Room Alert[®] 3E

Temperature & Environment Monitoring... *Made Easy!*



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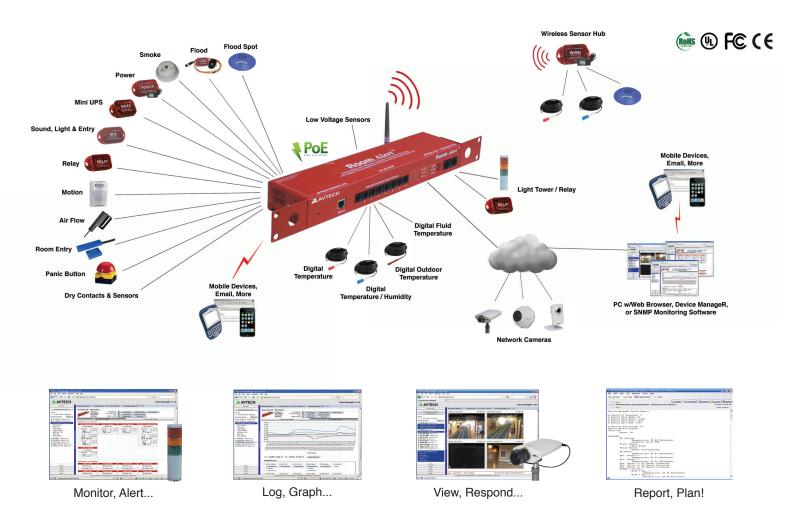
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- Digital Humidity
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- Smoke / Fire
- Sound, Light
- Air Flow
- Motion, Room Entry
- Panic Buttons, Security

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- Network Cameras
- Switch Sensors
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Special Thanks

We would like to recognize our customers, field test participants, reseller partners, inhouse sales & support staff, as well as the entire software & hardware development teams for their contributions and assistance in the completion of this manual.

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Protect Your IT Facility... Don't Wait Until It's To Late!

Introduction To Room Alert 3E

The Room Alert 3E monitor is AVTECH's most compact and economical hardware solution for *Temperature & Facilities Environment Monitoring*...*Made Easy*.

At 3 $\frac{5}{8}$ " L x 1 $\frac{3}{4}$ " W x $\frac{7}{8}$ " H and a mere 2 ounces, the Room Alert 3E is small and light enough to mount nearly anywhere; its PoE-enabled network port makes installation



a snap, even where no electrical outlets are handy; and it's jam-packed with AVTECH's latest technology, so it's smart and powerful enough to monitor up to three (3) sensors: one (1) internal, one (1) external digital and one (1) external switch.

Install your unit with minimal planning and less hassle.

- ✓ Get up and running in minutes with easy "Plug and Play" setup.
- ✓ Use Power over Ethernet to install even where no DC power is available.
- ✓ Easily mount Room Alert 3E—hang it from a nail and you're good to go!

Get access from anywhere over the web.

- ✓ Configure, monitor and operate Room Alert 3E with its easy-to-use built-in web interface.
- Significantly expand its functionality with AVTECH's Device ManageR, the powerful software bundled FREE with all Room Alert monitors.
- \checkmark Have the flexibility to monitor with any SNMP-enabled 3rd-party monitoring application.

Know immediately when physical conditions change.

- ✓ Set alert thresholds for the built-in temperature sensor from -40° to 185° F (-40° to 85° C).
- ✓ Alert multiple contacts on your team when thresholds are exceeded.
- Receive alert notifications by email, email-to-SMS and more on your computer or mobile phone.

Expand your options as your needs evolve.

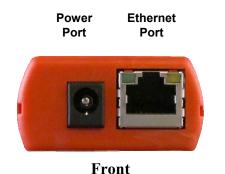
- Extend your reach by adding an external digital sensor up to 100 feet away and an external switch sensor up to 900!
- ✓ Generate clear visible and audible signals by adding a Light Tower (with adapter).
- ✓ Automatically turn on/off up to 4 electrical devices, such as air conditioners or generators, by adding a Relay Switch Sensor via a Light Tower & Relay Adapter.
- ✓ Explore your options further with your AVTECH Product Specialist.

Room Alert 3E Package Contents

The standard Room Alert 3E package includes:

- One (1) Room Alert 3E ID Box
- One (1) Room Alert 3E User's Guide & Reference Manual (You're reading it now.)
- One (1) Package Of Literature & Additional Information

The Room Alert 3E ID Box



Reset Button Switch Sensor Digital Sensor Port

Back

Front

Power Port



Ethernet Port



An RJ-45 PoE-enabled port connects Room Alert 3E to your network via an RJ-45 network cable.

Back

Reset Button



A small push button resets Room Alert 3E to factory default settings.

Switch Sensor Channel



A pair of dry contacts connects Room Alert 3E 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.

Digital Sensor Port



A standard RJ-11 jack connects any AVTECH digital sensor or Light Tower & Relay Adapter to your Room Alert 3E via a standard RJ-11 (straight through) telephone cord.

NOTE

For more information about AVTECH sensors and accessories, please refer to the <u>Appendix</u> at the back of this manual or visit the Sensors and Accessories sections of <u>AVTECH.com</u>.

How To Install Your Room Alert 3E

Step 1: Connect your Room Alert 3E hardware.

If your network is Power over Ethernet (PoE) enabled ...

- Connect one end of a standard Ethernet cable to the Room Alert 3E's Ethernet port.
- Connect the other end to a PoE-enabled network jack.

That's it! Your Room Alert 3E is now powered and discoverable on your network.

If your network is <u>not</u> Power over Ethernet (PoE) enabled . . .

A. Connect to your network first.

- Connect one end of a standard Ethernet cable to the Room Alert 3E's Ethernet port.
- Connect the other end to a network jack.

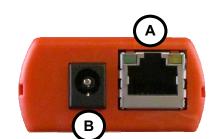
B. Then connect to a power source.

NOTF

- Plug one end of AVTECH's International Power Adapter into the Room Alert 3E's power port.
- Plug the other end into a surge-protected power source.

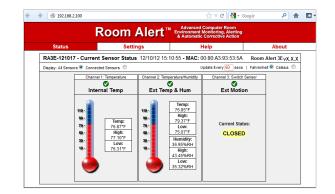
Your Room Alert 3E is now powered and discoverable on your network!

Use only AVTECH's International Power Adapter. Others could damage the Room Alert 3E and void your warranty. If you don't have one, please visit our online store at <u>AVTECH.com</u>.



Step 2: Open your Room Alert 3E in your web browser ...

With the built-in interface.



• Enter your Room Alert 3E's IP address in your web browser's address bar to access the interface.

OR

With Device ManageR for advanced functionality.

Iccalhost:0303	🏫 🗸 C 🛃 - Google	P 合
vice ManageR vX.X.	A 🙇	VTEC
Device Status	Discovered Devices: 15 - Last Discovery: Dec 12, 2012 1:10:06 pm - Temperature Scale: @ F 20 C	
Advanced Cleaners, Medig Physices. Medig The Second Cleaners & Medig Th	International and the second sec	\bigwedge
Alartis / Tanko	Temperature (F) Temperature (F) Switch	
Settings	." Heat Index (F)	
Help		
	Current Alerts: No Alerts In Progress Click Here To View Current (i) & Historical Alerts / Tasks (i)	

- Download and install AVTECH's Device ManageR via your customer account at <u>AVTECH.com/Downloads</u>.
- Launch it in your web browser at <u>http://localhost:8080</u>.

Step 3: Connect Additional Components

If you purchased additional components that are compatible, connect them according to the instructional material included with them.

How To Use Room Alert 3E's Web Interface

You may configure your Room Alert 3E through its built-in web interface. To access the interface, you may either:

• Select your Room Alert 3E in Device ManageR and click the "Open Web" button.

or

• Type the IP address of your Room Alert 3E monitor directly into the address bar of your web browser.

