



# WES3 Product Brochure



Completely Wireless  
Robust Mesh Network  
Remote Monitoring via REACT



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# WES3 Wireless Evacuation and Emergency System

Fire, evacuation and medical alert system for a wide range of temporary applications.

WES3 is a completely wireless system that has been developed to provide a simple, fast, and secure method of communicating and notifying personnel in the event of a site emergency. Fully wireless and battery operated, WES3 can be rapidly deployed and remotely monitored, without the need for cabling or mains power. From void properties through to sprawling construction sites, WES3 can be easily customised to tackle it all.

## Benefits of the WES3 system

The WES3 system has been designed to offer a practical and economical wireless emergency alert solution.

- ◉ Completely wireless
- ◉ Simple to set up, install, and reposition
- ◉ Long range mesh-radio network
- ◉ Fire and medical alert function
- ◉ 24/7 protection with smoke/heat detectors
- ◉ Easily integrates with other systems
- ◉ 4G connectivity for offsite communication
- ◉ Remote monitoring via REACT



### Connect Control Unit

Connect is the real brains behind the WES3 system that enables full management and real-time diagnostics/alarm activations for any connected unit in the network.



### Manual Call Point

The Manual Call Point allows a fire or evacuation alarm to be raised from any unit on-site, initiating a site-wide alarm. It also includes a medical alert button for immediate medical assistance.



### Heat Detector

Incorporating heat detectors into your WES3 network allows for automatic 24/7 fire detection. These detectors are ideally suited for locations where smoke detectors may not be effective.



### Smoke Detector

Incorporating dust-resistant smoke detectors into your WES3 network provides early fire detection while eliminating false alarms caused by dust.



### Interface

Allows WES3 to seamlessly integrate with third-party systems, such as permanent fire alarms, Building Management Systems, standpipe flow switches, and more.



### Link

A simple repeater unit that boosts the radio signal capability in particularly large, complex, or high-density sites.

## PRODUCT RANGE

# WES3 Manual Call Point

**Our wireless evacuation alarm system provides a cost-effective solution to protect both people and property.**

WES3 Manual Call Point is a versatile three-in-one unit, allowing you to raise evacuation, fire, and medical alerts from a single device with a simple button press. Strategically positioned across the site, they create a secure mesh network for site-wide alarms. Each unit is numbered for easy identification, and adding, removing, or cloning units is straightforward.

Designed for indoor and outdoor use under IP55 conditions, these call points are typically placed in prominent locations like main escape routes, stairwells, and near fire points, ensuring visibility and accessibility during emergencies.



## Call Point

The WES3 Manual Call Point is the primary alert unit in the WES3 range. This versatile unit features a powerful 94dB(A) horn, bright strobe lights, and both a manual call point and medical alert button, ensuring comprehensive alarm activation and safety communication on-site.

## Raising The Alarm

To raise a fire or evacuation alarm, simply press any call point in the network. This action initiates a site-wide alarm or activates the pre-alarm function. The WES3 Connect control panel then notifies the user of the exact location where the alarm was triggered, enabling quick identification of the search area.

## Integrated Medical Alert Button

The integrated medical alert button allows all personnel to raise an alert when medical assistance is required, immediately notifying first aiders.





# WES3 Connect Control Unit

**Connect is an enhanced emergency control unit that uses 4G data connectivity to deliver real-time alerts.**

WES3 Connect Control Panel is the central hub for managing and monitoring all WES3 units on-site. This advanced control unit can capture data from up to 999 devices across your site, providing continuous updates on active alarms, low battery warnings, and signal failures, ensuring you stay informed about the status of your site at all times.

When integrated with the REACT Emergency Notification System, it offers enhanced functionality, allowing you to monitor alarm activations from anywhere in the world through the REACT mobile app. This integration provides real-time alerts and a graphical map for easy identification of alarm locations. Additionally, the system maintains a traceable event log stored in the cloud for comprehensive auditing and incident investigation.

An accurate log of all system events can be downloaded via USB, enabling robust reporting of on-site issues.

