Room Alert®

Introduction, Overview & Justification
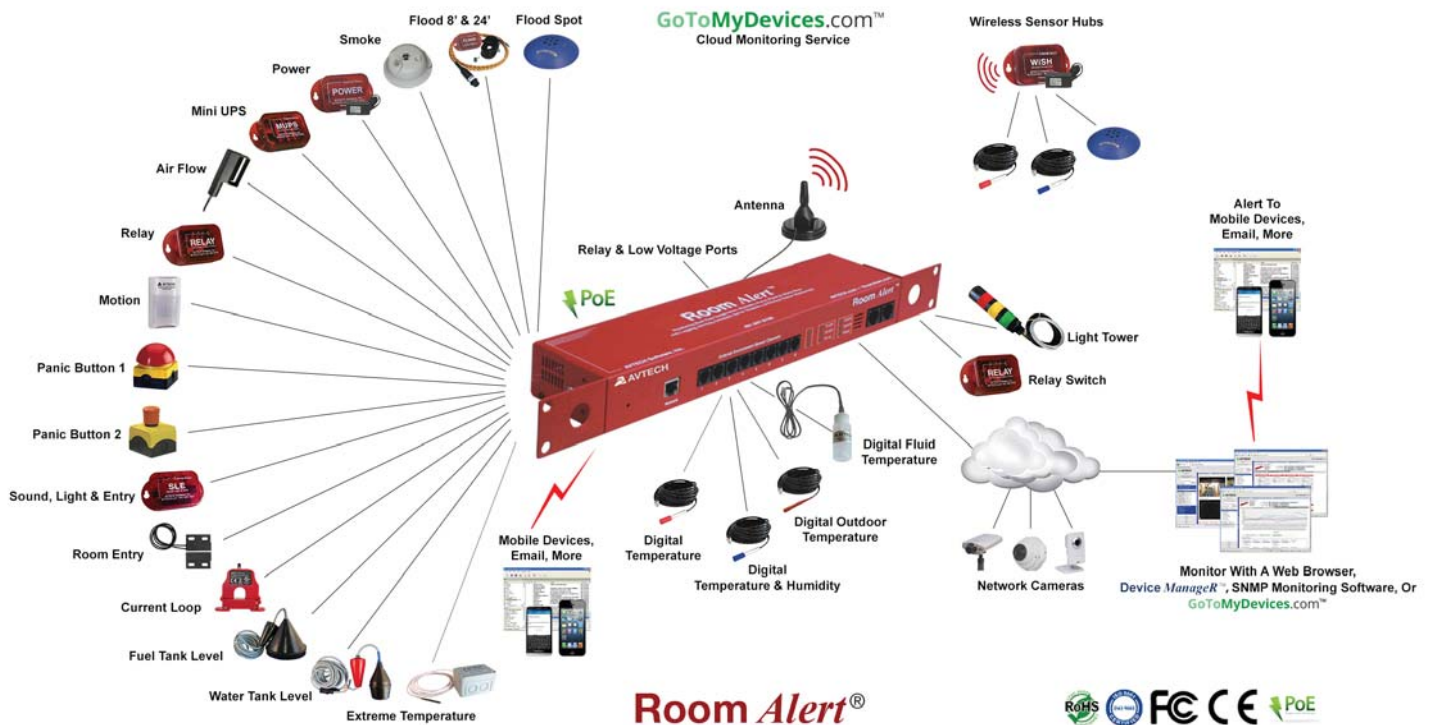
AVTECH's Room Alert products for 'Physical IT & Facilities Environment Monitoring' are the most widely used products of this type worldwide, used in over 179 countries, on Antarctica and in space.

Available through your favorite reseller, direct from AVTECH, or online at EnvironmentMonitor.com, there is a model available today that will meet the unique needs of any organization, large or small.

Please review this introduction for more information about Room Alert and to see how this advanced monitoring technology can benefit your organization.

AVAILABLE FROM...

Introduction

Room *Alert* ® is a hardware and software solution that allows easy remote monitoring of the environmental conditions in an IT computer room, data center or other facility from anywhere on the network or around the world.

The computer room or data center **'Environment'** means the physical conditions that may cause problems if they exceed certain thresholds. The primary environment conditions monitored typically include:

- **Temperature** (e.g. air conditioning, refrigerator, freezer or ventilation problems)
- **Humidity** (e.g. air conditioning, condensation, water or ventilation problems)
- **Heat Index** (e.g. feels like temperature important for people and animal safety)
- **Power** (e.g. main or UPS power loss or start, generator start or stop, current usage)
- **Flood** (e.g. air conditioning, plumbing or roof leak, natural disaster)
- **Smoke / Fire** (e.g. electronics burning, short circuit or room fire)
- **Motion** (e.g. movement or unauthorized entry within specific area, intrusion)
- **Air Flow** (e.g. air conditioner or cabinet fans stop moving air, blockage)
- **Room Entry** (e.g. unauthorized door, window or cabinet open/closed)
- **Panic Button** (e.g. user or staff press panic button, robbery or emergency alert)
- **Dry Contacts** (e.g. connect to non-voltage contacts on air conditioner, generator, security panel, etc.)

