

# User's Guide & Reference Manual Room Alert<sup>®</sup> MAX



#### **Copyright Information**

© Copyright 1988-2025 AVTECH Software Inc.

All Rights Reserved. No part of this book may be used or reproduced for commercial benefit in any form or by any means, or stored in a database or retrieval system, without prior written permission of AVTECH Software Inc., except in the case of brief quotations embodied in articles and reviews. Making copies of any part of this book for any purpose other than your individual use is a violation of United States copyright laws and international treaty provisions. For information or additional copies, contact AVTECH Software Inc., as directed below. Published in the United States of America.

#### Warning and Disclaimer

This publication is shipped as is, without warranty of any kind, either express or implied. While every precaution has been taken in the preparation of this publication, the publisher and authors assume no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information or instructions contained herein. It is further stated that the publisher and authors are not responsible for any damage or loss to your data or equipment that may result directly or indirectly from your use of this publication and the related hardware & software. Nothing on any AVTECH website or in documentation shall be construed as conferring any license under any of the AVTECH Software (AVTECH) or any third party's intellectual property rights, whether by estoppel, implication, or otherwise.

#### **Trademark Acknowledgments**

AlertScript, AVTECH, the AVTECH Logo, AVTECH Software, the AVTECH System Manager Character, AVTECH.com, AVTECHSoftware.com, Environment Alarm, "Environment Monitoring Made Easy!", EnvironmentMonitor.com, "IT Environment Monitoring Made Easy!", MUPS, Device Discovery, Device ManageR, "Protect Your Facility... Don't Wait Until It's Too Late!", "Protect Your IT Environment... Don't Wait Until It's Too Late!", Room Alert, Room Alert Signal Tower, Signal Tower, RoomAlert.com, RoomAlert.co.uk, RoomAlert.eu, TemPageR, TemPageR.com and "Temperature Monitoring Made Easy!", WiSH, and WiSPR, are trademarks or registered trademarks of AVTECH Software Inc. Any other trademarks, product or company names mentioned herein are the property of their respective owners and used strictly for the purpose of identifying compatibility. AVTECH Software Inc. cannot attest to the accuracy of any other organization's ownership claim to a trademark and use of any trademark in this publication should not be regarded as affecting the validity of any trademark or service mark.

#### **Contact Us**

#### **Worldwide Headquarters**

AVTECH Software, Inc. 16 Cutler Street, Cutler Mill Warren, RI 02885-2761 USA

Visit us on the web at **AVTECH.com** Log in to your account at **RoomAlert.com** 

#### Sales

Need to expand your monitoring capacity? Visit our online store 24/7 at <a href="https://AVTECH.com/Products/Environment\_Monitors/">https://AVTECH.com/Products/Environment\_Monitors/</a> Want expert advice? Contact our Product Specialists Monday to Friday, 9 AM to 5 PM EST (excluding holidays).

#### Sales@AVTEH.com

Quote Request at https://AVTECH.com/quote/ Live Sales Chat at https://AVTECH.com/ 888-220-6700 (In the USA & Canada, toll-free) 401-628-1600 (Outside the USA & Canada)

#### **Technical Support**

Questions about your product? Get answers 24/7 at our online Support Center. Need more help? Contact our Technical Support Monday to Friday, 9 AM to 5 PM EST (excluding holidays).

#### Support@AVTECH.com

Live Support Chat at https://AVTECH.com/support/ 888-220-6700 (In the USA & Canada, toll-free) 401-628-1600 (Outside the USA & Canada)

# **Table Of Contents**

1. Room Alert MAX Hardware	5
1.1. MAX Base Station	5
1.2. Temperature /Humidity Sensor	6
1.3. Wired Sensor Adapter (Optional)	7
2. How To Install Room Alert MAX	8
2.1. Setup Steps	8
2.2. Connect the Base Station to your network	8
2.3. Access Base Station's web interface and (optionally) configure Wi-Fi	9
2.3.1. Access the Web Interface	9
2.3.2. Connect the Base Station to your wireless network	9
2.4. Pair Wireless Sensors & Wired Sensor Adapters	10
2.5. Mount Your Base Station	11
2.6. Install Your Sensors	12
2.7. Install Your Wired Sensor Adapters	13
3. How To Use The Room Alert MAX Web Interface	14
3.1. Readings	14
3.2. Settings	17
3.2.1. Web Interface Settings	17
3.2.2. Wi-Fi Settings	17
3.2.3. Ethernet Settings	
3.2.4. TLS Certificate Settings	19
3.2.5. Date & Time Settings	19
3.2.6. RoomAlert.com Push Settings	20
3.2.7. Scale Settings	20
3.2.8. Email Settings	20
3.2.9. Credentials	22
3.2.10. Reset to Defaults	22
2.2.11 Sansar Connections	23