When an alarm is raised, the Connect unit will display the exact location where the alarm was triggered, allowing for quick identification.

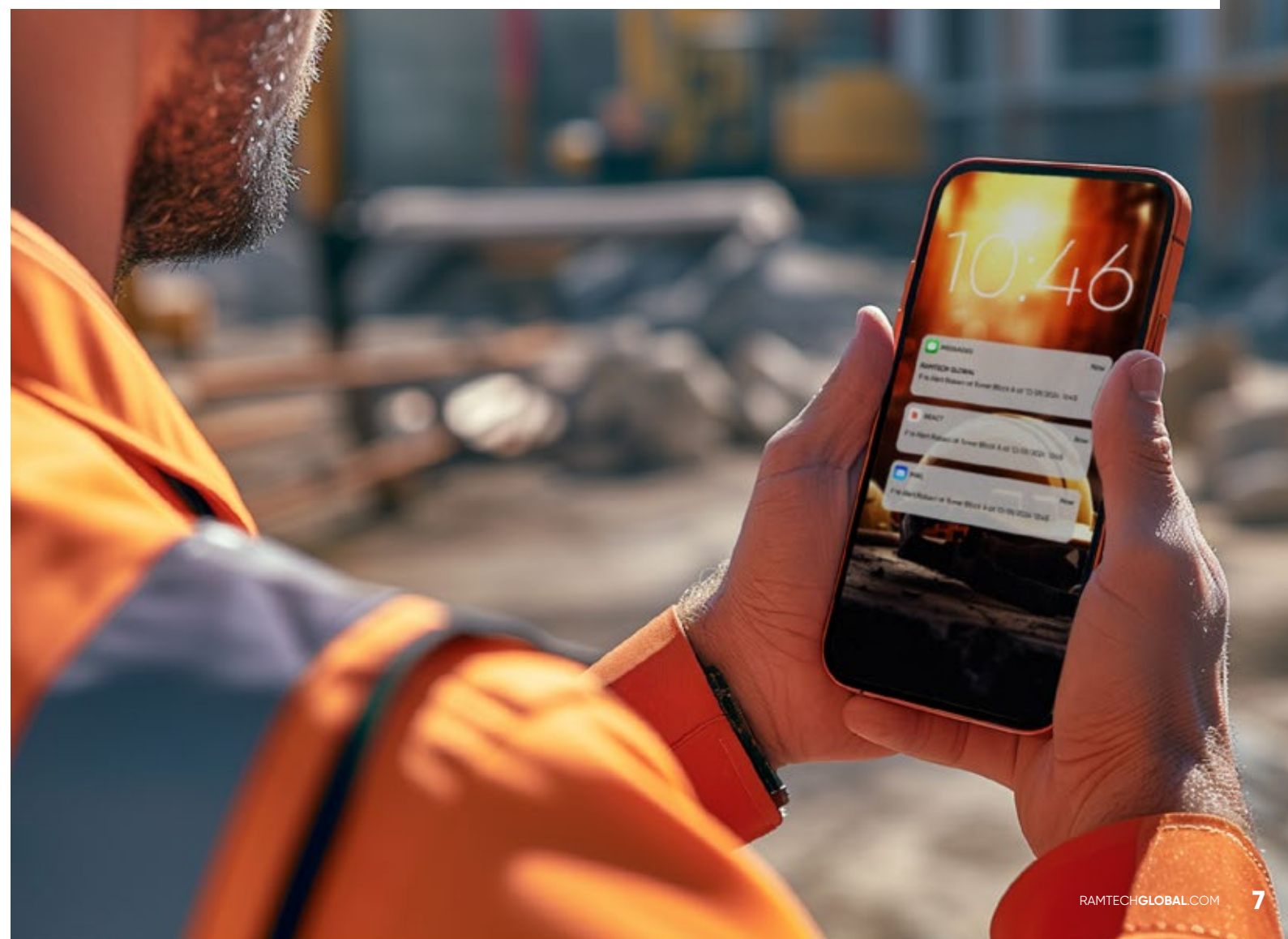
It features an enhanced user interface, including an alphanumeric keypad and a large color LCD display.