Your Room Alert 3E's web interface has 4 tabs:

- Status
- Settings
- Help
- About

Status

To view your Room Alert 3E's current sensor status, click **Status** in the navigation bar at the top of your screen.

Room Alert TM Advanced Computer Room Environment Monitoring, Alerting & Automatic Corrective Action						
Status	Settin	gs		Help	About	
RA3E-121017 - Cu	rrent Sensor Status	12/10/12 14:3	1:11 - MAC: 0	0:80:A3:93:53:5A	Room Alert 3E vX.X.X	
Display: All Sensors ()	connected Sensors		U	pdate Every 60 secs	Fahrenheit 🖲 Celsius 🔘	
110- 90- 70- 80- 10-	Temp: 76.55'F High: 76.55'F Low: 76.31'F		Derature/Humidity Derature/Humidity Define the second P & Hum 75:754*F High: 75:72*F Low: 75:48*F Humidity: 40.85%RH High: 40.85%RH Low: 35:96%RH	Channel 3: Switch Ext Motio Current State	vn us:	

Current Sensor Status Bar

Below the "Status" tab is the "Current Sensor Status Bar," where you may view basic information about your Room Alert 3E and make temporary adjustments to the sensor display.

• You may find your Room Alert 3E's name, current date & time, and MAC address here.

F	RA3E-121017	Current Sensor Status	12/10/12 14:31:11	MAC: 00:80:A3:93:53:5A	Room Alert 3E vX.X.X
0	Display: All Sensors	Connected Sensors		Update Every 60 secs	Fahrenheit 🔍 Celsius 🔘

• To determine if your Room Alert 3E's firmware is current, you may click **Room** Alert 3E vX.X.X at the right.

```
        RA3E-121017 - Current Sensor Status
        12/10/12
        14:31:11 - MAC:
        00:80:A3:93:53:5A
        Room Alert 3E vX.X.X

        Display: All Sensors (***)
        Connected Sensors (****)
        Update Every (****)
        Secs (*****)
        Fahrenheit (*****)
```



Your Room Alert 3E must be connected to the internet to check firmware versions.

• To temporarily modify the refresh interval of the "Status" screen while viewing, which is 60 seconds (i.e., every 1 minute) by default, you may enter a value in seconds in the "Update Every" field. Click outside the field to temporarily commit the change.

RA3E-121017 - Current Sensor Status	12/10/12 14:31:11 - MAG	C: 00:80:A3:93:53:5A	Room Alert 3E vX.X.X
Display: All Sensors Connected Sensors 		Update Every 60 secs	Fahrenheit 🔍 Celsius 🔘

• To temporarily toggle the temperature scale between Fahrenheit (F) and Celsius (C), click **Fahrenheit** or **Celcius**.

RA3E-121017 - Current Sensor Status	12/10/12 14:31:11 - MAC: 00:80:A3:93:53:5A	Room Alert 3E vX.X.X
Display: All Sensors Connected Sensors 	Update Every 60 secs	Fahrenheit 💿 Celsius 🔘

NOTE

Refer to the <u>Advanced</u> section in this manual for instructions on setting the default status page refresh rate and temperature scale for Room Alert 3E.

Sensor Display Area

Display: All Sensor	rs Connected Sensors		pdate Every 60 secs Fahrenheit @ Channel 3: Switch Sensor	Celsius 🖱
	Channel 1: Temperature	Channel 2: Temperature/Humidity	Ext Motion	
	110- 90- 70- 30- 10- 10-	Temp: 75.54°F High: 75.72°F Low: 75.48°F High: 75.72°F Low: 75.48°F Humidity: 40.85%RH High: 40.85%RH Low: 35.96%RH	Current Status: CLOSED	

In the main viewing pane of the "Status" tab is the "Sensor Display Area." Here you may view the current readings for your sensors, which are displayed left to right as follows:

Channel 1:	Channel 2:	Channel 3:
Internal Temperature Sensor	External Digital Sensor	External Switch Sensor

Below the channels, you see the status icons and the labels for your sensors, which you may configure in **Settings** \rightarrow **Sensors**.

Status Icons

- Green circle with "✓" mark...... Sensor is in a clear state.
- Grey circle...... Sensor has no alarm threshold set.
- 8 Red circle with "X" mark...... Sensor is in an alarm state.

Display All Sensors / Connected Sensors

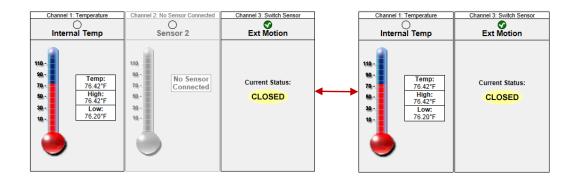
If you have no external digital sensor connected, you may temporarily hide Channel 2.

1. To hide the disconnected digital sensor, click **Connected Sensors** in the "Current Sensors Status Bar" as shown here.

RA3E-121017 - Current Sensor Statu	s 12/10/12 14:31:11 - MAC: 00:80:A3:93:53:5A Room Alert 3E vX.X.X
Display: All Sensors O Connected Sensors O	Update Every 🔂 secs Fahrenheit 🖲 Celsius 🔘

2. To toggle the view back to all 3 sensor channels, click All Sensors.

The "Sensor Display Area" collapses and expands as shown below:



Settings

To access your Room Alert 3E's settings, click **Settings** in the navigation bar at the top of your screen.

Status	Setti	ings	Help	About
MAC Address:	00-80-A3-93-53-5A	Version:	1.0.1 X.X.X	
	_	Network S	ettings	
Network			-	
SMTP Email	Device Name	RA3E-121017		
SNMP	IP Address Configuration			
Sensors		Address Automatically		
Alarm Options	Auto Conf	iguration Methods		
Security	BOOTP	🖲 Enable 🔘 Disable		
Advanced	DHCP	🖲 Enable 🔘 Disable		
	AutoIP	Enable Obisable		
Save Settings	💿 Use The F	Following IP Configuration		
Reset Defaults	IP Address			
	Subnet Mask			
	Default Gateway			
	DNS Server IP			
	Ethernet Configuration			
	MTU Size	1024		
	Auto Negotiate			
	Speed	🖲 100 Mbps 💿 10 Mbps		
	Duplex	Full Half		
	Gratuitous ARP Broadcasts	Enabled O Disabled		
		Accept Ch	anges	



Room Alert 3E

Network

Navigate to **Settings** \rightarrow **Network** to open the "Network Settings" screen.

Device Name

Device Name	RA3E-121017
Device Name	Server Rm RA3E

To rename your Room Alert 3E:

- 3. Select the automatically-assigned name in "Device Name" and enter a new one of up to 15 alphanumeric characters.
- 4. Click Accept Changes at the bottom of your screen.
- 5. Click **Save Settings** in the navigation bar to the left of your screen.

IP Address Configuration—DHCP

Obtain IP Address Automatically						
Auto Conf	iguration Methods					
BOOTP	🖲 Enable 🔘 Disable					
DHCP	🖲 Enable 🔘 Disable					
AutoIP	🖲 Enable 🔘 Disable					

To obtain an IP address automatically using DHCP:

- 1. Select Obtain IP Address Automatically.
- 2. Click **Accept Changes** at the bottom of your screen.
- 3. Click **Save Settings** in the navigation bar to the left of your screen.

IP Address Configuration—Static IP

Following IP Configuration
192.168.2.50
255.255.255.0
192.168.2.1
4.2.2.2

To assign a static IP address:

- 1. Select Use The Following IP Configuration.
- 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. Click Accept Changes at the bottom of your screen.
- 7. Click **Save Settings** in the navigation bar to the left of your screen.