Environment monitoring is very important because computer and network equipment is only designed to operate effectively within a specified range of environmental conditions. If conditions get out of bounds, then:

- System, application, website or network access can become reduced, delayed or simply unavailable.

- Unpredictable and potentially catastrophic results start to occur, like disk failures and CPU errors, which can cause extreme software and backup failures that can be difficult to recover from.

- Excessive or inefficient power consumption can increase ongoing costs.

- Manufacturers of equipment and insurance companies will often not accept responsibility for problems caused by equipment exposed to extreme temperature, humidity, power outage, water damage, and other environmental extremes.

The most common environment problem encountered in the computer room is air conditioning failure. This can lead to high temperatures, high or low humidity, and water flooding (e.g. if the water inlet pipe leaks). According to various market studies and the experience of most AVTECH customers, the most common causes of environment problems in computer rooms or data centers are:

1) Air Conditioning Failure   **2) Power Supply Failure**

A simple in-house experiment that you can implement yourself is to switch off the air conditioning in the computer room and observe what happens to the temperature in just a short time. When the temperature unexpectedly rises outside of a reasonable range, you or your staff will need to be alerted in a hurry. If the room temperature rises to just 85 degrees Fahrenheit, the temperature inside a server or rack cabinet can quickly rise to over 120 degrees or more in just minutes! This can be deadly to sensitive IT equipment.

The first consideration of any server or network monitoring program should be the environment. This is because virtually the entire organization can immediately be affected when computer systems fail to act properly or become unreliable. Costs mount up quickly and easily become staggering for organizations that fail to respond immediately and properly. Think about the people and functions within your organization that would be affected if your primary computer server, systems or website go down for just 15-30 minutes.

One recent study shows almost 75% of all sites being down at least half a day because of computer room environment problems 1-3 times a year... costing from $10,000 to $50,000 per incident for 43% of these organizations.

When environment problems occur, Room Alert senses the problem and delivers alert notifications to the appropriate staff's mobile phone, computer, tablet, web page, pager, etc. This is accomplished via the built-in notification capabilities of Room Alert firmware or the alerting capabilities within the bundled **Device** *ManageR* ™ software or **GoToMyDevices** cloud service.

Room Alert monitors have a built-in web server that alerts directly from the hardware by email, email-to-SMS (i.e. text to any mobile device) and via SNMP trap to your favorite SNMP enabled monitoring software. It's the advanced capabilities within AVTECH's software that have helped AVTECH to become the world's leader in IT & facility environment monitoring since 1988.

Easy To Use, Low Cost, High Value Solution

All Room Alert models are very easy to install and use because the monitors plug directly into the network via Ethernet and use 'built-in' or 'attached' sensors, making them a very cost effective solution, expandable at any time. This is especially true when compared with traditional monitoring systems requiring construction or modification to a building structure. If your organization relocates at some time in the future, Room Alert monitors can move with you because they are NOT permanently attached to the physical property. Most leases require physical changes (i.e. property enhancements) to be considered a part of the building and owned by the property owner when a lease ends.

Because of the user interface, Room Alert is very easy to set up and use. Customers typically have Room Alert installed and operational in minutes. And, the bundled Device ManageR software allows expanded methods of sending alert messages to mobile phones, computers, tablets, web page, pagers and more, as well as to individuals, groups, hierarchies, different people for different issues, at different times of the day and different days of the week. These are in addition to the built-in notification capabilities of each Room Alert model.

Device ManageR Handles Monitoring, Alerting & Automatic Corrective Actions

Room Alert was designed to optionally run in conjunction with AVTECH's Device ManageR application software to monitor the sensors built-in or attached to Room Alert units and then provide advanced alerting functions and/or automatic corrective actions. This is not required although it provides an extremely powerful enhancement to Room Alert because the capabilities of Device ManageR are significant and go well beyond the scope of basic environment monitoring. The monitoring of environment conditions is easily accomplished by using the specially-designed capabilities of Device ManageR for setup, firmware upgrades, monitoring, alerting, logging, graphing, reporting, automatic actions and more. A license for Device ManageR is included FREE with all models of Room Alert, so there is no additional cost for this valuable software.

Device ManageR allows an unlimited number of 'Contacts' to be set up. Contacts are people (recipients) or devices that are set up to receive alert notifications. In addition to all the standard alert methods, Device ManageR can also send text and voice alert notifications by dial-out through recommended text, voice or GSM modems.

The full capabilities of Device ManageR allow network-wide monitoring of all Room Alert and/or Axis cameras to be made easy, reliable and immediate from anywhere through a single IP address (see separate Device ManageR materials for more indepth information). With the addition of plugins, Device ManageR is able to extend its powerful monitoring features. This is a unique feature of Device ManageR and something NOT available from competitive product offerings. Device ManageR makes Room Alert a world-leading product.

An added benefit is that Room Alert does NOT have to be connected to the host system running the Device ManageR software. Room Alert models connect to your network via Ethernet, allowing you to connect Room Alert monitors anywhere across your local or worldwide network. This allows you to have unlimited Room Alert units installed at various locations that can all be monitored by a single installation of Device ManageR. This means you do NOT need a host PC, modem and phone line for each Room Alert ID box. This saves money and makes Room Alert and Device ManageR easier to install and more cost effective to manage. Users connect to Device ManageR using their favorite web browser from anywhere worldwide!