## REACT

### Emergency Notification System

- Real-time alerts**  
 Receive real-time alerts for any alarm activations, whether you are on-site or off-site.
- Visibility of alarm activations**  
 The graphical map on the REACT app provides quick and easy identification of the position where any activations, faults, or issues occur.
- Third-party integration with monitoring stations**  
 WES3 can send alerts automatically via the REACT cloud to a dedicated monitoring center, which can notify named key holders in the event of an alarm activation.
- Traceability and auditability**  
 A traceable event log is stored on the cloud for auditing or incident investigation purposes.







Since installing WES3 dust-resistant smoke detectors, we've seen a significant reduction in false alarms on our construction sites. The reliability and performance of these detectors have been outstanding, giving us peace of mind and ensuring the safety of our workers.

**BEN BUTTARAZZI**  
Health & Safety Manager





## PRODUCT RANGE

# Wireless Heat & Smoke Detectors

Incorporating heat and smoke detectors into the WES3 network provides automatic detection 24/7

Our wireless, dust-resistant smoke and heat detectors provide constant monitoring and early detection of smoke and fire, which is especially crucial during non-working hours when personnel are absent. These detectors seamlessly integrate with the WES3 system, automatically triggering alarms in the event of a fire. When combined with REACT, all registered personnel receive real-time alerts, including the activated alarm unit's location.