Make sure that you do not use an IP address that is already assigned to another device. Also, set the IP address within your current subnet range; otherwise, you may not be able to discover your Room Alert 3E.

Ethernet Configuration

Typically, you may leave the "Ethernet Configuration" section at the defaults, which are shown below, for immediate use of Room Alert 3E.

Ethernet Configuration	
MTU Size	1024
Auto Negotiate	
Speed	🖲 100 Mbps 💿 10 Mbps
Duplex	Full
Gratuitous ARP Broadcasts	Enabled Oisabled

However, if you connect your Room Alert 3E to a managed switch that controls your network traffic, you may need to change these settings:

- 1. In "MTU Size," you may leave the default, 1024, or enter a value as low as 512.
- 2. You may uncheck "Auto Negotiate" and choose:
 - For "Speed," 100 Mpbs or 10 Mbps.
 - For "Duplex," "Full" or "Half."
- 3. In "Gratuitous ARP Broadcasts," you may leave the default, "Enabled," or choose "Disabled."
- 4. Click Accept Changes at the bottom of your screen.
- 5. Click **Save Settings** in the navigation bar to the left of your screen.

SMTP Email

You may configure your Room Alert 3E to send alerts via email and email-to-SMS.

Statu	S	Setting	S	Help		About
MAC Address:	00-80-A3-93-5	53-5A	Version:	X.X.X		
			Ema	ail Settings		
Network		Email Enabled				
SMTP Email						
SNMP		Email Footer Enabled	\checkmark			
Sensors	_	Use SMS				
Alarm Options	_	Mail Server Port	25	Timeout	5	
Security	_	Mail Server	mail.yourco.co	m		* Domain Name or IP
Advanced						Domain Value of It
		Return Address (From)	RoomAlert3E@	VourCo.com		
		Display URL	192.168.123.16	80		
Save Settings	— —					
Reset Defaults	Authentic	ation (optional)				
		Enable Authentication	V			
		Username	RoomAlert3E@	YourCo.com		
		Password	•••••	* Max 11 Characte	rs	
	Email Rec	cipients (Separated By	Comma)			
		Email Addresses	ITMgr@YourCo	o.com, 1235551900	@ATT.txt.ne	et, FacilitiesDept@Your
				d Test Email		
			Acc	ept Changes		

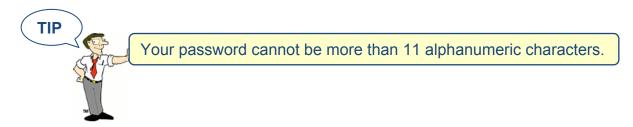
Navigate to **Settings** \rightarrow **SMTP Email** to open the "Email Settings" screen.

- 1. Check **Email Enabled**.
- 2. Leave the **Email Footer Enabled** checked to include AVTECH contact information with email messages.
- 3. Check Use SMS to send a shorter email with a reduced character count.
- 4. In "Mail Server Port," enter your mail server's SMTP port. The default is 25, a commonly-used port.
- 5. In "Timeout," you may leave the default, 5 seconds, or enter another interval.
- 6. In the "Mail Server" field, enter the domain name or IP address of your mail server.
- 7. In the "Return Address (From)" field, enter an email address that resides on your mail server. This is the address alert messages will come from.
- 8. In "Display URL," you may leave the default, which is the IP address and port of your Room Alert 3E, or overwrite it with another IP address.

Room Alert 3E

Authentification (Optional)

- 9. If your mail server requires SMTP authentication, check Enable Authentification.
- 10. In "Username" and "Password," enter a valid username and password for your mail server that will facilitate authentification.



Email Recipients (Separated By Comma)

- 11. In "Email Addresses," enter the email and email-to-SMS addresses that you'd like to send alerts to. Separate each address with a comma.
 - Email address: <u>ITMgr@YourCo.com</u>
 - Email-to-SMS address: <u>1235551900@ATT.txt.net</u>
 - Addresses separated by commas: <u>ITMgr@YourCo.com</u>, <u>1235551900@ATT.txt.net</u>, etc.
- 12. Click **Send Test Email**. This button will automatically save any changes made to the "SMTP Email" tab before sending a test email message.
- 13. Click **Accept Changes** at the bottom of your screen.
- 14. Click **Save Settings** in the navigation bar to the left of your screen.



If your test email is not received successfully, check your mail server's SMTP relay settings, which must allow anonymous SMTP relay messages. If you entered a domain name for the Mail Server Address, you may need to rename it to the IP address or assign a static IP setting and have a DNS server IP address set.

Simple Network Management Protocol (SNMP)

Because your Room Alert 3E is fully SNMP-compliant, you have the option to monitor it with a 3rd-party monitoring application capable of performing SNMP queries. You may configure the Room Alert 3E to send SNMP Traps in response to a change in alarm states to up to three host systems running 3rd-party SNMP monitoring applications.

If you use a 3rd-party SNMP monitoring application:

- Obtain the Room Alert 3E MIB files through your customer account at <u>AVTECH.com/Downloads</u> and load them into your SNMP monitoring application. Otherwise, your application cannot properly translate the data it receives in the SNMP Trap.
- Ensure that your application uses SNMPv1.
- Note that your Room Alert communicates with your SNMP monitoring application using the standard port for the SNMP protocol, 161.

Navigate to **Settings** \rightarrow **SNMP** to open the "SNMP Settings" screen.

IAC Address: (0-80-A3-93-53-5A	Version:	v	X.X	
			^ .	A.A	
	-	SN	MP Settings		
Network	SNMP Configuration				
SMTP Email	-			_	
SNMP	Community Name	public		🔲 Use 2 digit SNMP	
Sensors	Contact (sysContact)				
Alarm Options	Location (sysLocation)				
Security	Eucation (SysEucation)				
Advanced					
	SNMP Trap Sending Con	figuration			
	Trap Send IP 1	0.0.0.0			
Save Settings	Trap Send IP 2	0.0.0.0			
_	Trap Send IP 3	0000			
Reset Defaults		0.0.0.0			

Room Alert 3E

SNMP Configuration

SNMP Configuration		
Community Name	public	Use 2 digit SNMP
Contact (sysContact)	IT Manager	
Location (sysLocation)	Data Center	

To begin configuring your Room Alert 3E for SNMP:

1. In "Community Name," you may leave the default SNMP protocol community name— "public"—or enter a new name.



- 2. You may leave "Contact (sysContact)" blank or enter a person's name to specify who is receiving the information.
- 3. You may leave "Location (sysLocation)" blank or enter the location of your Room Alert 3E monitor.
- 4. You may click **Use 2 digit SNMP** if you prefer to receive values in 2-digit rather than 4-digit format.



Room Alert 3E sends values to your 3rd-party SNMP monitoring application in 4-digit format by default. 78.55° F, for example, appears as 7855. In 2-digit format, your values are truncated, not rounded to the nearest number. In this example, 78.55 would appear as 78.

- 5. Click Accept Changes at the bottom of your screen.
- 6. Click **Save Settings** in the navigation bar to the left of your screen.

SNMP Trap Sending Configuration

You may configure your Room Alert 3E to send SNMP Traps in response to a change in alarm state to up to three host systems running 3rd-party SNMP monitoring applications. Each host system you enter in these fields will receive the same SNMP Traps simultaneously.

SNMP Trap Sending Con	figuration
Trap Send IP 1	192.168.2.100
Trap Send IP 2	192.168.2.101
Trap Send IP 3	0.0.0.0

To configure your Room Alert to send SNMP Traps:

- 1. In "Trap Send IP 1," enter the IP address of the host system that runs your 3rd-party SNMP monitoring application.
- 2. In "Trap Sent IP 2" and "Trap Send IP 3," you may enter the IP addresses of other host systems that run 3rd-party SNMP monitoring applications, or leave the default, 0.0.0.
- 3. Click Accept Changes at the bottom of your screen.
- 4. Click **Save Settings** in the navigation bar to the left of your screen.