Integrating Room Alert With Your Existing SNMP Monitoring Software

Room Alert is designed to run in conjunction with AVTECH's Device ManageR application software and thereby has access to all the advanced monitoring, alerting and automatic corrective action capability that your organization may ever need. However, Room Alert can also be configured to work with third party monitoring and alerting software products that you may already use. Room Alert can easily be set up to work with platform products like *OpenView, Tivoli* and *Unicenter*, as well as popular monitoring applications like *Nagios, RTPG, Big Brother, WhatsUp Gold, PageR Enterprise, Scrambler* and many others. This is accomplished by monitoring Room Alert models directly via SNMP from anywhere across your network.

In this way, you are able to maintain a centralized reporting function that may already be in place and keep alert message formats consistent with what recipients are already familiar with. So, if your organization has already invested in or is loyal to another monitoring and alerting product, your investment can be preserved while you use Room Alert to expand its benefits for greater protection of your expensive equipment or facility. This allows immediate integration of Room Alert monitors and sensors.

Sample Room Alert Sensor Configuration

Monitoring environmental conditions is achieved with the use of sensors built into the Room Alert monitor and connected externally. Each sensor type monitors a different condition (e.g. temperature, power, humidity, flood, etc.) and is based on the different physical properties associated with the environmental condition being monitored. Sensors for temperature and humidity, for example, are **'digital'** which means they provide the **'real-time'** values being measured and allow monitoring of multiple thresholds. Most other sensors are based on a change in their **'output state'** (i.e. when the condition being monitored crosses a set threshold or changes back when the condition returns to normal) that is communicated to the Room Alert ID box. These sensors, known as **'switch'** sensors, are installed by connecting two **'volt-free'** wires (which do not require a professional electrician) between the Room Alert ID box and the individual sensor device (e.g. flood, smoke, room entry, air flow, motion, etc). Room Alert ID boxes allow connection of a wide variety of different sensors, with the type and quantity being dependent on the Room Alert model in use. Additional sensors can be easily and immediately attached by connecting them to an open sensor channel.

A typical setup configuration for a single Room Alert ID Box installation might look like this:
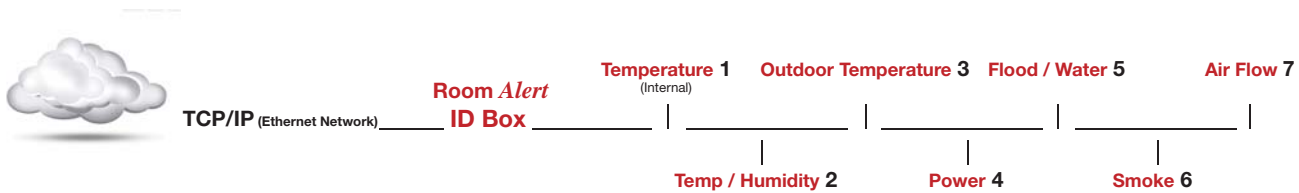
Use Room Alert To Monitor Multiple Locations Network-Wide

If you want to monitor multiple rooms or locations in the same facility or around the world, the best way to do this is to install AVTECH's **Device** *ManageR* ™ application software and then use it to monitor multiple Room Alert units installed network-wide via Ethernet. One or more Room Alert monitors are typically installed at each desired monitoring location (i.e. data center, computer room, telecom closet, remote facility, storage room, rack cabinet, etc.) throughout a facility. The maximum number of Room Alert monitors installed network-wide to be monitored from a single installation of Device ManageR is <u>unlimited</u>.
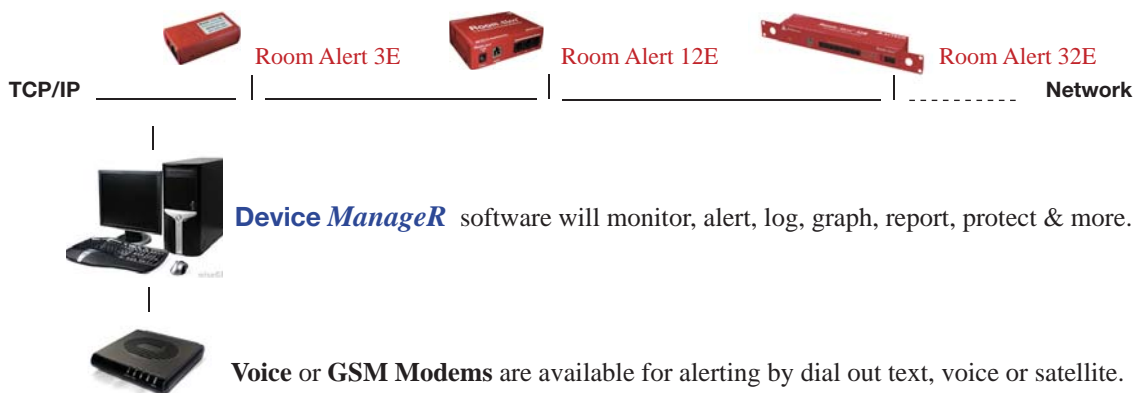
Device ManageR's web browser interface allows monitoring from any location, giving users access from anywhere on the network or around the world via the internet. It allows a single interface to display one, some or all Room Alert units connected network-wide, and managers can set multiple access levels, groups and more. Device ManageR allows real-time logging and graphing of sensor data with one-click export to an Excel or CSV file.