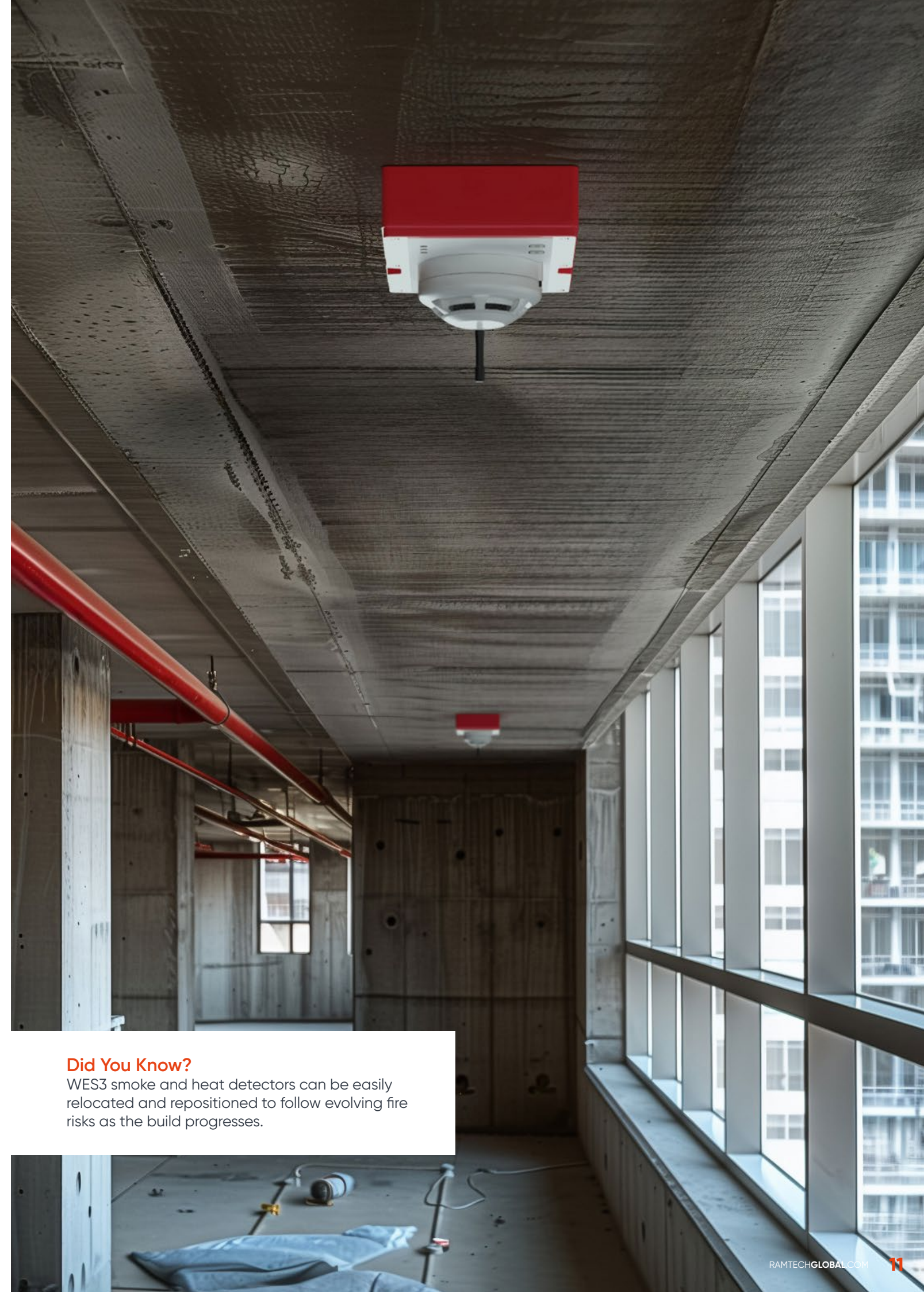
### Smoke Detector

The smoke detector units have an individual coverage radius of 25 feet and can differentiate between smoke and dust particles, ensuring accurate detection and minimizing false alarms.



### Heat Detector

The heat detector activates at a temperature of 135°F and has an individual coverage radius of 17.5 feet.



### Did You Know?

WES3 smoke and heat detectors can be easily relocated and repositioned to follow evolving fire risks as the build progresses.