Sensors

You may configure alert thresholds for the internal temperature, external digital and external switch sensor connected to your Room Alert 3E in this screen. Your Room Alert 3E sends alerts in response to changes in these alert thresholds.



For more information about AVTECH sensors and accessories, please refer to the <u>Appendix</u> at the back of this manual or visit the Sensors and Accessories sections of <u>AVTECH.com</u>.

Navigate to **Settings** \rightarrow **Sensors** to open the "Sensor Settings" screen.

This sample screen shows all three sensors connected to the Room Alert 3E before they have been configured.

Status		Settings		Help			About		
MAC Address:	00-80-A3-93-5	53-5A	Version:		X.X.X				
			Ser	sor Setting	js				
Network SMTP Email	Sensor 1	Alarm Configuration			Sensor	Туре:	Temperat	ture (Fahren	heit)
SNMP		Sensor Labe	1	Alarm On		High	Low	Adjust]
Sensors		Sensor 1		Temperature	(°F)	0	0	0	
Alarm Options						L]
Security Advanced	Sensor 2	Alarm Configuration			Sensor	Туре:	Temp/Hu	midity (Fahr	enheit)
Advanced		Sensor Labe	1	Alarm On		High	Low	Adjust	
		Sensor 2		Temperature	(°F)	0	0	0	
Save Settings		Monitor Heat	Index 🔲	Humidity (%R	H)	0	0	0	
Reset Defaults]
	Sensor 3	Alarm Configuration			Sensor	Туре:	Switch		
			Sensor La	bel	Alarm On				
			Sensor 3		Closed	•			
	_								
	Advanced	Sensor Configuration							
			Trigge	r Alarm If Sens	or Is Discor	nected?			
				cept Changes					
			AC	cepronanges	,				

Sensor 1 Alarm Configuration (Internal Temperature Sensor)

You may configure alert thresholds for the Internal Temperature Sensor in the "Sensor 1 Alarm Configuration" fields. The temperature range is -40° to 185° F (-40° to 85° C).

Sensor 1 Alarm Con	figuration	Senso	or Type:	Temperat	ture (Fahrenh
	Sensor Label	Alarm On	High	Low	Adjust
	Internal Temp	Temperature (°F)	80	60	0

- 1. In "Sensor Label," you may leave the default label, "Sensor 1," or rename it to something more descriptive, such as "Internal Temp."
- 2. The "Alarm On" field is set at the default of "Temperature (F)."



Refer to the <u>Advanced</u> section in this manual for instructions on setting the default temperature scale.

- 3. Enter values in the "High" and "Low" field to set high and low temperature thresholds.
- 4. Enter a value in the "Adjust" field to calibrate the Internal Temperature Sensor if its reading differs from a known temperature value at that location.
- 5. Click Accept Changes at the bottom of your screen.
- 6. Click **Save Settings** in the navigation bar to the left of your screen.

Sensor 2 Alarm Configuration (External Digital Sensor)

You may configure alert thresholds for an external digital sensor in the "Sensor 2 Alarm Configuration" fields.



The digital port also takes a Light Tower & Relay Adapter; however, you do not configure Light Tower or Relay options here—refer instead to the <u>Alarm Options</u> section in this manual.

In this example, we'll configure an external Digital Temperature & Humidity Sensor:

Sensor 2 Alarm Configuration	Sense	or Type:	Temp/Hu	midity (Fah
Sensor Label	Alarm On	High	Low	Adjust
Temp & Humidity	Temperature (°F)	80	60	0
Monitor Heat Index	Humidity (%RH)	50	30	0

- 1. In "Sensor Label," you may leave the default label, "Sensor 2," or rename it to something more descriptive, such as "Temp & Humidity."
- 2. The "Alarm On" fields automatically match the type of sensor you connect. In this example, the "Alarm On" settings are Temperature and Humidity.

- 3. Enter values in the "High" and "Low" field to set high and low thresholds. Your Room Alert 3E will send an alert email or email-to-SMS in response to these temperatures.
- 4. Enter a value in the "Adjust" field to calibrate your digital sensor if its reading differs from a known value at that location.
- 5. Click Accept Changes at the bottom of your screen.
- 6. Click **Save Settings** in the navigation bar to the left of your screen.



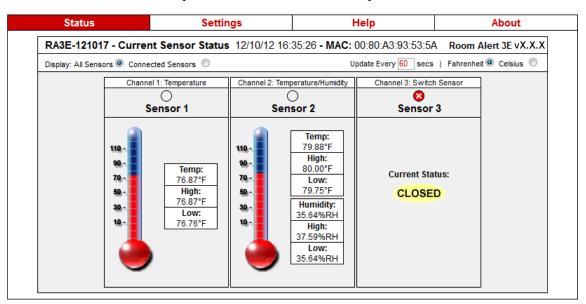
The options in these fields vary slightly depending on the type of digital sensor you connect. Notice, for example, that the Digital Temperature & Humidity Sensor has a "Monitor Heat Index" option.

Sensor 3 Alarm Configuration (External Switch Sensor)

You may configure the alert state for an external switch sensor in the "Sensor 3 Alarm Configuration" fields.

Your Room Alert 3E monitors your switch sensor for "Open" or "Closed" status. After you connect your switch sensor—and before you configure it—determine whether its normal state is "Open" or "Closed" by looking at the "Status" page of the web interface:

- 1. Click the **Status** tab at the top of your screen in the web interface.
- 2. Look at the current status of "Channel 3: Switch Sensor." It should show the normal sensor state, which is "Open" or "Closed." This example shows normal state as "Closed."



3. Now put the sensor into an alarm state. (To put a Motion Sensor into an alarm state, for example, wave your hand in front of it.) Look at the current status at the same time. You should see the current status switch to the opposite of normal. In this example, if normal is "Closed," you see the alarm state as "Open."

Channel 3: Switch Sensor
S
Sensor 3
Current Status:
OPEN

Now that you've checked what "Open" and "Closed" mean on your switch sensor, navigate to **Settings** \rightarrow **Sensors** to configure your options in "Sensor 3 Alarm Configuration":

- 1. In "Sensor Label," you may leave the default, "Sensor 3," or enter something more descriptive, such as "Ext Motion."
- 2. In "Alarm On," select the alarm state ("Open" or "Closed"), which you determined on the "Status" page. In our example, the alarm state is "Open."

Sensor 3 Alarm Configuration		Sensor Type: Switch
	Sensor Label	Alarm On
	Ext Motion	Closed 💌
	1	Open
		Closed
		Disabled

- 3. Click Accept Changes at the bottom of your screen.
- 4. Click **Save Settings** in the navigation bar to the left of your screen.



If you don't connect a switch sensor to your Room Alert 3E, choose **Disabled** from the "Alarm On" drop-down menu to avoid confusion or false alerts.

Advanced Sensor Configuration

Check **Trigger Alarm If Sensor Is Disconnected?** if you want to receive an alert if the external digital sensor becomes disconnected from the Room Alert 3E. This check box is blank by default.

Advanced Sensor Configuration Trigger Alarm If Sensor Is Disconnected?

Alarm Options

You need to configure the "Alarm Options" page only if you use a Light Tower & Relay Adapter with your Room Alert 3E, which gives you the option to add an AVTECH Light Tower, Light Tower w/Audio or Relay Switch Sensor. You may also connect a low-voltage device directly to the available relay port.

Shown here is a sample configuration:





RJ-11

Cable













The Light Tower w/Audio in this configuration can be replaced with a standard Light Tower or Relay Switch Sensor. For more information about AVTECH sensors and accessories, please refer to the <u>Appendix</u> at the back of this manual or visit the Sensors & Accessories sections of <u>AVTECH.com</u>. Navigate to **Settings** \rightarrow **Alarm Options** to open the "Alarm Options" screen. This sample screen shows the options for a Light Tower w/Audio before it has been configured.

