



# CONSTRUCTION BROCHURE





### 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

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



### Heat detector

Incorporating heat detectors into your WES3 network allows you to receive automatic activations 24/7 in the event of fire.



### Smoke detector

Incorporating dust-resistant smoke detectors into your WES3 network gives you early notification in the event of fire whilst eliminating false alarms caused by dust.



### Interface

Allows WES3 to be seamlessly integrated with third party systems, such as permanent fire alarms, Building Management Systems, access control turnstiles, etc.



### Link

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

SYSTEM

# WES3 Wireless fire and emergency alarm system for construction sites

**Help protect your site wirelessly from fire and medical emergencies with a fully compliant EN54-25 system.**

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 property refurbishments through to sprawling construction sites, WES3 can be easily customised to tackle it all.



## Did you know?

WES3 system is the only fully wireless and battery powered EN54 certified system available on the market.

## WES3 Manual call points

The WES3 Manual Call Point is the primary alert unit in the WES3 range. The unit incorporates 94dB(A) siren, bright strobe lights, and a manual call point/medical alert button for activating the alarm.

### Raising the alarm

Raise a fire or evacuation alarm by simply pressing any call point in the network, this will initiate a site-wide alarm or activate the pre-alarm function. The control unit will notify the user of the exact location where the alarm has been triggered for quick identification.

### Integrated medical alert button

The integrated medical alert button provides all personnel with the means to raise an alert when medical assistance is required, this will immediately alert first aiders.



#### Did you know?

The WES3 Manual Call Points are condensation, rain and humidity resistant to an impressive IP55 rating which means they can be installed outdoors.



94 dB(A) siren with a built-in strobe light

Integrated first aid button for medical emergencies

Manual call button

## EVACUATION

# Wireless fire, evacuation and medical alert system

**Our wireless fire and evacuation alarm system is a cost-effective way to protect your people and property.**

One of the leading innovations of the **EN54-25 compliant** WES3 system is the introduction of the integrated Medical Alert feature, also known as a first-aid button. With WES3 call points you can manually raise a fire or medical emergency alert at a simple touch of a button. Call points are suitable for both indoor and outdoor use, under IP55 conditions. Typically situated around a site in prominent places, such as main escape routes, stairwells and on or near fire points, where they are visible in case of an emergency.





**ramtech**



**WES**



# Protect your site today with a free site survey

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PROTECTION

# Wireless heat & smoke detectors

**Incorporating heat or smoke detectors into the WES3 network provides automatic cover 24/7.**

Rest easy, knowing your site is protected around-the-clock. Our wireless dust-resistant smoke and heat detectors provide constant protection and early smoke and fire warnings, particularly essential outside of working hours when personnel are not present. The units connect directly to the WES3 system, automatically raising the alarm in the event of fire.



### Dust-resistant smoke detector

WES3 smoke detector with dual optic technology minimises risk of false alarms and provides 24/7 protection overnight/weekends.



### Heat detector

Heat detectors are an integral part of the system, providing essential automatic detection in and out of working hours on all types of sites.



### Heat detector

The heat detector will activate at a temperature of 57 °C and has an individual coverage of 5.3m radius.

### Smoke detector

The smoke detector units have an individual coverage of 7.5m radius and can differentiate between smoke and dust particles.



### Did you know?

WES3 dust-resistant smoke detectors can distinguish between smoke and non-combustion products such as steam and dust eliminating false alarms

# Wireless water detection solution

## A cost-effective water detection solution for the construction and industrial sector with real-time alerts

Water leaks and flooding can come from various sources—frozen pipes, damaged pipework, burst pipes, loose fittings and many more. Ramtech water detection solution can help reduce downtime by sending real-time alerts about leaks before they cause significant damage.

Our water detection sensors placed strategically throughout your site or facility can be your best protection against potential damage from **escape of water**.