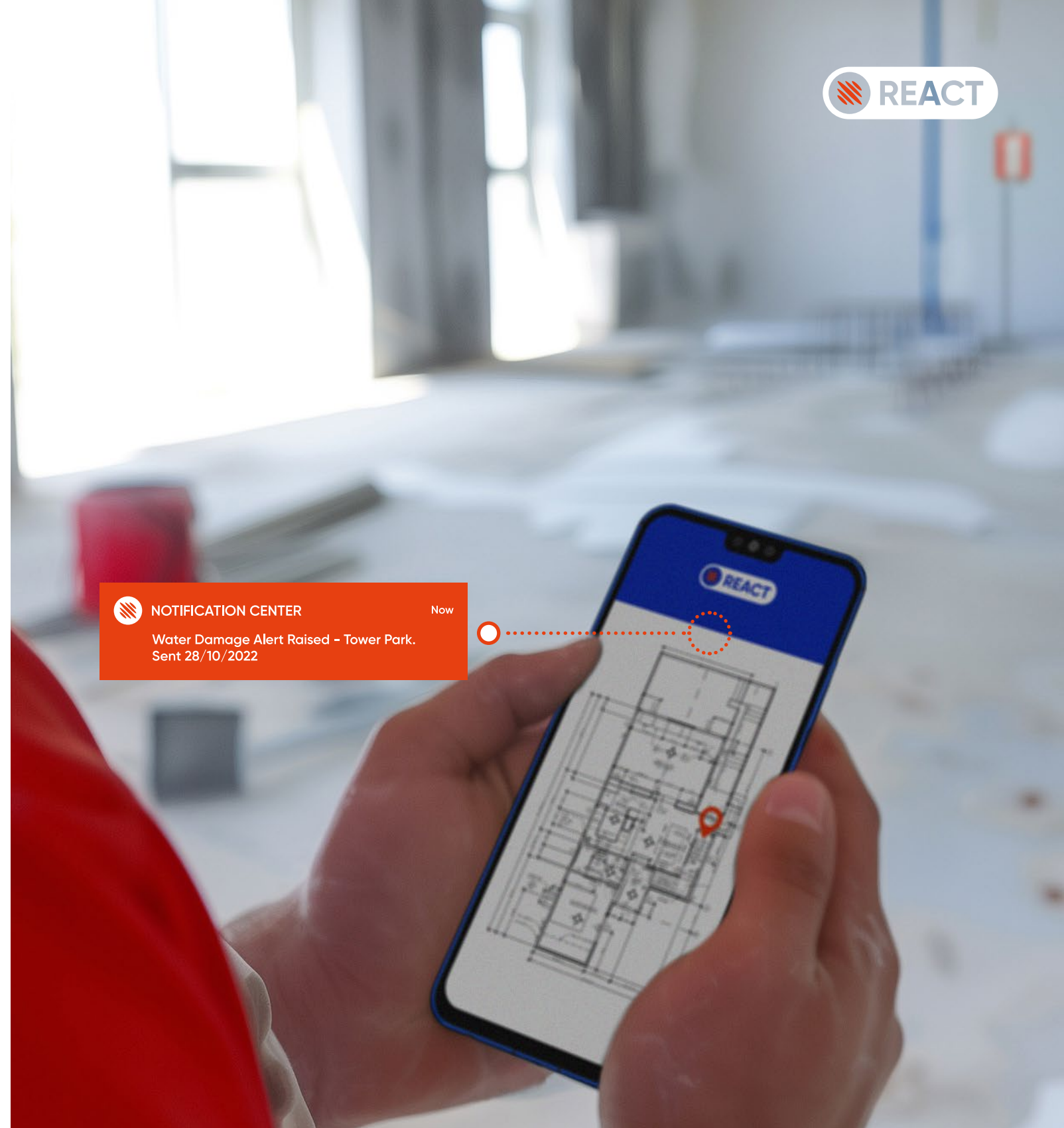


# Wireless Water Leak Detection Solution

Cost-effective water leak detection solution with real-time alerts.

Water leaks and flooding can originate from various sources, such as frozen pipes, damaged pipework, burst pipes, and loose fittings. Ramtech's water leak detection solution mitigates these risks by sending real-time alerts about leaks before they cause significant damage, thereby reducing downtime and preventing costly repairs. Strategically placed water leak detection sensors throughout your site or facility provide robust protection against potential water damage.

WATER



## How Does It Work?

The system offers continuous 24/7 monitoring and instant alerts. When water comes into contact with the detection cable or tape, the sensor activates the WES3 Water Interface unit, transmitting data to the WES3 Connect Control Panel and the REACT Emergency Notification System. Relevant personnel are immediately notified via text message, email, or the REACT mobile app.



# Interface

Easily connect your WES3 system to other systems on-site.

The interface enables seamless integration of your WES3 system with various on-site systems, including permanent wired fire alarms, access control, and standpipe flow switches. This versatile unit is ideal for a wide range of projects, from new builds to extensive renovations. It is designed to communicate effectively with most commonly used technologies in existing buildings, construction projects, and site cabins.

3RD PARTY



- ◉ CCTV cameras
- ◉ Access control turnstiles and barriers
- ◉ Wired fire alarm systems
- ◉ Auto dialers
- ◉ Security monitoring systems
- ◉ AOV (automatic opening vent) systems
- ◉ Sprinkler systems
- ◉ Gas, water or flame detectors
- ◉ BMS (Building management systems)
- ◉ Evacuation lights
- ◉ Temporary stand pipe flow switches
- ◉ Leak detection