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GoToMyDevices

GoToMyDevices is AVTECH's powerful cloud service, designed to make it easy to monitor temperature and environmental conditions from anywhere, at any time, through the cloud via the web. Enjoy the same alert interface from any device.

GoToMyDevices is designed specifically to assist with monitoring temperature and other environmental conditions without the worries of installing software, configuring an email server, configuring network settings, allocating disk space for data storage, or running regular data backups. GoToMyDevices handles all of this automatically in the cloud, with a user experience that is always consistent whether on a desktop, laptop, tablet or mobile device.

GoToMyDevices logs all sensor data for historical review, analysis and verification. This eliminates the need for users to manage data for long term access and backup. Easy CSV export allows in-house data collection and local manipulation to meet regulatory reporting requirements or management objectives. Users can easily display values over time on a graph for any of their connected sensors. Time and date ranges are adjustable and interactive with zoom features to explore data at detailed levels. An export to PDF option allows snapshot views to be created and saved on the fly in seconds.

Reports can be easily created for different sensor types, groups of devices, teams, locations and other criteria. Reports can pull data from any sensor or Room Alert device network-wide, allowing side-by-side comparisons within graphs, and providing complete flexibility as to what can be included within a report. Using reports enables managers to get the view and insight they need and want on a regular basis for better decision making, faster response, and planning. This leads to greater uptime for organizations, lower meantime between hardware failures, and smarter energy consumption.
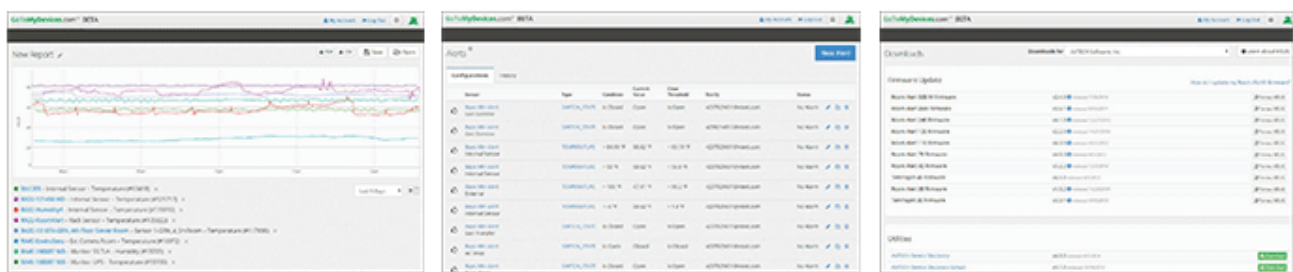
AVTECH'S GoToMyDevices Software Sample Screens

Alerts are easy to configure and do not require access to an email server or other external service. Simply enter the desired email or SMS address to notify and the conditions that should trigger an alert and GoToMyDevices will do the rest. GoToMyDevices allows users to get notified and respond appropriately before alert conditions impact their operations or facilities. This provides peace-of-mind for users who can be assured that all is well when they are away.

With its ease of use, advanced capabilities and affordable subscription rates, GoToMyDevices is quickly becoming the most trusted and dependable method for monitoring temperature and environmental conditions through the cloud. Register today and get started now at http://GoToMyDevices.com.
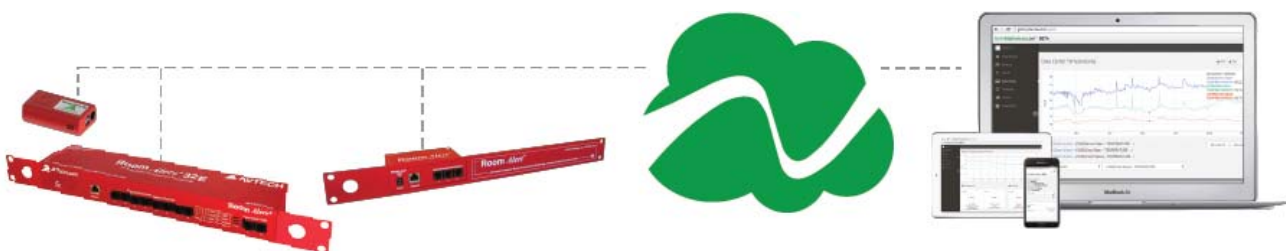
Room Alert Sensors

The following list indicates the most common types of sensors typically used with various Room Alert models:

Environment Variable	Sensor Type
Digital Temperature	**Digital Thermometer** (dynamic real-time values, Fahrenheit or Celsius)
Digital Humidity	**Digital Hygrometer** (dynamic real-time values, relative humidity, heat index)
Main Power	**Power Sensor** (switch, yes / no)
Flood / Water	**Flood / Water Sensor** (switch, yes / no, cable or spot models)
Smoke / Fire	**Smoke / Fire Sensor** (switch, yes / no)
Motion	**Motion Sensor** (switch, yes / no, proximity based, adjustable sensitivity)
Sound / Light	**Sound / Light Sensor** (switch, yes / no, adjustable sensitivity)
Air Flow	**Air Flow Sensor** (switch, yes / no)
Room Entry	**Room Entry Sensor** (switch, open / closed, for door / window / cabinet)
Panic Button	**Panic Button** (switch, on / off, pushed by attendant)

For simplicity, reliability and economy, a common specification for many external sensing devices to be used with Room Alert is that they are 'switch' based sensors. This means that the sensor is attached via two **'volt-free'** wires running from the contacts on the sensor to an open switch sensor channel (i.e. set of contacts) on the Room Alert monitor. This means that even though AVTECH manufactures a wide range of sensors meeting all of the primary monitoring scenarios, you can connect other non-AVTECH specialty sensors as long as they are switch sensors that are volt-free. You can even connect Room Alert directly to your UPS, air conditioner, power generator, security system, building control panel or other device for direct monitoring if volt-free dry contacts are available on these products to indicate a change in state.

When a condition changes from 'normal' to 'abnormal', the switch sensor contacts within the sensor device will either 'close' or 'open'. Room Alert is able to trigger an alert signal on both the switch 'make' (close) and switch 'break' (open). The point at which the switch on the sensor closes or opens is called the 'threshold'.

Some sensors have 'variable' thresholds, and the rest have 'fixed' thresholds. For example, a motion sensor has a variable threshold for sensitivity that is set manually with a dial by the user. Smoke / fire, flood / water, and main power sensors have fixed thresholds that are set by the manufacturer of the sensor. In each case, the switch inside the sensor device will either close or open (i.e. on / off, make / break) as the threshold point is met or passed.

One important characteristic of a sensor is known as **'hysteresis'**. This term refers to the difference between the value setting at which the threshold is crossed going 'into an alarm state' and then coming 'out of an alarm state'. For example, with a traditional thermostat to monitor temperature installed in most homes today, the sensor may trip at 72 degrees as the temperature rises. When the temperature then falls and drops below 72 degrees, the sensor may not actually trip closed until the temperature reaches about 68 degrees. The difference of the 4 degrees is due to the inherent 'hysteresis' of the sensor.

Hysteresis is necessary to have on sensor devices in order for you to avoid experiencing a condition known as **'chatter'**, where a sensor goes back and forth in and out of an alarm state multiple times over a very short period of time. This can easily occur when the temperature slowly crosses the threshold or if the temperature happens to **'hover'** around the threshold. Chatter indicates the rapid opening and closing of a sensor's switch on a repeated basis.

Without a proper understanding of the concept of hysteresis in the application of computer room environment monitoring, the end result would be many undesirable nuisance alert notifications. Therefore, the understanding of hysteresis has been incorporated into AVTECH's Room Alert monitors and Device ManageR software, in an effort to reduce repetitive or nuisance alert notifications. This is accomplished by allowing threshold or timing adjustments to be set in the firmware or software settings, limiting alerts based on various parameters.

Room Alert Monitors And Sensor Isolation

Room Alert 3E, Room Alert 12ER and **Room Alert 32W** models offer value options for any organization.

AVTECH offers multiple Room Alert models for environment monitoring, with current models including the 3 Wi-Fi, 3E, 4E/ER, 12E/ER, 32E and 32W. Each model offers different sensors, capabilities, options and bundled firmware, software and cloud service subscription. All are extremely easy to use and connect directly to your Ethernet or Wi-Fi network for immediate use. Rack, wall, ceiling and standard mount options are available for most models. PoE is available on most models, and we offer PoE Adapters for older models. Wi-Fi is available on Room Alert 3 Wi-Fi and wireless sensor hub monitoring is available on the Room Alert 32W.

Different Room Alert models can support various quantities and types of sensors that may be distributed in widely dispersed areas. The Room Alert monitor provides a simple means of bringing the necessary wiring together. This 'distribution' component of the Room Alert monitor is provided through simple connectors that accept the wiring from each sensor device. It converts sensor changes into signals suitable for delivery to monitoring software located anywhere on the network or in the cloud.

The sensor **'isolation'** properties that are provided by the Room Alert monitor are very important. When you have sensors distributed around the computer room, it is a serious risk to connect long lengths of unshielded wire directly to a computer. There are two reasons for this. First, there is a risk of induced electrical potential in the long lengths of wire that may run alongside existing 'current carrying' cables. And second, there is a risk of accidental connection of the sensor wiring to a live line circuit. All models, except Room Alert 3 Wi-Fi, can also send alerts directly from the unit and without the need for additional software.

With some other environment monitoring systems, sensor devices and their wiring are required to be installed by a qualified electrician. Even then, it's possible for wires to be mistakenly connected to the wrong contact point. This could have disastrous consequences if sensors were to be connected directly to a computer. This being understood, the proprietary voltage isolation circuitry designed for and engineered into every Room Alert monitor provides the needed protection for you, your equipment, your facility and your organization.