3	3.3. Alerts	24
4. Fo	or More Information	.24
5. Te	echnical Specifications	.26
5	5.1. MAX Base Station	26
5	5.2. MAX Temperature & Humidity Sensor	27
5	5.3. MAX Wired Sensor Adapter	28
5	5.4. Wireless Safety & Compliance Information	29

# **1. Room Alert MAX Hardware**

#### 1.1. MAX Base Station



- 5. **RESET Button** A small push button resets the Base Station to its default factory settings.
- 6. USB-A Port A USB-A port for future applications.
- 7. Ethernet Port A PoE-enabled port connects the Base Station to your network via an RJ-45 Ethernet cable.
- **8. USB-C Port** A USB-C power port connects to an electrical outlet via a Room Alert MAX Power Adapter.

#### 1.2. Temperature /Humidity Sensor



	Internal Sensors	Digital sensors monitors ambient temperature with a range of -40 to 257°F (-40 to 125°C) and relative humidity with a range of 0% to 100% RH.
1.	Status LED	An LED indicates the status of the device.
2.	PAIR Button	A small push button puts the device into pairing mode.
3.	Pairing Label	This label includes a QR code and the PIN for wireless pairing.
4.	Battery Compartment	2 non-rechargeable AA batteries power the sensor.
5.	USB-C Port	(Optional) A USB-C power port connects to an electrical outlet via a Room Alert MAX Power Adapter.

## 1.3. Wired Sensor Adapter (Optional)



	Internal Sensor	A digital sensor monitors ambient temperature with a range of -40 to 257°F (-40 to 125°C).
1.	Status LED	An LED indicates the status of the device.
2.	Pairing Label	This label includes a QR code and the PIN for wireless pairing.
3.	PAIR Button	A small push button puts the device into pairing mode.
4.	USB-C Port	A USB-C power port connects to an electrical outlet via a Room Alert MAX Power Adapter.
5.	Digital Ports	(2) Standard RJ-11 jack(s) connect any AVTECH wired digital sensor via a standard RJ-11 (straight through) telephone cord.
6.	Switch Port	Dry contacts connect to any AVTECH switch sensor or dry contact on a device (e.g., HVAC, generator, pump, fan, etc.) via standard speaker wire or low-voltage 2-wire cable.

# 2. How To Install Room Alert MAX

To ensure optimal wireless connectivity, configure your Base Station and sensors/adapters before mounting them. This allows you to test both:

- The Base Station's signal strength on your Wi-Fi network (if applicable)
- The wireless link quality between the Base Station and sensors/adapters

#### 2.1. Setup Steps

This section of the manual guides you through the following steps:

- 1. First, connect the Base Station to your network and verify its signal strength.
- 2. Next, pair your sensors and adapters with the Base Station.
- 3. Then determine optimal mounting locations by checking for a strong, stable wireless signal.
- 4. Finally, securely mount your hardware in the chosen locations.

That's it! Once installed, you can configure settings and alerts.

#### 2.2. Connect the Base Station to your network

To enable Wi-Fi (optional), the Base Station must first be configured over a wired Ethernet connection.

#### If Your Network Is Power Over Ethernet (PoE) Enabled...

- Connect one end of a standard Ethernet cable to the Base Station's Ethernet port.
- Connect the other end to a PoE-enabled network jack.

Your Base Station is now powered and discoverable on your wired network.

#### If Your Network Is Not Power Over Ethernet (PoE) Enabled...

- 1. Connect To Your Network First
  - Connect one end of a standard Ethernet cable to the Base Station's Ethernet port.
  - Connect the other end to a network jack.
- 2. Then Connect To Power
  - Plug one end of the Room Alert MAX 2A Power Adapter into the Bast Station USB-C power port.
  - Plug the other end into a surge-protected power source.

NOTE

Use the Room Alert MAX 2A Power Adapter or a 5V USB-C. Other voltages could damage the Room Alert hardware and void your warranty.

Your Base Station is now powered and discoverable on your wired network.

#### 2.3. Access Base Station's web interface and (optionally) configure Wi-Fi

#### 2.3.1. Access the Web Interface

To access the interface, type the Base Station's IP address directly into the address bar of your web browser. You may find the IP address...

- Through your <u>RoomAlert.com</u> account or the Room Alert App by navigating to **Devices** and clicking on your Base Station in the list to open its *Details* page.
- Using the Room Alert Discovery utility (available to download from RoomAlert.com) to scan your network for the device.