Status	;	Settings		Help	About		
MAC Address:	00-80-A3-93-53-5A	Ver	rsion:	X.X.X			
	Alarm Options						
Network	Cignal Towar (Dala						
SMTP Email	Signal Tower / Rela		-				
SNMP	Connect	ed Signal Tower / Relay	Red/Yellov	//Green w/Audio	•		
Sensors		Alarm Clear Action		Allow Signal Tower / F	Relay Off On Alarm Clear		
Alarm Options							
Security	Action To Perform	When Alarms Occur					
Advanced		Red LED		OFF			
		Yellow LED		OFF			
		Green LED		OFF			
Save Settings		Audio 1		OFF			
Reset Defaults		Audio 2		OFF			
	Action To Perform	When Alarms Clear					
		Red LED		OFF			
		Yellow LED		OFF			
		Green LED		OFF			
		Audio 1		OFF			
		Audio 2		OFF			
		ſ					
		l	Accept Cha	anges			

1. In "Connected Light Tower / Relay," select from the 4 choices in the drop-down menu.

Connected Signal Tower / Relay No Signal Tower / Relay Connected	
Alarm Clear Action Red/Green No Audio On Alarm Cl	lear
Red/Yellow/Green w/Audio Relay	



The options on this screen vary somewhat depending on the device you select from the drop-down list.

2. If you want to enable the Light Tower or Relay Switch Sensor to perform an action when your Room Alert 3E returns to a "clear" state, click Alarm Clear Action.

Signal Tower / Relay Configuration		
Connected Signal Tower / Relay	Red/Yellow/Green w/Audio	
Alarm Clear Action	Allow Signal Tower / Relay Off	On Alarm Clear

3. In "Action To Perform When Alarms Occur," you may leave the default "OFF," or click the check box to select "ON" for each item.

Action To Perform When Alarms Occur					
Red LED	ON				
Yellow LED	OFF				
Green LED	OFF				
Audio 1	ON				
Audio 2	OFF				

4. In "Action To Perform When Alarms Clear," you may leave the default, "OFF," or click the check box to select "ON" for each item.

Action To Perform When Alarms Clear					
Red LED	OFF				
Yellow LED	OFF				
Green LED	IN ON				
Audio 1	OFF				
Audio 2	OFF				

- 5. Click Accept Changes at the bottom of your screen.
- 6. Click **Save Settings** in the navigation bar to the left of your screen.

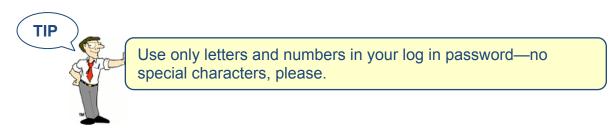
Security

By default, the Room Alert 3E does not require log in credentials; you may, however, create a password for your Room Alert 3E for extra security.

Stat	us	Settings	Help	About			
MAC Address:	00-80-A3-93-53-5A	Version:	X.X.X				
		Security Settings					
Network							
SMTP Email		Web Passwor	d				
SNMP		Confirm Passwor	d				
Sensors							
Alarm Options	;	Acce	pt Changes				
Security							
Advanced							
Save Settings	;						
Reset Default	S						

Navigate to **Settings** \rightarrow **Security** to open the "Security Settings" screen.

1. In "Web Password," you may create a log in password of up to 15 alphanumeric characters for your Room Alert 3E.



- 2. Re-enter the password in the "Confirm Password" field to verify.
- 3. Click Accept Changes at the bottom of your screen.
- 4. Click **Save Settings** in the navigation bar to the left of your screen.



If you forget your password, you can reset your Room Alert 3E settings to the factory defaults. Please see the <u>How To Reset</u> <u>Room Alert 3E To Factory Defaults</u> section of this manual for more information. There is no other alternative.

Advanced

You may configure a number of advanced options here, including the default temperature scale (Fahrenheit or Celsius), status page settings, Device ManageR "Push" settings, time & date, and trace output.

Navigate to **Settings** \rightarrow **Advanced** to open the "Advanced Settings" screen.

Status	Settings		Help	About	
MAC Address: 0	0-80-A3-93-53-5A	Version:	X.X.X		
Network	Advanced Settings				
Network SMTP Email	Temperature Scale Configuration)n			
SNMP Email		Celsius			
Sensors					
Alarm Options	Status Page Configuration				
Security	Refresh Rate (seconds)	60			
Advanced	HTTP Port	80			
		00			
	Device ManageR Push Configur	ation			
Save Settings	Enable Device ManageR Push				
Reset Defaults	Server IP Address		-		
	Server Port				
	Push Interval	1 Minute 👻			
	Time & Date Configuration				
	-	(CMT) Groopwich	lean Time (London, Lisbo	on) 🔻	
	Time Display		iean Time (London, Lisbo	nij •	
		MM/DD/YY Hour:M			
	Daylight Savings		Adjust For Daylight Savir	ıg Time (+1 hr)	
	Time Server IP	198.82.1.201			
	Time Server Auto Refresh	24 Hours 👻			
	Trace Configuration				
	Enable Tracing				
	Trace Port	143			
		Acception	ngoo		
		Accept Cha	nges		

Temperature Scale Configuration

You may select the default temperature scale for your Room Alert 3E here.



- 1. Select Fahrenheit or Celcius.
- 2. Click Accept Changes at the bottom of your screen.
- 3. Click **Save Settings** in the navigation bar to the left of your screen.

Status Page Configuration

You may set defaults for the "Status" screen here.

Status Page Configuration	
Refresh Rate (seconds)	60
HTTP Port	80

- 1. In "Refresh Rate (seconds)," enter the number of seconds you would like the "Status" screen to refresh at. You may enter a value from 1 to 65535. The default is 60 seconds (i.e., every 1 minute).
- 2. In "HTTP Port," you may change the port number your web browser uses to connect to your Room Alert's web interface. It uses port 80 by default.
- 3. Click Accept **Changes** at the bottom of your screen.
- 4. Click **Save Settings** in the navigation bar to the left of your screen.

Device ManageR Push Configuration

By default, Device ManageR queries your Room Alert 3E for sensor values at defined intervals. However, you may configure your Room Alert 3E to proactively send sensor updates to Device ManageR by enabling "Device ManageR Push."

Enabling "Device ManageR Push" is an advantage for two reasons:

• Your Room Alert 3E can communicate with Device ManageR without triggering any firewalls between the two. Firewalls typically allow out-going connections while blocking in-coming connections.

Room Alert 3E

• Your Room Alert 3E can immediately send an update to Device ManageR when it detects an alarm, regardless of any intervals you have configured either in this section or in the Device ManageR discovery interval.

Device ManageR Push Configur	ation
Enable Device ManageR Push	
Server IP Address	192.168.2.10
Server Port	8080
Push Interval	1 Minute 👻

To enable Push to Device ManageR from your Room Alert 3E:

- 1. Select Enable Device ManageR Push.
- 2. In "Server IP Address," enter the IP address of Device ManageR's host system.
- 3. In "Server Port," enter the port Device ManageR uses. The default is 8080.
- 4. In "Push Interval," choose the number of minutes you would like between pushes from the drop-down list.
- 5. Click Accept Changes at the bottom of your screen.
- 6. Click **Save Settings** in the navigation bar to the left of your screen.

Time & Date Configuration

You may set the time and date defaults for your Room Alert 3E here.