By allowing connection via Ethernet or Wi-Fi, users can locate Room Alert monitors anywhere on the network and monitor unlimited Room Alert units from a single installation of Device ManageR located anywhere on the network or through GoToMyDevices. This valuable and beneficial design consideration is in all Room Alert models and another reason why AVTECH remains an undisputed leader in IT & facilities environment monitoring worldwide going back to 1988.

Sensor Distribution

Room Alert is able to create two (2) different alerts for **'switch'** sensors like our external flood sensors (i.e. spot and cable models shown below) by effectively monitoring the 'ON' and 'OFF' status of each individual sensor.

Sensor Circuit   **ON / HIGH / MAKE / OPEN / NO FLOODING**
Sensor Circuit   **OFF / LOW / BREAK / CLOSED / FLOODING**

The recommended sensor polarity is when a switch 'closes' or 'opens' its contacts as the condition being monitored changes from 'normal' to 'abnormal' (e.g. when flooding occurs). If monitoring for flooding (i.e. water leakage), the contacts would close when the presence of water trips the sensor. The ability to monitor for flooding or water leakage can easily be accomplished by placing the spot flood sensor or flood sensor cable (i.e. 8' or 24') where flooding is most likely to occur.

It is important to note that external switch sensor circuits can only trigger two (2) unique alert message signals: one for ON and one for OFF. In other words, there is one signal for a change from 'normal' to 'abnormal' and a second signal for a change from 'abnormal' back to 'normal'. The exception to this is for special built-in or external sensors that are **'digital'**. The digital sensors provide **'real-time'** values in the alerts and can be monitored at multiple threshold levels (e.g. early warning, normal warning, critical warning, shutdown action, restart action, etc.). Values and status changes can be logged by Device ManageR and GoToMyDevices for use in graphing and reporting.

Using Multiple Sensors Connected To A Single Sensor Channel

Each of the Room Alert switch sensor channels (i.e. contact sets) is able to connect an unlimited number of sensors, provided they are of the same **'polarity'**. All sensors connected to a single channel MUST be 'closed' and then open when the condition goes from 'normal' to 'abnormal' (e.g. they must react the same way when conditions change). **It is NOT possible to mix normally 'open' and 'closed' sensors on the same channel or to chain multiple sensors that are normally 'open'.**

The result of this is that if you want to use multiple flood sensors (e.g. in different sections of a room) on a single sensor circuit, and one sensor device trips over its threshold, then until it trips back again, the other sensor devices will not be detectable. This is not a problem since the main objective has already been achieved because an alert signal was already sent when the first sensor was triggered by the change in flood conditions. Basically, multiple sensors can be connected in **'parallel'** like a ladder (i.e. piggyback or chained) or **'spoked'** from the channel connectors. **If unique sensor monitoring or alerting is desired so you know exactly which sensor has tripped, then use one sensor channel per sensor.**

A typical application for sensor chaining is to have multiple sensors located in different parts of the computer room in order to detect changes at several critical spots. The primary benefit of this is the expanded monitoring capacity or range for an environmental condition while consuming only a single sensor circuit on the Room Alert monitor. Note that the alert message sent is the same for each of the chained sensors sharing a channel and that the individual sensor triggered cannot be identified from the group. This is because when one chained sensor trips, all the sensors chained to it are considered tripped. **To get full differentiation between the sensors, users must use one sensor channel for each individual sensor device.**

Putting It All Together

Each Room Alert package consists of a Room Alert monitor, Ethernet cable, installation and mounting hardware, Device ManageR software, various built-in or external sensors, open sensor ports or channels for connection of additional external sensors, a power adapter, online *User's Guide & Reference Manual* and installation notes, a year subscription to GoToMyDevices cloud service (with first purchase), extended service & support, and AVTECH's Hardware Warranty.

Our Room Alert 12E package, for example, is enough to monitor computer room temperature, power, room entry and more. Everything a user needs is included. There are three (3) additional open digital sensor ports and four (4) additional open switch sensor channels, one (1) Analog port, one (1) Relay port for connection of additional sensor devices. A variety of sensors and Device ManageR Plugins are optionally available. Extra Device ManageR Plugins can be used to Shutdown, Reboot, Log Off and/or Run Scripts/Commands on Windows systems, Shutdown and/or Reboot Unix/Linux systems, send alerts via Dial Out Text, Dial Out Voice or GSM Text, and Generate Custom Reports with status updates and advanced statistics on Room Alert devices.

The Room Alert 12E comes assembled and ready for immediate use. It should be mounted in a rack or attached to a convenient surface where the ambient room temperature is to be monitored. All other sensors can be extended to locations at approximately 100-900 feet away from the monitor, depending upon the sensor type and your monitoring needs. The Ethernet cable connects the Room Alert 12E monitor directly to your network and a 5V international power adapter (110-240V) connects to a power source (or optionally to a UPS like AVTECH's Mini UPS). **Note that it is important, like other network equipment, to connect it to the network before connecting it to power, so that it can obtain an IP address properly**. This is all that is required for the basic hardware installation of Room Alert 12E. All power adapters ship for use in the destination country.