The web interface is secured with a username and password. The default credentials are:

- Username: **admin**
- Password: **password**

*The web interface opens to the Readings page by default. For information about this page, see "3.1. Readings" on page 14.* 

#### 2.3.2. Connect the Base Station to your wireless network

- 1. Navigate to **Settings**  $\rightarrow$  **Wi-Fi** to open the *Wi-Fi Settings* screen.
- 2. Wi-Fi is disabled by default. Click the toggle to enable it.
- 3. A list of available networks will populate; select your network from the list.
- 4. Enter your credentials, and (optionally) IP settings.
- 5. Click **Connect**.
- 6. If the connection is successful, it will show as connected at the top of the networks list; you may check its signal strength here or in the *Readings* page.

For more information about Wi-Fi, including the supported encryption protocols, see "3.2.2. Wi-Fi" on page 19.

1

#### 2.4. Pair Wireless Sensors & Wired Sensor Adapters

Navigate to **Settings** → **Sensor Connections** to open the *Sensor Connections* screen.

To pair a new sensor or adapter to your Base Station, first connect it to power. Then click the **+ Pair new sensor or adapter** button.

Then follow the on-screen prompts through the following steps:

- 1. Enter the 6 digit PIN listed on the sensor/adapter's sticker and click **Next**.
- 2. Press the physical PAIR button on the back of the sensor/adapter.
  - The LED on the front of the sensor/adapter will flash **blue** to indicate it is in pairing mode; once it is flashing, click **Pair**.
- 3. The Base Station will attempt to pair with the sensor/adapter, and show feedback on-screen.



If pairing fails, bring the sensor/adapter closer to the Base Station and try again.

- 4. Once the sensor/adapter is paired to the Base Station, you can find it in the Readings page, and check its signal strength. *For more information, see "3.1. Readings" on page 14.* 
  - Bring the sensor/adapter to your desired mounting location and then check its signal strength. Ensure a strong signal prior to mounting it in place.

### 2.5. Mount Your Base Station

Before mounting your Base Station, be sure to check for a strong Wi-Fi signal and wireless link with sensors/adapters.



#### 2.6. Install Your Sensors

#### Sensor Placement

Choose a suitable mounting location for your sensor in the area you want to monitor. Avoid high-traffic areas, as people passing by can interfere with signal strength.

#### First, Insert Batteries

- Remove the battery compartment door by sliding it downward; this will serve as the mounting bracket.
- Insert the included (2) AA batteries, ensuring proper polarity.

NOTE

Use **only non-rechargeable** batteries. In most installations, batteries last at least 2 years under normal use.

• (Optional) If desired, the sensor can be powered via its USB-C port; in this setup, batteries can serve as backup during power outages.

#### Next, Mount The Sensor

The sensor can be mounted using either screws or the included dual-lock tape. For optimal airflow, mount the sensor with its ventilated side facing upward.

#### A. Screw Mounting

- Secure the battery compartment door to the wall using screws.
- Attach the sensor onto the mounted door by pushing it straight forward onto the 4 notches. (Tip: when aligned, you'll see approximately 3 mm of the mounting door overhanging the bottom of the sensor, as pictured.)
- Press the sensor downward approximately 3 mm to snap it into place.

#### **B.** Tape Mounting

- Close the battery compartment door on the sensor by aligning the 4 notches and sliding it into place.
- Attach the double-sided latch tape to the back of the door.
- Press the entire unit firmly against the mounting surface, holding it in place for a moment to set.

#### **Removing The Sensor**

The sensor can be removed from the mount to access its PAIR button or replace batteries. To remove it, first slide the sensor upwards approximately 3 mm to release it from the mount latches. Then pull the sensor toward you and off of the mount.

10 00 oz yend		
÷	6	

#### 2.7. Install Your Wired Sensor Adapters

#### Adapter Placement

Choose a suitable mounting location for your adapter based on the wired sensors you intend to connect. Avoid high-traffic areas, as people passing by can interfere with signal strength.

#### Mount The Adapter

You may hang it from a nail, screw or hook through the key hole slots, secure it with dual-lock tape, or simply place it on a flat surface.

#### **Connect Power**

- Connect the Room Alert MAX 2A Power Adapter to the adapter's USB-C power port.
- Plug the other end into a surge-protected power source.



Use the Room Alert MAX 2A Power Adapter or a 5V USB-C. Other voltages could damage the Room Alert hardware and void your warranty.

#### Then connect external sensors

Install up to (2) digital sensors and (1) switch sensor according to the sensors' <u>Installation Notes</u>, available at <u>https://avtech.com/support/</u>.