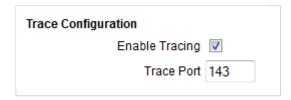
Time & Date Configuration		
Time Zone	(GMT) Greenwich	Mean Time (London, Lisbon) 🛛 🔻
Time Display	24 hour 👻	
Time Format	MM/DD/YY Hour:	Minute:Second 👻
Daylight Savings		Adjust For Daylight Saving Time (+1 hr)
Time Server IP	198.82.1.201	
Time Server Auto Refresh	24 Hours 🔹	

- 1. In "Time Zone," select your time zone from the drop-down list. Greenwich Mean Time (GMT) is the default.
- 2. In "Time Display," you may select the 12- or 24-hour format from the drop-down list. The 24-hour setting is the default.

- 3. In "Time Format," you may select either MM/YY/DD or DD/YY/MM format. Month first is the default.
- 4. Select **Daylight Savings** if you would like your Room Alert 3E time setting to compensate by +1 hour for daylight savings time.
- 5. In "Time Server IP," you may leave the default of 198.82.1.201 or enter the IP address of another NTP time server on your network.
- 6. In "Time Server Auto Refresh," select how often you would like your Room Alert 3E to synchronize automatically with the time server from the drop-down list. The 24 hour setting is the default. You may disable synchronization by selecting "Disabled" from the drop-down list.
- 7. Click Accept Changes at the bottom of your screen.
- 8. Click **Save Settings** in the navigation bar to the left of your screen.

Trace Configuration

You may configure your Room Alert 3E for trace output, which is useful for troubleshooting. Trace output shows the communication between your Room Alert 3E and your mail server, as well as other information, such as the current firmware version, IP address, MAC address, and requests to web pages.



To configure trace output:

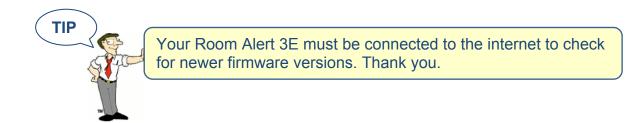
- 1. Select Enable Tracing.
- 2. In "Trace Port," leave the default, 143, unless your network blocks that port.
- 3. Click Accept Changes at the bottom of your screen.
- 4. Click **Save Settings** in the navigation bar to the left of your screen.
- 5. Click "View Tracing Output" to open a trace window.
- 6. When the trace window loads, click **Connect** to begin viewing the live trace output.

Help

Click the **Help** tab to open the "Room Alert 3E Help" screen, which provides helpful links and contact information for AVTECH support resources.

Room Alert [™] Advanced Computer Room Environment Monitoring, Alerting & Automatic Corrective Action						
Status	Settin	igs	Help	About		
Γ	Room Alert 3E Help					
	Room Alert 3E Firmware vX.X.X Released 1 Novem <u>Click Here To Check Fo</u>					
	Support Resources	User's Guide Frequently Asl Application No Support Cente Downloads	tes			
	Live Chat		PPORT k here			
	Email Support	Support@AVT	ECH.com			
	Phone Support		(USA & Canada) (International) - 5 PM EST			

You may find the version number and release date of the firmware that is installed on your Room Alert 3E on this screen. To check if your Room Alert 3E has the most current version, click **Click Here To Check For Updates**.

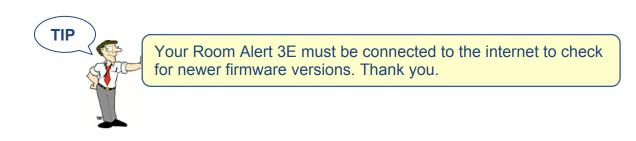


About

Click the **About** tab to open the "Room Alert 3E About" screen, which provides helpful links and contact information for AVTECH sales and support resources.

Room Alert Mathematic Computer Room Environment Monitoring, Alerting & Automatic Corrective Action									
Status	Sett	ings	Help	About					
	Room Alert 3E Ab	out							
	Room Alert 3E Firmware vX.X.X Released 1 Nove <u>Click Here To Check</u>	mber 2012							
	Sales								
			LICK HERE FOR SALES IVE CHAT DNLINE						
	Support	Support@AVT 888.220.6700	& Reference Manual						
	Website	AVTECH.com RoomAlert.co EnvironmentM							

You may find the version number and release date of the firmware that is installed on your Room Alert 3E on this screen. To check if your Room Alert 3E has the most current version, click **Click Here To Check For Updates**.



Updating & Troubleshooting Your Room Alert 3E

How To Download Firmware & Software Updates From AVTECH.com

Software and firmware updates are available to licensed customers with current "Maintenance Support & Update Service" (MSUS). To download:

- 1. Go to <u>AVTECH.com/Downloads</u>, or click **Downloads** on the menu bar at the top of the screen at <u>AVTECH.com</u>.
- 2. In the Downloads page, enter the following user account information in the "Customer Access" box:
 - Your username, which is the email address we have on file for you
 - Your organization's password.



Your user account information (download username & password) was emailed to you when you purchased your Room Alert 3E. This can be emailed to you again upon request.

- 3. Click Login.
- 4. Once you've logged in, you'll see which software and firmware products you are currently enabled for. To download, click the **Download Now** button next to the appropriate product.

How To Update Room Alert 3E's Firmware

- 1. Download and save the most recent firmware update for Room Alert 3E from your customer account at <u>AVTECH.com/Downloads</u>.
- 2. Open AVTECH's Device ManageR. (If you don't already have it installed, download it from your customer account.)
- 3. Select the Room Alert 3E option under the Device Status tab in the navigation bar to the left of your screen.
- 4. Click the **Update Firmware** link shown under the product name (or the **Update Firmware** button shown at the top of the screen).
- 5. Then follow the on-screen instructions to complete the update.



IMPORTANT: Be sure that there are no web browsers accessing your Room Alert 3E monitor from anywhere on your network before uploading the firmware as this could cause the firmware update to be incomplete or become corrupted.

How To Discover Room Alert 3E When Your Network Blocks UDP Broadcasts

If your network blocks UDP broadcast packets on port 30718, AVTECH's Device ManageR might not be able to automatically locate the Room Alert 3E monitor.

To manually discover your Room Alert 3E, use the Advanced Discovery option in AVTECH's Device ManageR Application:

- 1. Open AVTECH's Device ManageR. (If you don't already have it installed, download it from your customer account at <u>AVTECH.com/Downloads</u>.)
- 2. Navigate to **Advanced Discovery** under the "Device Status" tab in the navigation bar to the left of your screen.
- 3. In the "Advanced Discovery Options" dialog box, click Manually Add Device/s Via IP Address.
- 4. Enter your Room Alert 3E's IP address or the range of IP addresses assigned to DHCP devices on your network.
- 5. Click **Begin Scan**, which initiates a TCP scan on port 30718.
- 6. When the scan is complete, click **Close Window** and your Room Alert 3E should be automatically added to the list of discovered devices.

How To Reset Room Alert 3E To Factory Defaults

You may need to reset your Room Alert 3E to factory defaults if:

- You are moving it to a new location and it must be reconfigured.
- It has been assigned invalid network settings and is therefore inaccessible.
- You have lost your Room Alert 3E's password.

If your Room Alert 3E is accessible on the network, to reset it to factory defaults:

1. Navigate to **Settings** in the web interface.

- 2. Click **Reset Defaults** in the navigation bar to the left.
- 3. Click **Yes** when prompted with "Are you sure you want to Reset Factory Defaults?"

Stat	us	Settings	Help	About
MAC Address:	00-80-A3-93-53-5A	Version:	X.X.X	
Network				
SMTP Email		ou want to Reset Factory I)ofaults?	
SNMP	Are you sure yo	ou want to Reset Factory L		
Sensors		YES	NO	
Alarm Option	5			
Security				
Advanced				
Save Setting	5			
Reset Default	ts			

- 4. Your Room Alert 3E will automatically reboot and attempt to obtain an IP address via DHCP.
- 5. To automatically discover your Room Alert 3E on your network, open AVTECH's Device ManageR. (If you don't already have it installed, download it from your customer account at <u>AVTECH.com/Downloads</u>.)