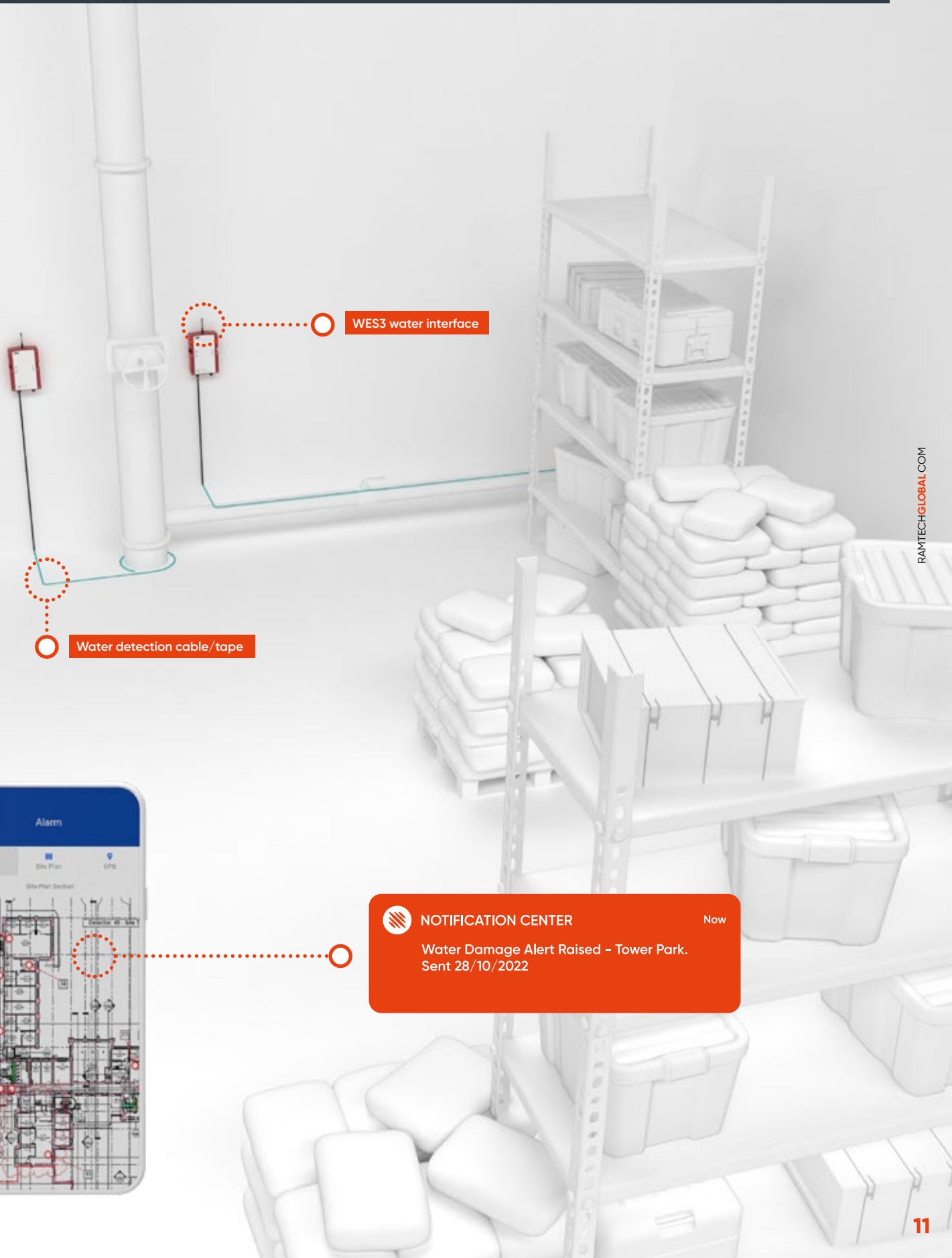
- **No plumbing**, specialist skills or equipment required
- **Rapid installation** and low maintenance costs.
- **Get real-time alerts** about leaks via REACT
- **Easy integration** into existing systems
- **Available in a variety of lengths** in both cable/ tape
- **Relocated** and re-used





## How does it work?

The system provides 24/7 monitoring on site and immediately alerts relevant personnel if a water is detected. When water comes into contact with the detection cable or tape, the sensor immediately activates the WES3 Water Interface unit and transmits water presence data to the WES3 Connect Control unit and REACT cloud-based platform. All relevant personnel receive an immediate notification by text, email or the REACT mobile app.