# 3. How To Use The Room Alert MAX Web Interface

For information about accessing the Base Station's web interface, see "2.3.1. Access the Web Interface" on page 9.

Your Room Alert MAX web interface has 3 tabs:

- Readings
- Alerts
- Settings

#### 3.1. Readings

The Base Station's web interface opens by default to the **Readings** page, where you may view all sensor statuses.

( Room Alert	$\vee$ Warehouse Hub		Room Alert Hub - 02:38:47:33:11:23 🎄
(••) Readings	Device Info Model: Room Alert NG Hub Firmware: v1.1.1 Sensors: 9 connections	Network Ethernet IP: 192.168.0.30 WI-Fi: Connected to Example WI-Fi IP: 192.168.2.60	Push Connectivity RoomAlert.com: Connected Register To: Example Org Name Last Push: 6 min ago
Settings	Break Boom Temp	Hub Internal Temp	Sensor Label =
Log out	Wretess Temperature 02:38:47:33:41:22 ♦♦ Strong - 4 min ago - ■ OK Strong - 4 min ago - ■ OK	Internal Temperature Room Alert Hub • 0 min ago -	• For perature / Humidity     Wireless Temperature / Humidity       • 7 min ago • ● OK     • Ø Strong • 1 min ago • Ø       • Perature ● Humidity     ● Temperature ● Humidity
	<b>87</b> .90°F	80.77°F	1.84°F         23.19%RH         74.66°F         27.72%RH           at Index         Dew Point         Heat Index         Dew Point           1.84°F         47.20°F         74.66°F         48.65°F
	Packing Area T/H Wireless Temperature / Humidity 02:38:473:33:55:0	Picking Area T/H Wireless Temperature / Humidity 02:38:47:33:18:16 Wireless 04 Eair 2 zino ano 2 zino 2 zin	ing T/H Temperature / Humidity 212120 Ample area (14)
	Temperature         Humidity           74,12°F         55,64%RH           Heat Index         Dew Point           74,12°F         58,15°F	Temperature         Humidity         Temperature           79.52°F         32.27%RH         73           Heat Index         Dew Point         73           79.52°F         55.15°F         73	Operature         Operature <t< th=""></t<>
	> Ceiling Sensors	(+) Strong	Wireless Adapter - 02:38:47:33:11:23:54 🔹
	Adapter Box Temp  Internal Temperature Room Alert Adapter -0 min ago -	Drop Ceiling Dry Contact Port Switch Sensor - 4 min ago-	Air Flow Aired Temperature / Air -4 min ago-

#### Header

At the top of the page is the header, where you may view basic information about your device, including its name and MAC Address.

∨ Warehouse Hub		Room Alert Hub - 02:38:47:33:11:23 🔹 🏟
Device Info	Network	Push Connectivity
Model: Room Alert NG Hub Firmware: v1.1.1 Sensors: 9 connections	Ethernet IP: 192.168.0.30 Wi-FI: Connected to <i>Example-Network</i> Wi-FI IP: 192.168.2.60	RoomAlert.com: Connected Register To: Example Org Name Last Push: 6 min ago

If you expand the header, you may view additional information, including:

- Device Info, such as model, firmware version, and number of wireless connections
- · Network details, like Ethernet IP address, connected Wi-Fi network, and Wi-Fi IP address
- Push Connectivity with your <u>RoomAlert.com</u> account

# Tip

You may change the device name and other settings by clicking the cog icon  $\mathfrak{B}$  in the upper right corner of the header.

#### Navigating Sensor Readings

Your Base Station displays sensors in the following order:

- The Base Station's internal sensor
- Wireless sensor(s)
- Wired sensor adapter(s)

#### Sensor Display Area

Below the main page header is the sensors section where you may view your sensor data.



#### Sensor Cards

Each sensor card includes the following information:

- The sensor label, type and MAC address
- The strength of the signal to the Base Station (if applicable)
- The time elapsed since the Base Station last received sensor data
- The battery level (if applicable)
- Readings for all of the sensor channels



# Tip

You may change the sensor label, adjust readings and change other settings by clicking the cog icon 🕄 in the upper right corner of the sensor card.

#### Alarm Status Icons

Status icons are displayed for sensor channels associated with alert thresholds.

Status icon	Means
✓ Green circle with "✓" mark	The sensor channel is associated with one or more alert thresholds, and <b>all</b> of those alerts are currently in a clear state.
😢 Red circle with "X" mark	The sensor channel is associated with one or more alert thresholds, and <b>at least 1</b> of those alerts is currently in an alarm state.
No status icon	The sensor channel is not associated with any alert thresholds.