If your Room Alert 3E is not accessible on the network, to reset it to factory defaults:

- 1. With your Room Alert 3E connected to the network and powered on, press and hold the reset button for at least 10 seconds until the left LED over the network jack turns off and then on again.
- 2. Your Room Alert 3E will automatically reboot and attempt to obtain an IP address via DHCP.
- 3. To automatically discover your Room Alert 3E on your network, open AVTECH's Device ManageR. (If you don't already have it installed, download it from your customer account at <u>AVTECH.com/Downloads</u>.)



IMPORTANT: When you reset to factory defaults, you lose all of your previously configured settings, including password security.

Introduction To AVTECH's Device ManageR

Device ManageR is AVTECH's all-in-one software solution for the discovery, management, monitoring, alerting, logging, graphing, automatic action and more of AVTECH's physical environment monitoring hardware and Axis network cameras.

Manage Unlimited Room Alert & TemPageR Montiors

- Control all of your Room Alert and TemPageR units from a single web browser interface, accessible from anywhere by internet.
- Take automatic corrective actions, run scripts and notify unlimited contacts on the device of their choice.
- Use dashboard widgets to customize your interface and display the information most important to you in real time.



✓ Automatically log and graph all of your sensor data for a comprehensive history of environmental conditions. Control the log file size automatically.



Manage Unlimited Network Cameras

- View all of your Axis camera displays simultaneously—and control who has access!
- Automatically email Axis camera snapshots in response to alert conditions.
- Customize your alerts with links to your Axis cameras for one-click access to real-time video.

Expand Device ManageR's Functionality With Plugins

- ✓ Send customized reports with advanced statistics according to a schedule or in response to alert conditions. Modify according to each user's needs.
- Log off, shut down, reboot and execute commands on Windows and Linux / Unix systems across your network.
- Automatically text or call contacts with alerts using a text, voice or GSM (satellite) modem.

Device Status	DISCONSTRUCT	N891 19	 Last Discovery: Oct 12, 2012 2:59: 	or part + reciperature	ates er o c				
Alerts / Tasks	Sched	uled 1	asks Configure which 'Tanks' to perf	orre on a specific schedule					
4									
uled Tasks	No 'Scheduled Tasks' are currently configured. Click the 'Add button to create a 'Scheduled Task'.								
(Notification Lists	Add Edit Copy Delate								
255	Alerts	Link an 9	Action / Notification List" with a specific sense	or and threshold informatio	L.				
al Schedules	Alert Status	Enobled	Norio	Device	Sensor Name	Operator	Value	Action	
		×	Air Intaka Humidity Too High	R12-Data Center	Crawl Space-Humidity	>1	94	1	
	~		Air Intake Temperature Too High	R32-Data Center	Crawl Space-Temperature (F)	>1	65		
			Cutler Mil Temp Check	RA24-GM	Internal Sensor-Heat Index (F)	~	85		
	4	×	Data Center Temperature Too Low	R32-Data Center	Internal Sensor Temperature (F)	<	68		
	~		Datacenter Ambient Temperature Alert	R20-OutlerMil	DC-Ambient-Hi-Temperature (F)		80		
	4	×	EnvironmentMonitor.com DOWN	Web - EnvironmentMo	Web - EnvironmentMonitor.com-Ping		Down		
	V	×	EnvironmentMonitor.com DOWN (Copy)	Web - AV/TECH.com	Web - AV/TECH.com-Ping		Down		
	~		Intake AC Temperature Over 75F	R32-Data Center	AC Unit-Temperature (F)	>	77.5		
	V		Room Entry Test Alert	RA12-MB	Switch Sen 1-Switch		Open		
	1								
Settings	ActionConta	IS Tasks Cts Sp	Ification Lists Configure while and Activities that should be performed due action collinguistics for the people y hedules Optional activulating that of	ing alarm conditions. Indu	dos sending email and toggling Signal Tow				
Help									

A license for Device ManageR is included FREE with the purchase of any AVTECH environment monitor. Download it now from your customer account at <u>AVTECH.com/Downloads</u>.

What Are Digital vs Switch Sensors?

Digital Sensors are those that monitor in real-time to provide digital values that can be viewed through a web or application interface, passed in alert notifications or logged for creating charts and graphs. Common digital sensors include Temperature; Outdoor Temperature; Fluid Temperature; and Temperature & Humidity.

Switch Sensors are those that do not provide real-time values and instead present their current status as being in or out of a specific state (i.e. on/off). These sensors have a built-in switch or circuit that changes status as a threshold is passed, indicating an alarm condition.



INCLUDES: Digital Temperature Sensor with 25' RJ-11 cable & installation note.

Digital Fluid Temperature Sensor

· Real-time fluid temperature sensor.

medicines & fluid temperature.

WiSH & WiSPR.

INCLUDES: Digital Fluid Temperature Sensor with 25" RJ-11 cable & installation note.

• Temperature range: -67 – 257° F, -55 – 125° C.

· Perfect for cooler or freezer monitoring of food,

Max sensor cable distance up to 100', includes 25'.

26WO, 24E, 11E, 7E, 4E, 3E, TemPageR 4E, 3E,

• Compatible with Room Alert 32W, 32E, 26W,

Digital Outdoor Temperature Sensor



RMA-DTH-SEN

POWER

RMA-PS1-SEN

BEŚ

- · Real-time temperature sensor.
- Temperature range: -67 257° F, -55 125° C.
- Max sensor cable distance up to 100', includes 25'.
- Silicon coating offers extra resilience for monitoring outdoors or in other harsh environments.
- <u>Compatible with Room Alert 32W, 32E, 26W,</u> 26WO, 24E, 11E, 7E, 4E, 3E, TemPageR 4E, 3E, WiSH & WiSPR.

INCLUDES: Digital Outdoor Temperature Sensor with 25' RJ-11 cable & installation note.

Digital Temp & Humidity Sensor

- Real-time temperature & humidity sensor.
- Temperature range: -67 257° F, -55 125° C.
- Relative humidity range: 5 to 95% non-condensing.
- Max sensor cable distance up to 100', includes 25'.
- <u>Compatible with Room Alert 32W, 32E, 26W, 26WO, 24E, 11E, 4E, 3E, WiSH & WiSPR</u>.

INCLUDES: Digital Temperature & Humidity Sensor with 25' RJ-11 cable & installation note.

Main Power Sensor

· Real-time main power on/off status.

· Specially designed to interface with Room Alert.

• Max sensor cable distance up to 900', includes 25'.

• Compatible with Room Alert 32W, 32E, 26W, 26WO,

· Monitors main, UPS or single phase power.

24E, 11E, 7E, 4E, 3E, WiSH & WiSPR.

25[´] Extended Cable & Coupler



RMA-DFT-SEN

- Extends the cable length of AVTECH's digital sensors or Light Tower & Relay Adapter another 25'.
- Compatible with AVTECH's Digital Temperature, Outside Temperature, Fluid Temperature, Temperature & Humidity Sensor, Light Tower & Relay Adapter.

ECC-25E-SEN

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• Note that digital sensors have a maximum cable distance of 100'. Therefore, only three (3) extensions can be connected since digital sensors have 25' cables.