TECHNICAL

# The System

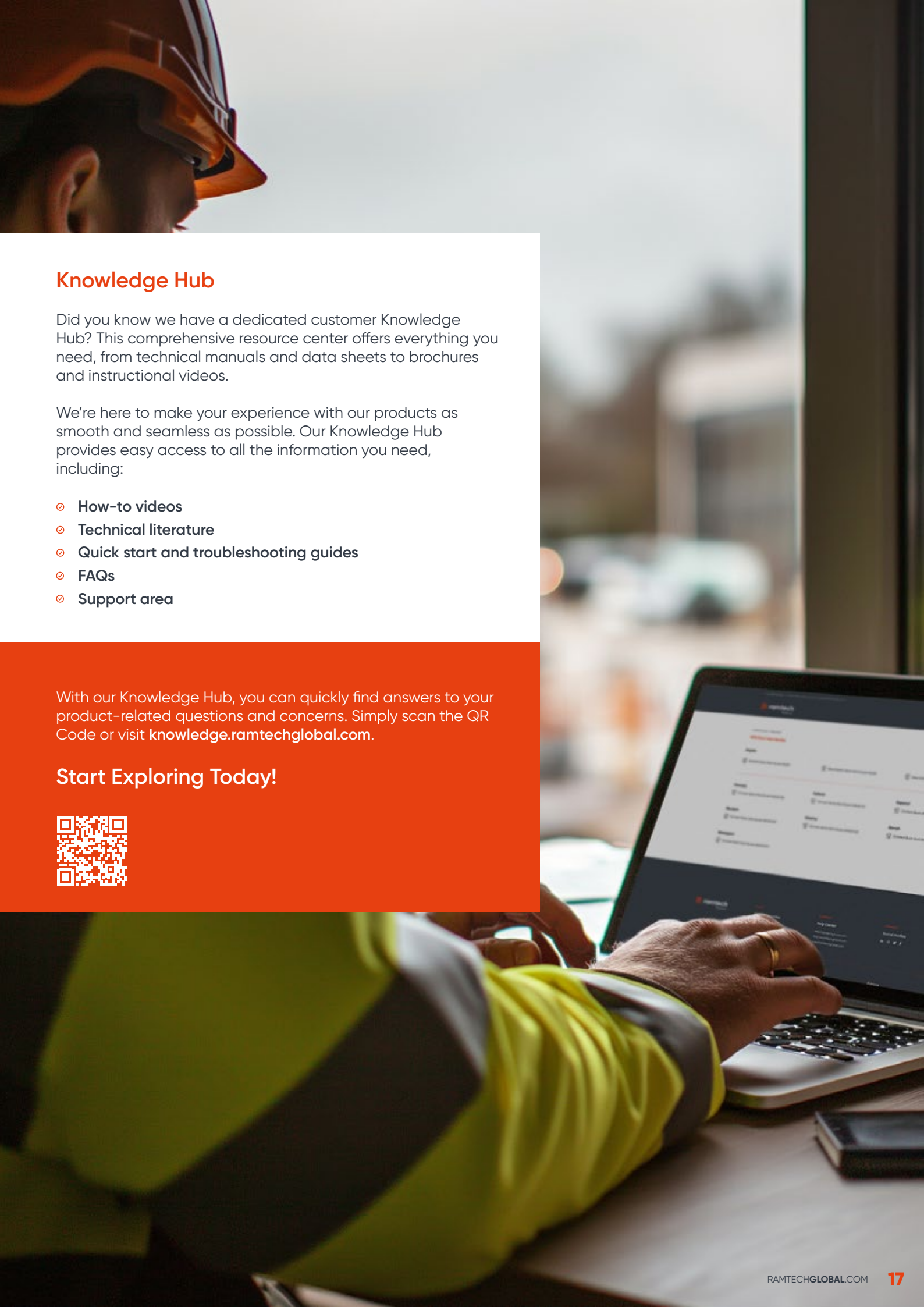
## Technical Information

The WES3 system uses Category 1, Euro-harmonised radio in compliance with European standards covering the use of radio technology in emergency equipment (ETSI 300-220-1).

WES3 is also independently tested, CE marked and compliant with all key safety legislation. Our robust and hard-wearing units are suitable for internal or external use, with weather sealing and a 3-year battery life under normal use.

The WES3 range has grown to become a truly global alarm system, currently protecting sites in over 30 countries around the world. Using our innovative radio technology, WES3 has been developed to satisfy all applicable Radio and Communications legislation in international territories, including the relevant parts of ETSI, FCC and EMC test standards.