For more information about Alerts, see "3.3. Alerts" on page 24.

#### Wired Sensor Adapters

Wired sensor adapters have their own header, which includes the adapter's label, the strength of the signal to the Base Station, and the MAC address.

Below this header, the adapter's internal and external sensors are displayed.



Tip

You may change the adapter label, set sensor types and change other settings by clicking the cog icon 🕄 in the upper right corner of the adapter header.

#### 3.2. Settings

To adjust your Base Station's settings or to pair new sensors/adapters, select **Settings** in the navigation bar to the left of your screen; then choose a sub-tab to open the corresponding settings.

#### **Saving Settings**

To save a setting, click out of the field you just modified. Notice 2 buttons below the settings.

- A **Save** button applies your settings.
- A **Cancel** button re-loads the page without any unsaved changes you've made.

#### 3.2.1. Web Interface Settings

You may set defaults for the Status screen:

- In Refresh Rate,
- In *Web Port*, you may change the port number your web browser uses to connect to your Room Alert's web interface. By default, it uses port 80 for HTTP and port 443 for HTTPS.
- To change the web port, select the **Custom Web Port** checkbox above the *Web Port* field.
- Select the Enable HTTPS checkbox to enable your Room Alert to use HTTPS for its local web interface. When enabled, your Room Alert Monitor's local web interface is secured by a certificate issued to \*.roomalertmonitor.com.

#### 3.2.2. Wi-Fi Settings

On the **Settings** → **Wi-Fi** page, you may...

- Enable or disable Wi-Fi functionality using the toggle control.
  - Disabling Wi-Fi while connected to a network causes the device to drop the connection without losing its credentials or IP settings.
- Connect to a Wi-Fi network.
  - See the supported network types listed on the next page.
- Modify the device's Wi-Fi connection settings.
  - Click on your connected network, and then click **Make Changes**.
- Forget your Wi-Fi network.
  - Click on your connected network, and then click Forget
     Network. This will drop the connection and delete any saved credentials or IP settings.

For more information about connecting to a Wi-Fi network, see "2.3.2. Connect the Base Station to your wireless network" on page 9.

# Web Interface SettingsRefresh Rate5Custom Port-Web Port80Enable HTTPS-CancelSave

NiFi			
	0	Enabled	
	(•	Connected to Example-Wireless-Network 192,168,88,120	
	Ŷ	BeaconZone_5G	
	ŕ	Your-Neighbors-WiFi	
	÷	LaserNet_Pro	
	(:	DataDock_24G	
	(î-	Echo_Node	
	+	Other Network	

#### Supported Wi-Fi Encryption Protocols

Room Alert MAX supports the following types of Wi-Fi networks:

- Open Mode
- WPA2 Personal, WPA2 Enhancements
- WPA2 Enterprise
- WPA3 Personal
- Mixed Mode (WPA/WPA2)
- WPA3 Personal Transition Mode (WPA2/WPA3)

#### 3.2.3. Ethernet Settings

Navigate to **Settings**  $\rightarrow$  **Ethernet** to configure Ethernet IP settings.

#### IP Address Configuration—DHCP

To obtain an IP address automatically using DHCP:

- 1. Select Automatic (DHCP), which is the default setting.
- 2. Select Save.

#### IP Address Configuration—Static IP

To assign a static IP address:

- 1. Select Manual (Static IP).
- 2. In *IP Address*, enter the new static IP address.
- 3. In Subnet Mask, enter the subnet mask.
- 4. In Default Gateway, enter the gateway IP address.
- 5. In DNS Server IP, enter the DNS server IP address.
- 6. Select Save.



IP Configuration	<ul> <li>Automatic (DHCP)</li> <li>Manual (Static IP)</li> </ul>	
	Cancel	Save

IPv4 Address		
IP Configuration	<ul><li>Automatic (DHCP)</li><li>Manual (Static IP)</li></ul>	
IP Address	192.168.1.2	
Subnet Mask	255.255.255.0	
Gateway IP	192.168.1.0	
DNS IP	8.8.8.8	
	Cancel Save	

# Tip

Make sure you do not use an IP address that is already assigned to another device. Also be sure to set the IP address within your current subnet range; otherwise, you may not be able to discover your Room Alert Base Station.

