AVTECH's Digital Shielded Temperature & Humidity Sensor monitors ambient indoor temperature and humidity in locations where electromagnetic interference (EMI) would otherwise interfere with the sensor's readings. The 2" L x ⅜" diameter probe is small and light enough to install almost anywhere with no special tools.

This "Plug and Play" sensor has an operating range of -40º to 185º Fahrenheit (-40º to 85º Celsius) and 5% to 95% relative humidity (RH) non-condensing. It provides temperature values accurate to +/- 2° C; its humidity accuracy is +/- 4.5% at below 60% RH and +/- 6.5% at 60% RH and above.

Your Room Alert uses these readings to calculate heat index for the "feels like" temperature and dew point (at 45% RH and above) for a more accurate depiction of the amount of moisture in the air.

Digital Shielded Temperature & Humidity Sensor Package Contents

- One (1) Digital Temperature & Humidity Sensor with built-in shielded RJ-11 cable

    This sensor is available in 25', 50' and 100' lengths:

Length	Digital Shielded Temperature & Humidity Sensor
25'	RMA-DTHS-SEN
50'	RMA-DTHS50-SEN
100'	RMA-DTHS100-SEN

Digital Shielded Temperature & Humidity Sensor Features

Probe Cap

The cap on the Digital Shielded Temperature & Humidity Sensor features 1 air hole on the tip of the casing. This approximately 0.1" diameter hole allows air to reach the humidity and temperature sensing components inside.

Condensation

The probe should not be placed in an environment where condensation can form.

Bright light

The humidity-sensing component is sensitive to light; bright light shined directly into the cap's air hole may result in erroneous humidity readings.
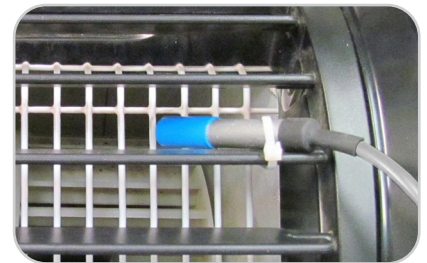
Sensor Cable

The foil shielding in the sensor's RJ-11 cable filters out EMI, which can interfere with the sensor's readings and even impact the connected Room Alert. The cable's outer jacket and interior insulation are made of mPPE (Modified Polyphenylene Ether, a thermoplastic).

Install Your Digital Shielded Temperature & Humidity Sensor

Do not use this sensor in hazardous (classified) locations or life safety applications.

1. Locate the probe (the end with the blue cap) where you wish to measure temperature and humidity. Shown here is a Digital Shielded Temperature & Humidity Sensor placed on the grill of an air conditioner to monitor cool air output.