	Dimension (mm)	IP Rating	Noise Level	Compatible With	Operating Temperature (°C)
Call Point (Strobe & Sounder)	235x161x128*	IP55	94 dB(A)	Other WES3 Units	-25 to +70
Heat Detector	235x161x118*	N/A	N/A	Other WES3 Units	-25 to +70
Dust Resistant Smoke Detector	235x161x108*	N/A	N/A	Other WES3 Units	-25 to +70
Interface	235x161x58**	N/A	N/A	Relay input/ output to connect to additional systems	-10 to +55
Link	235x161x58*	N/A	N/A	Other WES3 Units	-25 to +70
Base Station	235x161x128*	N/A	N/A	Other WES3 Units	-25 to +70
Connect	235x161x128*	N/A	N/A	Other WES3 Units	-25 to +70



## Knowledge Hub

Did you know we have a dedicated customer Knowledge Hub? This comprehensive resource center offers everything you need, from technical manuals and data sheets to brochures and instructional videos.

We're here to make your experience with our products as smooth and seamless as possible. Our Knowledge Hub provides easy access to all the information you need, including:

- How-to videos
- Technical literature
- Quick start and troubleshooting guides
- FAQs
- Support area

With our Knowledge Hub, you can quickly find answers to your product-related questions and concerns. Simply scan the QR Code or visit [knowledge.ramtechglobal.com](https://knowledge.ramtechglobal.com).

## Start Exploring Today!







REACT platform is a permanent fixture on our sites now, such as Everton Football Club's new stadium under construction at Bramley-Moore Dock, and gives the reassurance needed during projects with so many moving parts and personnel.

**ANDREW SWINDELLS**

Senior Health And Safety Manager At Laing O'rouke



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## CONNECTIVITY

# Wireless Mesh Radio Technology

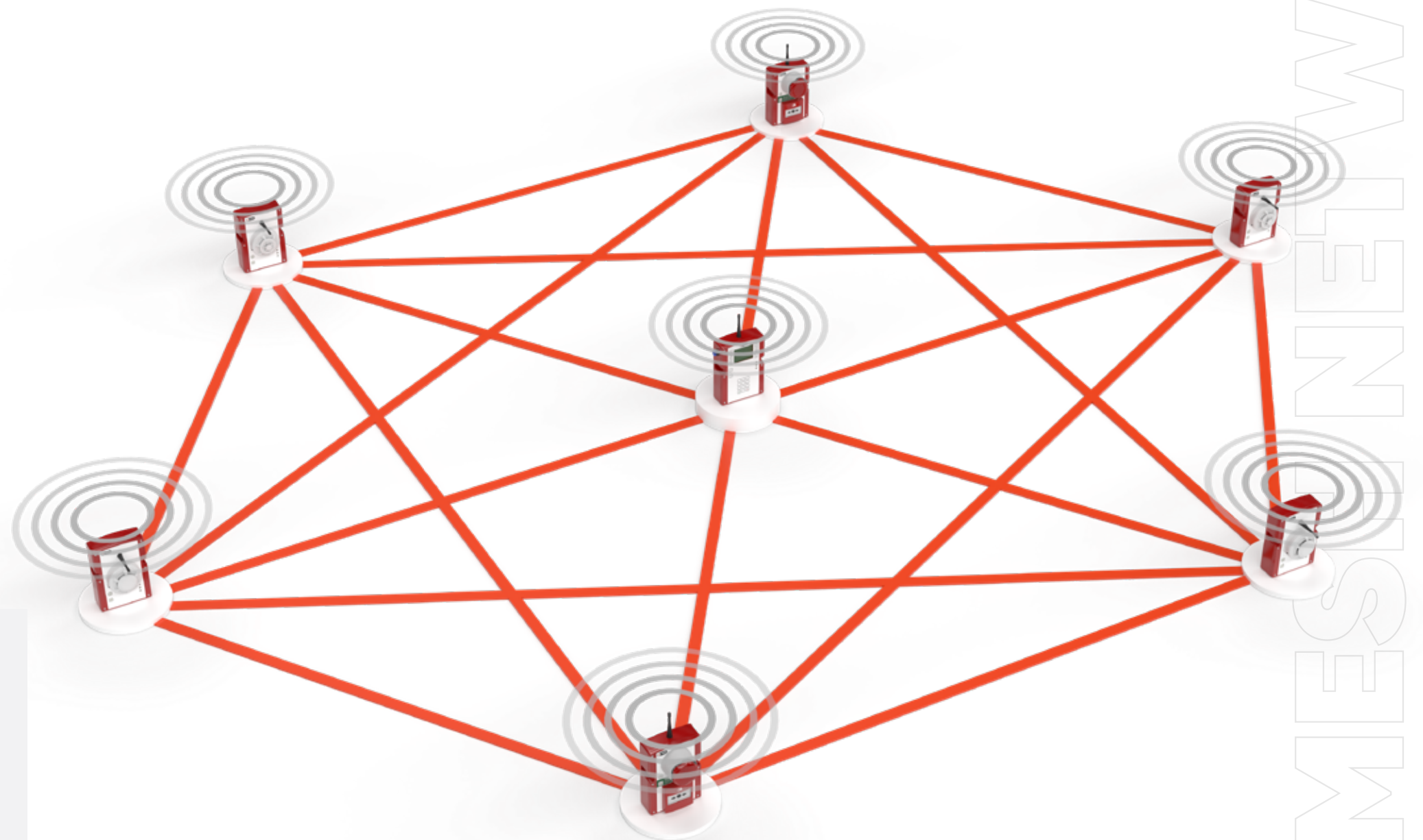
**WES3 system is fast becoming the solution of choice for many applications.**