It is assumed that some users have a modem connected to the Windows host. However, if dial-out notification is not available or desired, then a modem is NOT required. Note that all of the major mobile service providers like AT&T, Verizon, Sprint, T-Mobile and others have already discontinued dial-up service. With this in mind, service providers recommend using Email-To-SMS or Simple Network Paging Protocol (SNPP) which is already built-in and available in all Room Alert models, Device ManageR and GoToMyDevices.

Although not required, installation of the Device ManageR software significantly enhances your organization's ability to monitor all models of Room Alert, increases the number and types of available alert notification methods and enables you to set up automatic corrective actions. Installation of Device ManageR is easily accomplished via download of the software from GoToMyDevices.com. Instructions on how to get started are available online. Simply select 'Downloads' from the navigation bar.

After you have completed the basic set up of Device ManageR, you can check your installation of Room Alert by monitoring it directly with Device ManageR. All Room Alert, TemPageR and Axis cameras across your network will be automatically discovered for immediate use within seconds. Most users absolutely love Device ManageR!

Real World Usage, Proven Reliability

AVTECH has designed, tested and proven both Room Alert, Device ManageR and GoToMydevices to be extremely powerful and reliable, according to standard testing methods and in actual, real world facilities at some of the biggest and most critical facilities in the world. **AVTECH products are employed by most of the Fortune 1000, the United Nations, U.S. Government, U.S. Military, White House, Pentagon, NORAD, NASA and many thousands of organizations of all types & sizes.** AVTECH has minimal support requests and resolves 94% within the initial contact. We support over 130,000 end users worldwide across 179 countries. Professional Resellers often provide level 1 support as well.

AVTECH will continue to monitor the issues and concerns our customers face in today's complex, multi-OS computing and facilities management environments and work to keep our products on the leading edge. AVTECH works hard to earn your business and continues to work even harder to keep it once we've earned it.

A Complete Line Of Room Alert Options

There are six (6) current models of AVTECH's physical environment monitoring products known as Room Alert. These include the Room Alert 3 Wi-Fi, 3E, 4E/ER, 12E/ER, 32E and 32W. These Room Alert models offer more features and functions than competitive products at lower prices. In other words, **current Room Alert models offer the greatest value & maximum reliability**.

Components of each model (i.e. base package) are below to describe what is included when you order:

Room *Alert* 3 Wi-Fi WiFi • Includes PUSH & Wi-Fi Connection

INCLUDES: Room Alert 3W ID box, Wi-Fi connection, built-in PUSH technology, built-in Digital Temperature sensor, 1 Digital Sensor Port (RJ-11), 1 Switch Sensor Channel, 5V International Power Adapter (110/240V, RoHS), built-in Web Server, bundled Device ManageR software, Download Access, downloadable Room Alert 3 Wi-Fi User's Guide & Reference Manual, 12 months of GoToMyDevices cloud service, 30-Day Satisfaction Guarantee. OPTIONAL: Sensors, Software Plugins, Voice or GSM Modem, more.

Room *Alert* 3E PoE • Includes PUSH • Light Tower & Relay Ready

INCLUDES: Room Alert 3 ID box, Ethernet connection, built-in PoE, built-in PUSH technology, built-in Digital Temperature sensor, 1 Digital Sensor Port (RJ-11), 1 Switch Sensor Channel, Ethernet cable, 5V International Power Adapter (110/240V, RoHS), built-in Web Server, built-in Alert Notifications, SNMP Trap & Query enabled, bundled Device ManageR software, Download Access, downloadable Room Alert 3E User's Guide & Reference Manual, 12 months of GoToMyDevices cloud service, 30-Day Satisfaction Guarantee. OPTIONAL: 10' Ethernet Cable, Sensors, Software Plugins, Light Tower w/Adapter, Relay Switch Sensor w/Adapter, Voice or GSM Modem, more.

Room *Alert* 4E / ER • Includes PUSH • Light Tower & Relay Direct Connect

INCLUDES: Room Alert 4E ID box, Ethernet connection, built-in PUSH technology, built-in Digital Temperature sensor, external Digital Temperature sensor, 2 Digital Sensor Ports, 1 Switch Sensor Channel, 1 Light Tower or Relay Switch Sensor Connection Port, 10' Ethernet cable, 5V International Power Adapter (110/240V, RoHS), Wall or Rack (1U 19") Mount Bracket, built-in Web Server, built-in Alert Notifications, SNMP Trap & Query enabled, bundled Device ManageR software, Download Access, downloadable Room Alert 4E User's Guide & Reference Manual, 12 months of GoToMyDevices cloud service, 30-Day Satisfaction Guarantee. OPTIONAL: Sensors, Software Plugins, Light Tower, Relay Switch Sensor, Voice or GSM Modem, PoE Splitter or Injector, more.