## CONNECTIVITY

# Wireless control unit

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

The WES3 Connect is the real brains behind the fully EN54-25 compliant WES3 system. The control unit will capture data from up to 999 devices situated around a site, it constantly relays data back to the user including active fire alarm activations, medical alerts, low battery warning and signal failure. In addition, WES3 Connect includes 4G cellular connectivity, allowing customised alerts to be sent to 6 different phone numbers ensuring that the relevant persons are notified in the event of an emergency.

### Features:

- Available in multiple languages
- Colour LCD Screen
- Off-site communication
- Louder buzzer
- 4G Data connectivity
- Global connectivity
- Numerical keypad
- Pass code protection



### Did you know?

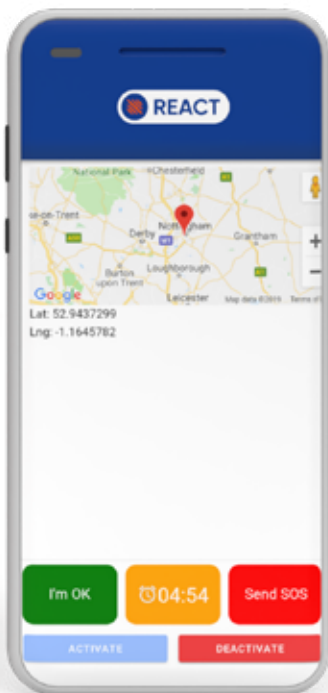
WES3 Connect is the only **completely wireless EN54-25 control panel** on the market. The unit is powered by a battery with a three-year life under normal use to secure your project during all phases whether electricity is available or not.

NOTIFICATION

# REACT

## REACT allows you to communicate site alerts quickly and easily.

REACT is a cloud-based platform that provides accurate, real-time, and highly customised notifications to all personnel in the event of a site incident or emergency. Registered individuals immediately receive notification of any **WES3 alarm activations** and site incidents on their mobile device, along with any relevant documentation such as site plans, evacuation routes and emergency procedures.




### 24/7 Site alerts and notification system

Partnering Connect with REACT enables users to monitor WES3 alarm activations from anywhere in the world 24/7 using the mobile app to receive real-time alerts and notifications.

- **Real-time alerts**  
Receive real-time alerts for any alarm activations or system faults both on-site and off.
- **Visibility of alarm activations**  
The graphical map on the REACT app provides a quick and easy identification of the position where any activations, fault or issues occur.
- **Third-party Integration with monitoring stations**  
WES3 can send alerts automatically via the REACT cloud to a dedicated monitoring centre where they can notify named key holders in the event of an alarm activation.
- **Traceability and auditability**  
Traceable event log stored on the cloud for auditing or incident investigation.

Our Ramtech REACT app is available on the following platforms:



# Interface

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

The WES3 Interface unit allows you to integrate your WES3 system with a host of other building management and emergency systems on-site including wired fire alarms, BMS and access control turnstiles. The interface unit is suited to a wide range of projects, be it a new build through to extensive refurbishment projects. The unit is capable of communicating with most commonly used technologies in existing buildings, construction projects and site cabins.

### Examples include:

- CCTV cameras
- Access control turnstiles and barriers
- Wired fire alarm systems
- Auto diallers
- 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.