WES3 is specifically designed for use in dense concrete and steel structures, as well as areas with numerous competing radio frequencies. Utilizing advanced flooded mesh radio technology, all units in the WES3 network communicate seamlessly, ensuring multiple paths for activation signals. This design provides exceptionally long-range connections and greater distances between units, guaranteeing reliable performance even in challenging environments.

### Advantage of a wireless alarm system:

The enormous flexibility and endless combinations of wireless units make wireless a sound choice.

- ◊ Minimal Disruption
- ◊ Quick Installation
- ◊ Easy to Maintain
- ◊ Fully Addressable
- ◊ Easy to re-locate / move



### Zero Point of Failure

If any unit in the network fails, the system automatically reroutes the transmission path, ensuring continuous communication and reliability.

MESH NETWORK

MESH NETWORK

# Possible Applications Of The WES3 System

Fire, evacuation and medical alert system for a wide range of temporary applications.

Ramtech solutions are designed to provide innovative wireless site safety solutions across various industries, from construction to historical sites. With over 30 years of expertise in communications and hardware, our solutions enhance safety, security, operational efficiency, and data insights for your business. All our solutions are supported by extensive assistance from our office and field-based teams.



## Job Stories

Read our latest job stories on our website by scanning the QR code.



## Construction

Construction sites are inherently dangerous, making robust safety measures essential to protect staff, property, and equipment. The WES3 system has been deployed at high-profile locations such as the Maryland Naval Academy new build, Amazon Distribution Centers, and the Colony Island Hospital renovation project, ensuring comprehensive protection against fires and other incidents.



## Shipyards & Shipbuilding

Safety is paramount in the specialized world of shipbuilding and maintenance. The WES3 emergency fire and evacuation alarm system provides early warnings of potential fires, protecting valuable equipment and employees across various sites.



## Historical Buildings

The preservation of heritage buildings is crucial due to their cultural, historical, and architectural value. Ensuring these structures are safe from fire hazards is vital. WES3 has been used to protect notable sites like Nottingham Castle, the Oslo Parliament Building, and the Palace of Versailles-Trianon.



## Manufacturing Plants

Our wireless safety solutions have been utilized by numerous manufacturing plants, including pharmaceutical and automobile facilities, across North America, the EU, and beyond, particularly during construction, renovation, or restoration.



## Rail

Due to stringent health and safety requirements across railway infrastructure, from underground stations to freight depots, Ramtech's technology is a vital asset. The WES3 and REACT systems have been successfully deployed on projects like HS2, Crossrail, London Underground, and more.



## Airports

Ramtech technologies, including WES3 and REACT, have been utilized in airport expansion projects at locations such as Manchester, Schiphol, and Pittsburgh airports. These solutions are ideal for complex, dynamic sites like airports, where the health and safety of workers and the public are paramount.





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