#### 3.2.4. TLS Certificate Settings

When HTTPS is enabled, the Base Stations' web interface uses a certificate issued to \*.roomalertmonitor.com. If desired, you may upload your own custom certificate instead. To use your own certificate:

- 1. FIrst, upload your Certificate File, which must be in PEM format.
- 2. Then upload your Key File, which must also be in PEM format.
- 3. Then select **Save**. Room Alert MAX will verify that the certificate and private key match each other and are correctly formatted. If so, the web interface will redirect to use the new certificate.
- 4. You may uninstall the custom certificate at any time by clicking the **Remove** button and then clicking **Save** to apply your changes.

#### 3.2.5. Date & Time Settings

You may configure the date and time defaults for your Room Alert Base Station.

- In *Time Zone*, select your time zone from the dropdown list. (GMT) Greenwich Mean Time is the default.
- In *Time Display*, you may select the AM/PM or 24 hour format from the drop-down list. The 24 hour setting is the default.
- In *Time Format*, you may select either the MM/DD/YY or DD/MM/YY date format from the drop-down list. Month first (MM/DD/YY) is the default.

#### Time Server

By default, Room Alert uses the Network Time Protocol (NTP)

server, time.nist.gov. In the *Time Server* sub-section, you may choose to use a custom time server.

- To use a different time server, select the **Use custom time server** checkbox.
- In Domain Name/IP, enter your time server's domain name or IP address.
- In *Auto Refresh*, you may select how often Room Alert automatically synchronizes with your time server. You may leave the default, 24 Hours, or choose another interval from the drop-down list.

Date & Time Settings		
Time Zone	(GMT) Greenwich Mean Time	~
Time Display	24 hour	~
Time Format	MM/DD/YYYY HH:MM:SS	~
Use Custom Time Server	(If this is disabled time.nist.gov will be used by default)	
Domain Name/IP	time.nist.gov	
Auto Refresh	24 hour	~
	Cancel Save	

**TLS Certificate Settings** 

No Custom Certificate Installed

Cancel

Choose File No file chosen

Choose File No file chosen

Save

**Custom Certificate** 

Certificate File

**Upload New Certificate** 

Key File

#### 3.2.6. RoomAlert.com Push Settings

Room Alert Monitors with push to <u>RoomAlert.com</u> enabled automatically update your Room Alert Account with sensor data at defined intervals.

- Push to <u>RoomAlert.com</u> is enabled by default.
- If you wish to disable push to <u>RoomAlert.com</u>, uncheck the **Enable push to RoomAlert.com** box.
- Select Send Push to manually send sensor data to <u>RoomAlert.com</u>.

When you're done making changes, select **Save**.

2	27	Scal	~ ~	ttin	ac
Э.		Scar	6 26	UUII	gs -

You may change the temperature scale, as well as the unit of speed (used for the wired Digital Air Flow sensor). These preferences are reflected in the display of data within the web interface and in email notifications.

- In *Temperature Scale*, you may choose Fahrenheit or Celsius from the drop-down list. Fahrenheit is the default.
- In Unit of Speed, you may choose Feet Per Minute (f/m) or Meters Per Second (m/s) from the dropdown list. Feet Per Minute (f/m) is the default.

Scale Settings			
Temperature Scale	Celsius	~	
Unit of Speed	Feet per minute (f/m)	~	
	Volume Flow Unit: Cubic Feet Per Minute (CFM) Cancel Save		

**RoomAlert.com Push Settings** 

Push Timeout

10

Cancel

Send Push 📀

seconds

Enable push to RoomAlert.com

Send current data to RoomAlert.com

#### 3.2.8. Email Settings

You may configure Room Alert MAX to send alert notifications via email. To send the notification, you must configure your mail server.

- 1. Check Email Enabled.
- 2. You may leave **Email Footer Enabled** checked to include AVTECH contact information with email messages.
- 3. In Mail Server:
  - In *Domain Name/IP*, enter the domain name or IP address of your mail server.
  - In Secure Connection, select the checkbox if your mail server requires SSL or TLS encryption.
  - In Port, enter your mail server's SMTP port. The default is 25, a commonly-used port.
  - In *Timeout*, you may leave the default, 30 seconds, or enter another interval.
- 4. In *Return Address*, enter an email address that resides on your mail server. This is the address alert messages will come from.
- The Device URL field controls what IP or URL displays in email alerts. You may leave the default, a disabled, blank field, or enter a custom IP address or URL. To make a custom entry, you must first check Device URL Enabled.
  - When this field is left at the default (disabled, blank), your email alerts will contain the Room Alert's current IP address and HTTP or HTTPS port number in the body of the email.

• When this field is overwritten with a custom IP or URL, your email alerts will contain that custom IP or URL in the body of the email.