INCLUDES: 25' RJ-11 extension cable with attached coupler & installation note

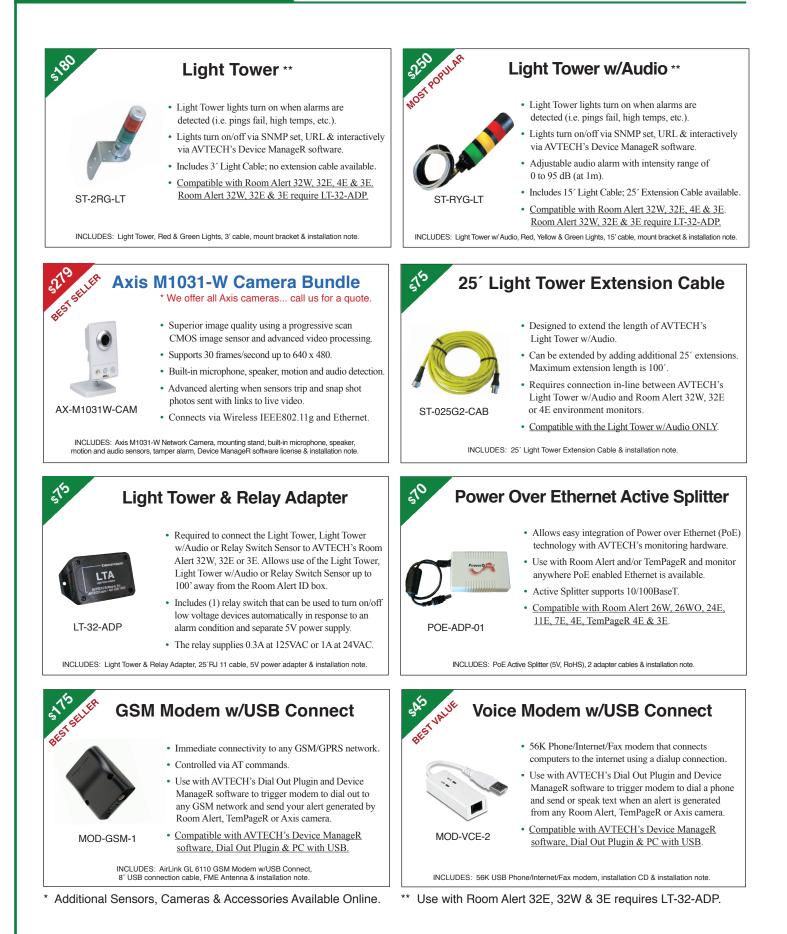
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INCLUDES: Main Power Sensor with 25' cable, 5V power adapter & installation note. Additional Sensors, Cameras & Accessories Available Online.



Additional Sensors, Cameras & Accessories Available Online.







IMPORTANT REMINDERS:

• Be sure that your Maintenance Support & Update Service (MSUS) is "Current" so that your organization is: 1) enabled to receive technical support, 2) enabled for download access to the latest firmware and software, 3) entitled to receive multiple firmware and software updates each year, and 4) covered by AVTECH's 100% hardware monitor replacement guarantee. Contact AVTECH to check your organization's status or renew/reinstate this valuable service.

• Be sure that your organization is ALWAYS running the latest version of firmware and software. Check regularly for updates and update your Room Alert and TemPageR monitors, Device ManageR software or SNMP Mibs. It is a big world out there and changes outside of our products can influence the access and performance to all types of hardware and software. Don't wait until a problem occurs before you look into being current.

- Read AVTECH's monthly email newsletter for customers to stay informed and up to date.
- Follow AVTECH on Twitter to learn about changes and updates on a timely basis.

How To Purchase AVTECH Products

AVTECH products are available for purchase around the world and used in 106 countries, on Antarctica and in space. You can purchase through your favorite reseller *, direct from AVTECH, or online through our store. When ordering from AVTECH, we are happy to accept your organization's purchase order (PO), as well as payment via credit card or wire transfer. All orders ship the same or next business day.

Resellers: Order Through Your Favorite Reseller – Ask them to contact AVTECH on your behalf. We can set them up to resell AVTECH products in minutes and ship to you the same or next business day.

Phone: 888.220.6700 / **401.628.1600** (9-5 EST) – Call AVTECH direct and ask to speak with a 'Product Specialist'. They can take your order by phone for immediate processing or provide you with an immediate PDF quote by email. If you are outside of the U.S.A. or Canada, please ask to speak with an 'International Product Specialist' as they can better address international shipping and customs concerns.

Website: Environment Monitor.com (Anytime) – Place your order online at any time through the AVTECH store for immediate processing. International money rates are available online to view pricing and make payment in your local currency. Periodic online specials are available and change on a regular basis.

Email: <u>Orders@AVTECH.com</u> (Anytime) – Send your organization's purchase order (PO), completed and scanned quote form or order instructions to AVTECH via email. We prefer to receive POs in PDF format although can accept Word and Excel formats if necessary. Other file formats are not accepted.

Fax: 401.628.1601 (Anytime) – Send your purchase order (PO), completed quote form or order instructions to AVTECH via fax at any time. Faxes are received in a secure facility.

* NOTE: International orders ship when payment in U.S.D. is received. Wire transfer or credit card payment is preferred. Checks must be in U.S.D. and drawn on a U.S. bank.

Maintenance Support & Update Service (MSUS)

'Maintenance Support & Update Service' (MSUS) for AVTECH's physical IT & facilities environment monitoring products is an important type of 'IT & facilities insurance'. If a problem arises, help is within easy and immediate access. This enables your organization to keep the servers, network and entire operation available and running for everyone's benefit. It also allows managers to sleep well at night, comfortable knowing that Room Alert, TemPageR and Device ManageR are on the job 24 hours a day!

During the 'Maintenance Support & Update Service' (MSUS) period, AVTECH will make available to current customers without charge, copies of current firmware, software and MIBs for licensed products. Firmware and software updates (approximately 3-4 times per year) will be provided via website download. Updates shall include release notes or revised documentation when it is appropriate. In addition, AVTECH will provide technical support as may be required, download access, current product firmware/software/MIBs, notice of new products and services, monthly email newsletter or update communication and various special offers, which provide benefit to the licensed customer. Room Alert and TemPageR hardware customers will enjoy full hardware replacement service on the ID box in case it should fail to function properly during normal use (i.e. without tamper or damage). This valuable service insures that current firmware and software versions for products, documentation, as well as technical support and fully functioning hardware, are available to licensed customers during the MSUS period.

MSUS is an annual service that is included for free during the first year when any AVTECH monitoring product is purchased. MSUS is optionally extendable thereafter on an annual basis, paid for in advance. AVTECH automatically sends out optional renewal notices sixty (60) and thirty (30) days prior to expiration of MSUS via email, for easy renewal. Failure to renew this service will result in a loss of the valuable and important benefits listed above. Reinstatement after MSUS has expired will incur an additional service fee and void the monitor replacement warranty. Support for sensors is complimentary for ninety (90) days. For additional information, please see the warranty or contact AVTECH directly.

Technical Support services are available 9-5:00 EST through:

Live Chat: <u>AVTECH.com/LiveChat.htm</u> Website: <u>AVTECH.com/Support</u> Email: <u>Support@AVTECH.com</u> Phone: 888.220.6700 / 401.628.1600

Contact Us

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

> Sales: 888.220.6700 Phone: 401.628.1600 Fax: 401.628.1601

Visit Us

AVTECH.com EnvironmentMonitor.com RoomAlert.com TemPageR.com

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Privacy Promise

AVTECH does not sell or share your email or other contact information. However, AVTECH uses some email marketing because our prospects and customers consider it important and convenient. When we do, AVTECH provides customers with an easy means to decline further email of that type.

Current Versions

To confirm your organization is running current software and firmware versions or to download these versions for any licensed AVTECH product under current MSUS, please visit <u>www.AVTECH.com</u> and look for the 'Current Versions' box on the 'Downloads' page.

Tell Us Your Story

At AVTECH, we truly want to know when we do well and when we miss expectations. Working to provide the best products and services means making changes that typically succeed and occasionally fall short. Please take a moment and email us your feedback at <u>Feedback@AVTECH.com</u>. It is always appreciated. Thank You.



Protect Your IT Facility... Don't Wait Until It's To Late!