



## **EkoTek STAFF SAFETY SOLUTION**

**EMPOWERING YOUR STAFF WITH INSTANT SAFETY**

## BACKUP AT THE PRESS OF A BUTTON

It's an unfortunate fact that some workers are at higher risk of harm than others. This could be because they work closely with the public, or because their work is intrinsically high risk.

Alternatively, it could be that due to their shift pattern, job role, or the layout of their workplace, they often work on-site in isolation and might struggle to get help if they fall ill or suffer an accident.

Healthcare workers, for example, are at much higher risk of violence or verbal abuse than other workers. The 2020 NHS Staff Survey found 14.5% of respondents had experienced violence from patients, their family or members of the public at least once in a 12 month period.

Employers have a responsibility to do all they can to protect their staff from harm. This is where our EkoTek staff safety system comes in - providing personal safety alarms which report the user's location directly to designated responders.

### Benefits at a Glance:

- Easy to install.
- Cost-effective.
- Simple to use.
- Combines fixed and portable alarms.
- Improves safety and gives peace of mind for staff.
- Can be scaled to accommodate facilities of any size, including indoor and outdoor areas.
- Mesh network ensures reliable alarm transmission.

### Who's it for?

- Workers who face an elevated risk of violence or abuse.
- Workers who work extensively with, or are often alone with, members of the public.
- Workers who often work in isolation on-site (e.g. at night, or on a large site).
- Workers with high-risk jobs or in high-risk workplaces.

### These staff might include:

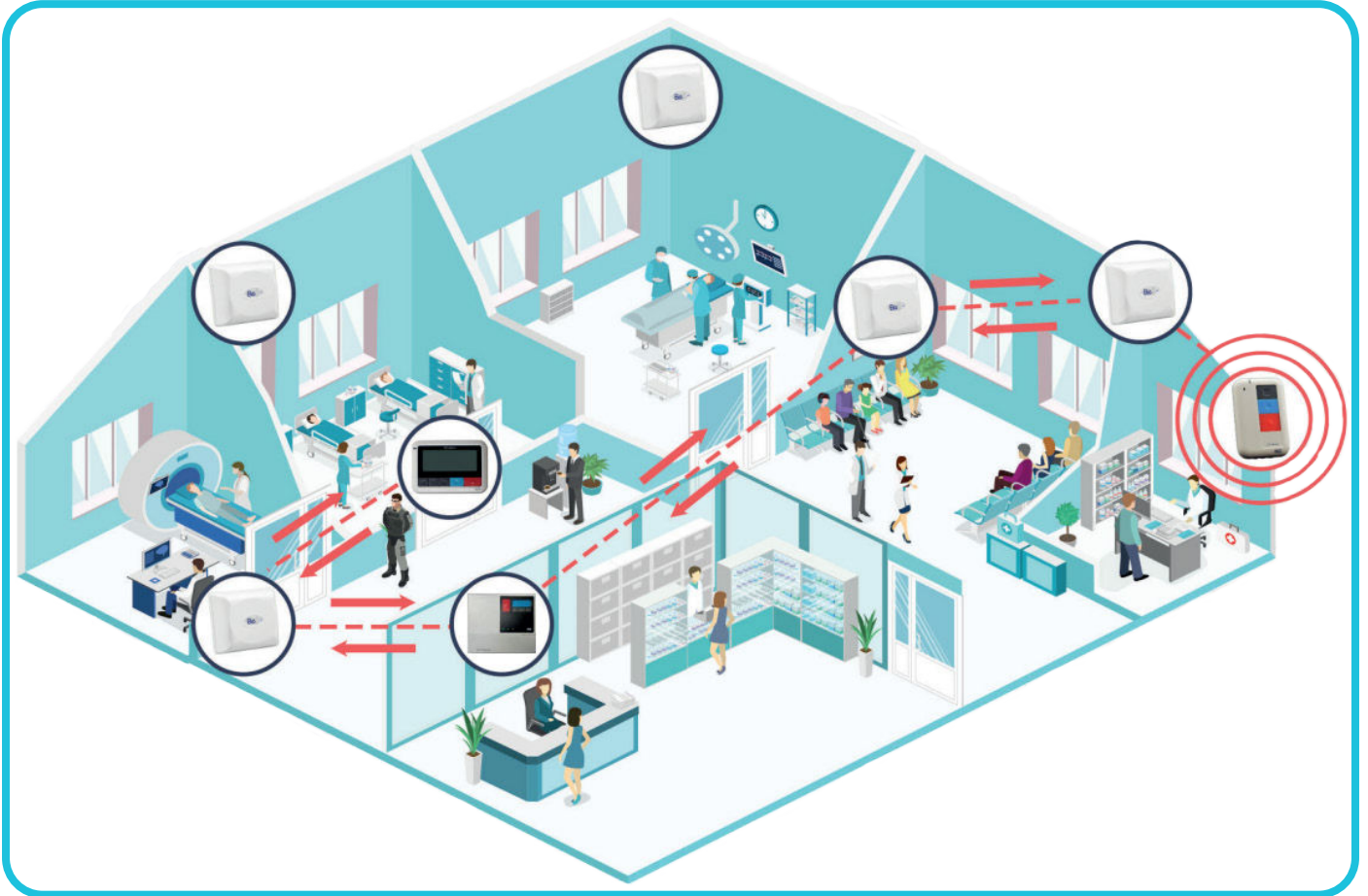
- Clinical staff.
- Teachers.
- Security guards.
- Maintenance workers.



