, 0-10V and 4-20mA, preset to 4-20mA.

The Quick Connect wire terminals make installation easy and eliminates screw terminals and wire nuts.

## FEATURES

- Wide sensing range
- Capacitance-type sensing element for rel. humidity
- High airflow and fast response

## SPECIFICATION

### Measured Values

#### Relative humidity (4...20mA)

Working range 10...90% %RH (non-condensing)  
 Accuracy (active sensor)  $\pm 2\%$  RH (10...90% RH) at 20 °C,  
 otherwise  $\pm 5\%$  RH  
 Temperature dependency typically  $\pm 0.05\%$  RH / °C  
 Typical response time < 180 s  
 Long Term Stability: < 0.25% per year  
 Repeatability: 0.8% RH @ 25°C  
 Sensitivity: 0.1% RH

### General Specifications

Supply Voltage (500 Ohm Load) 13 to 35 VDC  
 Supply Current 4-20mA  
 Connection Spring-loaded terminals, max.1.5mm<sup>2</sup>

Housing material Injection-molded ABS UL 94 HB  
 Cover Quick snap, injection-molded ABS

Mounting Direct mounting with quick snap faceplate. Fits standard single gang box or mounts directly to wall. Built-in level for accurate installation.

EMC EN61326-1, EN61326-2-3; FCC Part 15, Class B; ind. environment: ICES-003 Issue 5 Class B

Working conditions 0...50°C / 32...122°F  
 0...95% RH (non-condensing)  
 Storage conditions -25...+60 °C (-13...+140 °F),  
 20...80% RH

Dimensions See Fig 1.  
 Mounting wall or space  
 Approvals CE / RoHS

### Outputs

Analog output RH 4...20mA  $\equiv$  0...100%

## WIRING

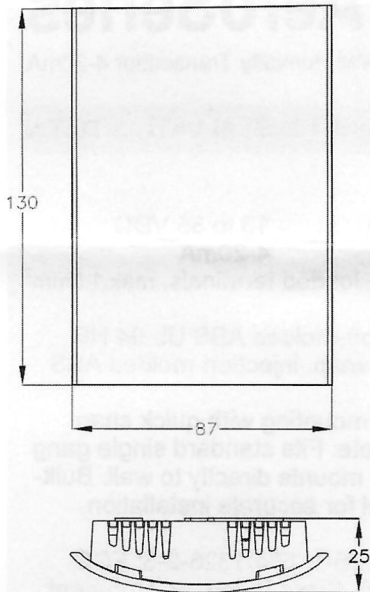
	maximum length
sensor to controller	200 m (660 ft)

**NOTE:** Installation of the sensor near high EMI-emitting devices may lead to faulty measurements.

Use shielded wiring in areas with high EMI.

Keep 15 cm (6") min. distance between sensor lines and 230 Vac power lines.

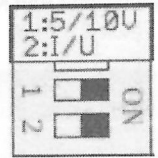
## DIMENSIONS



**Fig. 1. Dimensions (mm)**

## CONFIGURATION

Terminal	Function
TEMP	N/A
VIN	Main power – DC only
4-20mA	Current mode signal output
COM	(not used in current mode)
VOUT	(not used in current mode)



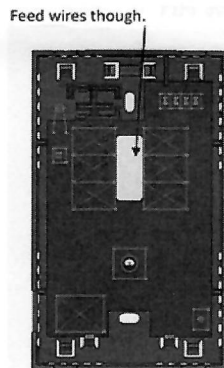
**Fig. 2. DIP position**

Step 1 – Be sure the white Output mode DIP switches are in the proper configuration. For 4-20mA output, DIP switch #2 must be in the LEFT position. Switch #1 has no function in this mode.

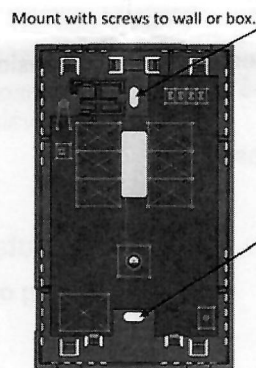
Step 2 – Terminate control wires in quick connects as indicated in the table above. Only 2 wires are needed for 4-20mA output mode; main power supply and signal output. These wires terminate at “VIN” and “4-20mA”.

Step 3 – Power on control.

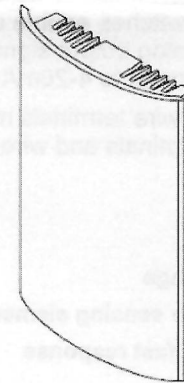
## MOUNTING INSTRUCTIONS



**Step 1 –** Feed wires through hole in rear of sensor.



**Step 2 -** Mount with screws, then make connections.



**Step 3 –** Snap on cover. Depress hooks through vents with tool to remove.

**Fig. 3. Mounting diagram**

## ORDERING INFORMATION

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