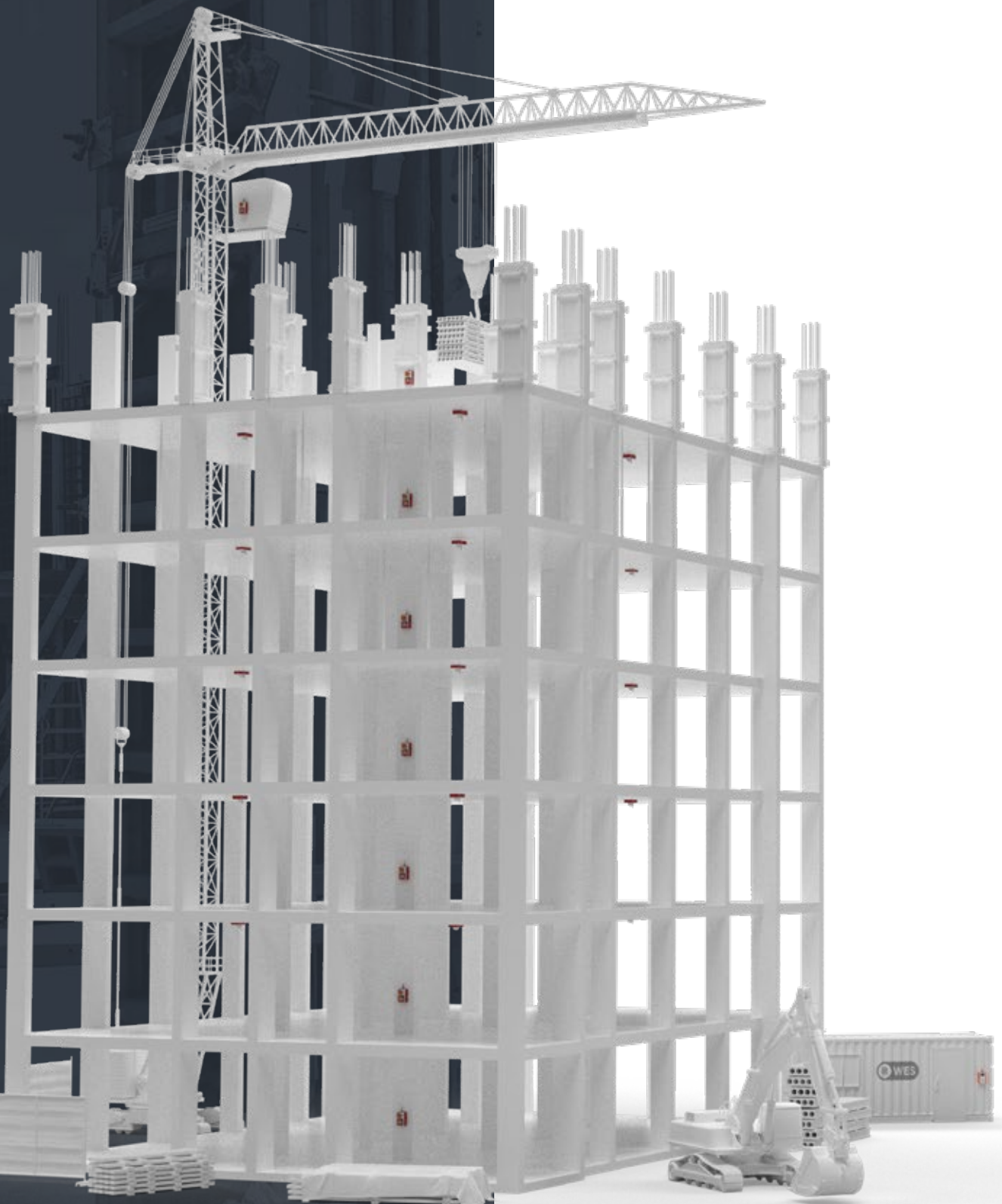
The WES3 range has grown to become a truly global alarm system, currently protecting sites in over 30 countries around the world. Using our innovative radio technology, WES3 has been developed to satisfy all applicable Radio and Communications legislation in international territories, including the relevant 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	Max. 94 dB	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



### Did you know?

When the project is complete, you can easily re-use your WES3 units on the next one.



# Deploying WES3

**Easy set-up that requires no special tools or expertise. Protection that's ready when you are.**

The units that make up the WES3 system can be deployed as soon as the building is out of the ground. Setup is quick and easy – it takes just a few minutes for your units to be a network on active duty protecting your site and workers. All WES3 units connect to form a secure long range flooded mesh network, so if a fire breaks out any unit can trigger a site-wide alarm, whether automatically in the case of the detector unit or manually via the Call Points.