Room *Alert* 12E / ER PoE • Includes PUSH • Light Tower & Relay Ready

INCLUDES: Room Alert 12E ID box, Ethernet connection, built-in PoE, built-in PUSH technology, built-in Digital Temperature sensor, external Digital Temperature sensor, external Power sensor, 3 Digital Sensor Ports (RJ-11), 4 Switch Sensor Channels, external Relay Output Port (0.3A@125VAC / 1A@24VDC), 0-5V Analog Sensor Input Port, external Light Tower or Relay Switch Sensor Connection Port, 10' Ethernet cable, 5V International Power Adapter (110/240V, RoHS), Wall or Rack (1U 19″) Mount Bracket, built-in Web Server, built-in Alert Notifications, SNMP Trap & Query enabled, bundled Device ManageR software, Download Access, downloadable Room Alert 12E User's Guide & Reference Manual, 12 months of GoToMyDevices cloud service, 30-Day Satisfaction Guarantee. OPTIONAL: Sensors, Software Plugins, Light Tower w/Adapter, Relay Switch Sensors w/Adapter, Voice or GSM Modem, more.

Room *Alert* 32E PoE • Includes PUSH & UPS • Light Tower & Relay Ready

INCLUDES: Room Alert 32E ID Box, Ethernet connection, built-in PoE, built-in PUSH technology, built-in Digital Temperature sensor, built-in Digital Humidity Sensor, built-in Main Power sensor, external Digital Temperature sensor, external Room Entry sensor, 8 Digital Sensor Ports (RJ-11), 16 Switch Sensor Channels, built-in Uninterruptible Power Supply (UPS), 2 external Relay Output Ports (0.3A@125VAC / 1A@24VDC), 2 0-5V Analog Sensor Input Ports, 2 external Light Tower or Relay Switch Sensor Connection Ports, 10' Ethernet cable, 5V International Power Adapter (110/240V, RoHS), built-in Web Server, built-in Alert Notifications, SNMP Trap & Query enabled, bundled Device ManageR software, Windows Plugin Bundle, Download Access, downloadable Room Alert 32E/W User's Guide & Reference Manual, 12 months of GoToMyDevices cloud service, 30-Day Satisfaction Guarantee. OPTIONAL: Sensors, Software Plugins, Light Towers w/Adapter, Relay Switch Sensors w/Adapter, Voice or GSM Modem, more.

Room *Alert* 32W PoE • Includes PUSH, UPS & Wireless Sensor Monitoring • Light Tower & Relay Ready

INCLUDES: Room Alert 32E ID box, Ethernet connection, built-in PoE, built-in wireless capability, built-in PUSH technology, built-in Digital Temperature sensor, built-in Digital Humidity Sensor, built-in Main Power sensor, external Digital Temperature sensor, external Room Entry sensor, 8 Digital Sensor Ports (RJ-11), 16 Switch Sensor Channels, Wireless Sensor Hub (powered), 15 Wireless Sensor Hub capacity, built-in Uninterruptible Power Supply (UPS), 2 external Relay Output Ports (0.3A@125VAC / 1A@24VDC), 2 0-5V Analog Sensor Input Ports, 2 external Light Tower or Relay Switch Sensor Connection Ports, 10' external antenna, 10' Ethernet cable, 5V International Power Adapter (110/240V, RoHS), built-in Web Server, built-in Alert Notifications, SNMP Trap & Query enabled, bundled Device ManageR software, Windows Plugin Bundle, Download Access, downloadable Room Alert 32E/W User's Guide & Reference Manual, 12 months of GoToMyDevices cloud service, 30-Day Satisfaction Guarantee. OPTIONAL: Wireless Sensor Hubs, Sensors, Software Plugins, Light Towers w/Adapter, Relay Switch Sensors w/Adapter, Voice or GSM Modem, more.

Contact Information

To receive further information or assistance regarding Room Alert, Sensors, Device ManageR, Plugins, GoToMyDevices or AVTECH, please contact us at:

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

Phone **401.628.1600**   Sales   **888.220.6700** (Toll Free in North America)

Fax   401.628.1601

Email   Sales@AVTECH.com   Support@AVTECH.com   Info@AVTECH.com

Web   AVTECH.com   RoomAlert.com   GoToMyDevices.com   EnvironmentMonitor.com

About AVTECH Software

AVTECH Software (AVTECH), a private corporation founded in 1988, is a computer hardware and software developer. Our Room Alert line of products monitor computer room and facility conditions such as temperature, humidity, power, flood/water, smoke/fire, air flow, room entry, motion, IP cameras & more. When issues or events occur, AVTECH products use today's most advanced alerting technologies to quickly communicate important status information to managers via computer, mobile phone, tablets, email, web, audio alert & more. Device ManageR provides a collective web interface for unlimited Room Alert units, as well as Axis Cameras, through a single IP address. It will monitor, log all sensor data, graph sensor data, alert users, and more. Device ManageR is bundled with every Room Alert monitor. GoToMyDevices adds advanced monitoring through the cloud. Automatic monitoring solutions like Room Alert resolve issues for a lights-out response, allowing 'Disaster Prevention' instead of 'Disaster Recovery'.

AVTECH has over 130,000 end user customers located throughout the world, including organizations in every industry and on every continent. AVTECH products are heavily used by the Fortune 1000, U.S. Government, U.S. Military, medical organizations, educational institutions, manufacturers and businesses of all types and sizes.

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Room *Alert* 3E is the most popular Room Alert ever!
Now Room Alert 3 is available in a Wi-Fi model.