2. If necessary to hold the probe in place, mount it with a cable clip, Velcro or nylon tie.

3. Run the built-in cable back to your Room Alert.

4. Connect the sensor to a digital sensor port on your Room Alert.

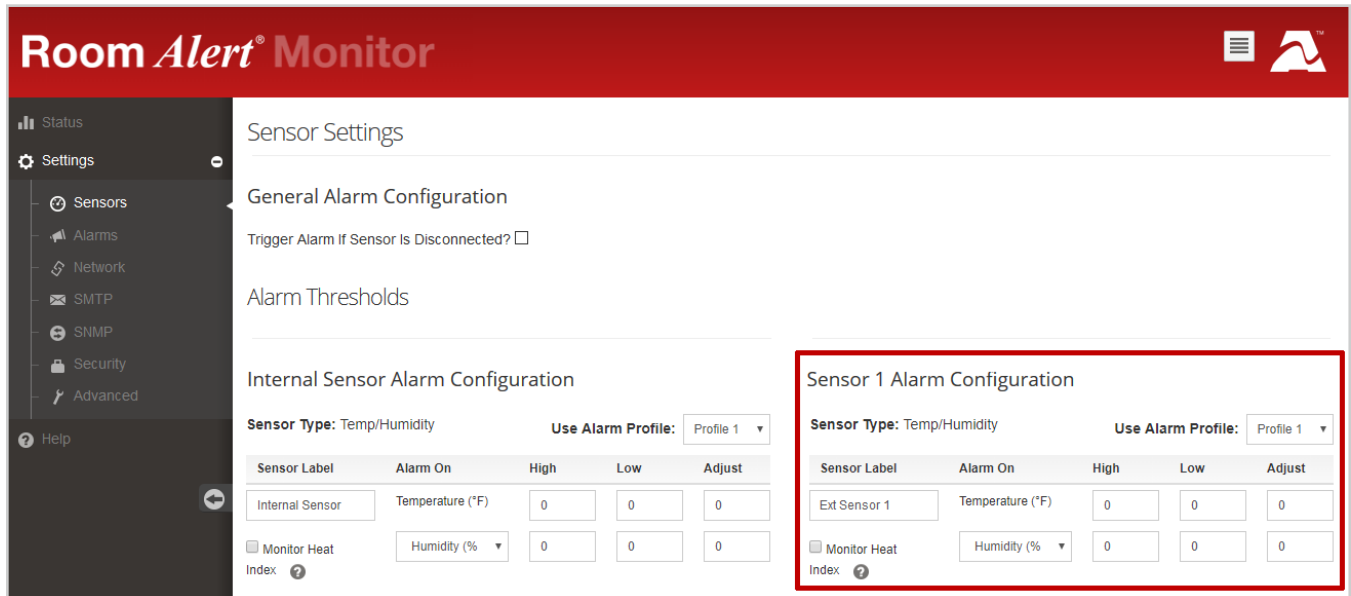

Sensor Features & Specifications

Environment Condition Monitored	Indoor ambient temperature & humidity in EMI-prone spaces
Type Of Sensor	Digital
Power Supply	Powered by Room Alert
Sensor Cable Type	Shielded RJ-11 (straight-through telephone cord)
Included	Yes (built-in)
Shielding	Foil
Jacket & insulation	mPPE (Modified Polyphenylene Ether)
Length	25' (50' and 100' also available)
Maximum Extendible Length	100' total
Temperature Range	-40° F to 185° F (-40° C to 85° C)
Accuracy	+/- 2° C
Resolution	0.03125° C
Humidity Range	5% to 95% relative humidity (RH) non-condensing
Accuracy	+/- 4.5% RH at 5 to 59% RH; +/- 6.5% RH at 60 to 95% RH
Resolution	0.333% RH
Compatible Products	25' & 50' lengths: Room Alert 32S, 12S, 3S, 32E, 12E, 4E & 3E 100' length: Room Alert 32S, 3S, 32E, 12E and 3E

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Configure Your Digital Temperature & Humidity Sensor

Use Room Alert's Built-In Web Interface

Navigate to **Settings** → **Sensors** in the web interface of your Room Alert. The options you see below will vary depending on the model.

1. Scroll to your external digital sensor(s), the total number of which will vary depending on the Room Alert model.

2. Find the digital sensor interface that matches the port you connected your Digital Temperature & Humidity Sensor to. For example, if you used the first digital port on your Room Alert, look for *Sensor 1 Alarm Configuration*; if you used the second, look for *Sensor 2 Alarm Configuration*, and so on. Notice that your Room Alert monitor automatically detects the type of digital sensor and displays it in *Sensor Type*.

3. In *Sensor Label*, you may leave the default, "Ext Sensor X," or enter something more descriptive. Room Alert "E" models accept up to 15 characters, including only letters, numbers, spaces, hyphens (-), underscores (_) or periods (.). Room Alert "S" models accept up to 30 characters, including the above and special characters, like ampersand (&).

4. *Alarm On* automatically populates with *Temperature* (at the default scale) and *Humidity*.

   - You may change the default temperature scale in the **Settings** → **Advanced** → **General** tab. Please refer to your Room Alert *User's Guide & Reference Manual* for more information.

   - You may select **Dew Point** from the *Humidity* drop-down menu if you wish to set thresholds for the dew point (temperature) rather than the humidity (%RH).

5. You may select **Monitor Heat Index** if you wish to set thresholds on the "feels-like" temperature. Notice that the *Humidity* threshold fields become grayed out and *Alarm On* changes to *Heat Index* at the default temperature scale.

6. In *High* and *Low*, you may enter values for high and low thresholds. Your Room Alert generates alerts based on those thresholds.

    *   Room Alert "E" models: the default High & Low is 0—which means no alarm is configured.

    *   Room Alert "S" models: the High & Low fields are disabled by default. You may enable each field individually by selecting its check box.

7. In *Adjust*, you may leave the default, 0, or enter a value to adjust the temperature or humidity reading if it differs from a known value at that location. On Room Alert "S" models, you must enable the *Adjust* field by selecting its check box before entering a value.

8. In *Use Alarm Profile*, which controls light towers and relays on your Room Alert, you may leave the default, **Profile 1**, or choose another profile from the drop-down menu.

9. Select **Save Settings** at the top or bottom of the page. Your Room Alert will automatically reboot and commit your changes.

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