## Benefits of the WES3 system

Advanced wireless fire and safety system for every site.

- **EN5-254** certified system
- **Completely wireless system** (3-year battery)
- **Simple to setup**, install, and reposition
- **24/7 protection** with smoke/heat detectors
- **Easily connects** with other systems
- **4G connectivity** for offsite communication
- **IP55 rated**, suitable for outdoor use
- **Remote monitoring** via REACT
- Two-year warranty

## Features for WES3 system include:

### Full isolation system test mode

Test individual alarm points without the need to trigger the entire system.

### Inspection delay

Enables site managers to validate an alarm before evacuating site to mitigate against false alarms.

### Real-time system notification

System issues and faults are reported to the control unit in real-time as they occur.



## Free site survey

Call us on **+44 (0)115 957 8282** or email us at [solutions@ramtechglobal.com](mailto:solutions@ramtechglobal.com)







## About Ramtech

Ramtech's expertise in wireless technology goes back to our origins in 1990. Our solutions have always embraced the latest in wireless innovation, and this continues to be our main focus to help achieve our vision of empowering customers to save lives, protect assets and gain insights.

## 30+ years

The ground-breaking products in our WES3 range are built on over 30 years' experience in designing and manufacturing wireless safety and security solutions to meet challenging environmental conditions in the construction industry.

## 30 countries

The WES3 range has grown to become a truly global alarm system, currently protecting sites in over 30 countries around the world.



### Case Studies

Scan here to view our latest case studies.

## SHOWCASE

# WES3 around the world

### Manchester Airport Transformation Project (Manchester, UK)

The challenges at Manchester Airport Transformation Project were centred on the need for a wireless alert system for the site that was scalable to a project of this size, whilst being fast and easy to reposition. The combined solution of REACT and WES3 was used to provide 24/7 protection across the site. When the project completed, the contractor simply used the solutions again on another site.

### Amazon Distribution (Colorado, USA)

Ramtech North America recently supplied the solutions to Amazon's distribution and sorting center adjacent to the Colorado Springs Airport. The five-story building will be the largest in Colorado Springs, and likely in Colorado; it is larger than the combined size of the Air Force Academy's Fairchild Hall and The Citadel and Chapel Hills malls. The units deployed included the WES3 wireless call points and automatic smoke sensors, which will ensure workers are protected no matter what the emergency.

### Naval Academy (Maryland, USA)

Ramtech solutions were used on a new building on a Naval Academy site in Maryland. Site managers were impressed the features of the WES3 wireless evacuation system, one of the favourites being mobile phone notifications if alerts are raised, so site managers are kept informed on and off site. Automatic smart sensors for smoke (including dust resistance) and heat were important too, as it helps the system to provide 24/7 monitoring of the site.

### New Schierstein Bridge (Mainz, Germany)

WES3 from Ramtech was specified during the €250 million construction project of an entirely new four-lane bridge spanning the Rhine in Germany – connecting the major conurbations of Mainz and Wiesbaden. The contractors chose the WES3 system due to its EN54-25 compliance, 24/7 coverage, ease of install, 3-year battery life and movability, plus it wasn't just the staff and physical equipment it needed to protect...a local protected botanical area needed an early warning if fire broke out.



**The best and most cost effective system on the market today without doubt. The quick installation and simple testing facility gives you peace of mind enabling health and safety requirements to be met.**

**BEN BUTTARAZZI**  
HEALTH & SAFETY MANAGER

### European Central Bank (Frankfurt, Germany)

The European Central Bank (ECB) headquarters in Frankfurt utilised the fully wireless, EN54-25 compliant WES3 fire alarm solution during its construction. Fire safety was critical on the ECB project as only 30 floors of the 40-storey building were undergoing refurbishment. Staff continued to occupy the remaining space alongside personnel involved in the refurbishment while the work was being carried out.

Ramtech Electronics Ltd