#### Authentication (Optional)

- 6. If your mail server requires SMTP authentication, check **Enable Authentication**.
- 7. In *Username*, enter a valid username for your mail server that will facilitate authentication.
- 8. In *Password*, first select the **Change** button to enable the field. Then enter a valid password for your mail server that will facilitate authentication.
- 9. Select **Save** to apply your changes

After saving your settings, select **Send Test Email** to confirm your settings are working as expected.

Email SMTP S	ettings	
Email Enabled		
Email Footer Enabled		Test your email settings
Mail Server		Send Test Email button to send a test email to a single recipient.
Domain Name/IP	Domain Name/IP	In the Mail Server Test window that opens
	Maximum: 64 characters	1. Enter the email address where you would like
Secure Connection		the test email to be sent. 2. Select Send Test Email.
Port	587	You will either see a "Test Succeeded" or a "Test Failed" message.
Timeout	30	Send Test Email
Return Address	Return Address	
	Maximum: 254 characters	
Device URL Enabled		
Device URL	Device URL	
	Maximum: 254 characters	
Authentication (option	nal)	
Enable Authentication		
Username	Username	
	Maximum: 128 characters	
Password	Password	
	Cancel Save	

#### 3.2.9. Credentials

The username and password on your Base Station protect all of its web interface pages. To change the credentials:

- 1. In *New Username*, you may create a username of up to 50 characters.
- 2. In *New Password*, you may create a password of up to 50 characters.
- 3. Re-enter the password in the *Confirm Password* field to verify.
- 4. Select **Save** at the bottom of the page.

Credentials		
New Username	New Username	
	Max chars 128	
New Password	New Password	
	Max chars 128	
Confirm Password	Confirm Password	
	Cancel Save	

#### 3.2.10. Reset to Defaults

Resetting to defaults removes all of your custom settings, including sensor thresholds, static IP address settings, password security, and Wireless sensor connections.

To reset your device to defaults:

- 1. Select the **Reset To Factory Defaults** button.
- 2. In the confirmation box that appears, select **Reset Now** to proceed with the reset process, or select **Cancel** to close the window.

#### 3.2.11. Sensor Connections

On the Sensor Connections screen, you can pair new sensors/adapters, view a list of all paired devices, and unpair devices.

The Room Alert MAX Base Station supports up to 10 sensor/adapter connections.

- All wireless sensors and adapters that are currently paired with the Base Station are listed with their Serial Number and Type.
- To unpair a sensor/adapter, click on its ellipses and then click **Forget**.

For more information about pairing a device, see "2.4. Pair Wireless Sensors & Wired Sensor Adapters" on page 9.

#### 3.3. Alerts

With the Room Alert MAX built-in alerting features, you may configure multiple thresholds for any of your sensor readings. You may also configure as many alert recipients as you'd like to be notified when a threshold is exceeded.

To get started, select **Alerts** in the navigation bar to the left of your screen.

#### Thresholds

To configure a threshold:

- 1. Click + **New Threshold** below the *Alert Conditions* table.
- 2. Label your threshold. The label defaults to "New Threshold X."
- 3. Select your sensor (or adapter).
  - Additional fields will populate based on your initial selection. For example, you may be prompted to select the adapter port and/or sensor channel.
- 4. Select the operator and input your threshold value.
- 5. Select Add.

Your new threshold will now appear in the Alert Conditions table.

- Triggered alerts get displayed at the top of the table in red.
- To delete a threshold, click on its ellipses and then click **Delete**.

#### **General Conditions**

The Base Station can notify you if ANY of your connected sensors has a low battery or stops reporting data to the Base Station. To alert on these conditions, select the checkboxes.

#### Recipients

You can configure as many recipients as you'd like to be notified if any of your alert conditions go into alarm state. To configure an alert recipient:

- 1. Click + **New Recipient** below the *Recipients* table.
- 2. Label your Recipient. The label defaults to "New Recipient X."
- 3. Enter the email address where you want the alert notification sent.
- 4. Select Add.

Your new recipient will now appear in the Recipients table.

• To delete a recipient, click on its ellipses and then click **Delete**.

Tip

If you set up Email Recipients, be sure to configure your mail server under Settings > Email.

# 4. For More Information...

#### Visit our Support Center.

Go to <a href="https://AVTECH.com/Support/">https://AVTECH.com/Support/</a> to view our collection of:

- How To Guides
- Installation Notes
- Product Tours
- and more

#### Find us on YouTube.

Go to the <u>AVTECH Software, Inc. YouTube Channel</u> for product overviews, How-To's, and more.

#### **Common Questions**

- How To Discover Devices With Room Alert Discovery
- How To Register For A Room Alert User Profile
- What Triggers A Push To RoomAlert.com
- How To Update Firmware On Room Alert Monitors

# **5. Technical Specifications**

#### 5.1. MAX Base Station

Wireless Connectivity	Wi-Fi (802.11 a/b/g/n, 2.4 GHz & 5 GHz) & Low-Energy Wireless
Security Features	WPA2/WPA3-Personal, WPA/WPA2-Enterprise
	-40°F to 185°F (-40°C to 85°C)
Operating Temperature	Do not place unit inside condensing environments like refrigerators & freezers.
Ports	1 USB-C power jack 1 RJ-45 Ethernet port (PoE-enabled) 1 USB-A peripheral slot (for future applications)
Power Supply	Room Alert MAX USB-C power adapter (120/240 VAC) or PoE (IEEE802.3af compliant) or any 5V USB-C
Power Adapter Included	Yes
Dimensions	6.5" x 6.5" X 1.5" (16.5cm x 16.5 cm x 3.8cm)
Weight	9.42 oz (without mounting plate), 11.68 oz (with mounting plate)
Weight Internal Temperature Sensor	9.42 oz (without mounting plate), 11.68 oz (with mounting plate) Indoor ambient temperature
Weight Internal Temperature Sensor Range	9.42 oz (without mounting plate), 11.68 oz (with mounting plate) Indoor ambient temperature -40°F to 257°F (-40°C to 125°C)
Weight Internal Temperature Sensor Range Accuracy	9.42 oz (without mounting plate), 11.68 oz (with mounting plate) Indoor ambient temperature -40°F to 257°F (-40°C to 125°C) +/- 0.3°C
Weight Internal Temperature Sensor Range Accuracy Resolution	9.42 oz (without mounting plate), 11.68 oz (with mounting plate) Indoor ambient temperature -40°F to 257°F (-40°C to 125°C) +/- 0.3°C 0.01°C

# 5.2. MAX Temperature & Humidity Sensor

Type Of Sensor	Wireless
Wireless Range	Up to 150' (45 m) from Base Station
Wireless Connectivity	Low-Energy Wireless (2.4 GHz)
Security Features	Secure Boot, Hardware Cryptographic Acceleration (AES-128/256, SHA-2, ECC)
	-40°F to 221°F (-40°C to +105°C)
Operating Temperature	Do not place unit inside condensing environments like refrigerators & freezers.
Power Supply	(2) AA Batteries or 5V USB-C power
Average Battery Life	More than 2 years
Power Adapter Included	No
Dimensions	2.5" x 3.25" X 1.125" (6.3cm x 8.3cm x 2.8cm)
Weight	2.68 (without batteries), 4.37 oz (with batteries)
Environment Condition Monitored	Indoor ambient temperature & humidity
Temperature Range	-40°F to 257°F (-40°C to 125°C)
Accuracy	+/- 0.2°C
Resolution	0.01°C
Humidity Range	0% to 100% relative humidity (RH), non-condensing
Accuracy	+/- 1.8% RH
Resolution	0.01% RH
Compatible Products	Room Alert MAX Base Station

# 5.3. MAX Wired Sensor Adapter

Type Of Sensor	Wireless
Wireless Range	Up to 150' (45 m) from Base Station
Wireless Communication	Low-Energy Wireless (2.4 GHz)
Security Features	Secure Boot, Hardware Cryptographic Acceleration (AES-128/256, SHA-2, ECC)
Operating Temperature	-40°F to 221°F (-40°C to +105°C) On ot place unit inside condensing environments like refrigerators & freezers.
Ports	1 USB-C power jack 2 digital sensor port (RJ-11) 1 switch sensor port (spring terminal block)
Power Supply	Room Alert MAX USB-C power adapter (120/240 VAC) or any 5V USB-C
Power Adapter Included	Yes
Dimensions	4.5" x 4.5" X 1.25" (11.4cm x 11.4cm x 3.2cm)
Weight	4.59 oz
Internal Temperature Sensor	Indoor ambient temperature
Range	-40°F to 257°F (-40°C to 125°C)
Accuracy	+/- 0.2°C
Resolution	0.01°C
Compatible Products	Room Alert MAX Base Station
External Sensor Compatibility	Any Room Alert wired digital or switch sensor

#### 5.4. Wireless Safety & Compliance Information



This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body or nearby persons.

**Base Station** 



- Contains FCC ID: XF6-M7DB7
- Contains IC ID: 8407A-M7DB7

Wireless Sensors & Wired Sensor Adapter



- Contains FCC ID: QOQ-GM220P
- Contains IC: 5123A-GM220P