### Key Features of the Multitone Staff Safety Solution:

- Option for battery-powered location sensors/signal repeaters means rewiring is not required to install the system.
- Provides alarm location for both fixed and portable alarm units.
- Alarm units include separate buttons for assistance calls and emergency alarms.
- Features automatic alarm escalation should the initial designated responders fail to acknowledge the alarm.
- Features a variety of alarm units, including personal alarm fobs, alarm pagers (Messengers) for staff, repeater units with alarm buttons, and an outdoor variant of the system (EkoSecure).
- Alarm fobs and Messengers are IP67 rated. All EkoTek system components are compliant with HBN/HTM guidelines and all relevant UK safety standards.
- User groups are fully configurable, allowing segmentation by job role, working area etc.
- Portable units can be configured with automatic fall-detection and dead-man alarms requiring user acknowledgement.
- Optional EkoMS management software provides additional functionality to the system, including detailed reporting and options for live alarm boards and mapping.
- Units send low battery alerts automatically to ensure constant operation. Batteries last up to 2 years.
- Radio-based mesh network ensures alarm transmission, even if an individual repeater unit fails.
- Existing third party alarm systems can be integrated into our system, transmitting alarms to our pagers.
- Our network can be installed in isolation or can be integrated into an existing network.

## EkoTek ALARM PROCESS



## ABOUT EkoTek

The Multitone staff safety system combines fixed and portable units with assistance and emergency buttons, all connected by Multitone's EkoTek technology. A series of signal repeaters, which may be either mains-wired or battery-powered, are stationed around the facility. When an alarm is triggered, the nearest repeater, which is named for the relevant room or area, picks up this alarm and reports it, along with its location, via the repeater mesh network to the EkoTek hub, which controls the whole system.

The alarm type, location and device ID is then forwarded on to the relevant preconfigured group of Messengers, which may consist of security staff or first aiders. They can press a button to acknowledge the alarm and are able to raise alarms of their own. If the alarm is not acknowledged, it will be escalated further. These Messengers can also receive messages and updates from the system administrator. With the addition of EkoMS, alarm information can also be relayed to live alarm boards or even annotated maps of the facility.

For workplaces with outdoor areas which also require personal alarm coverage, you can enhance your EkoTek system with EkoSecure, which provides dual-band Messengers which work indoors and out. EkoSecure may also be installed alone if a wholly-outdoor system is required.



## EkoSecure

### Inside or out, help is always a button-press away.

Many premises feature a mixture of indoor and outdoor areas: a university campus is a good example of this. If security staff or teachers are provided with a personal alarm system, it ought to continue to work when they step out the door. That's where EkoSecure comes in.

EkoSecure is an outdoor variant of the EkoTek staff safety system, operating on a different frequency to improve range. EkoSecure Messengers feature an improved antenna to extend their transmission range, while outdoor signal repeaters provide 60 metre coverage on average. To save staff having to carry two personal alarms, the EkoSecure variant can operate across two frequencies, making it suitable for use on both the indoor and outdoor networks.

By combining the EkoSecure outdoor personal alarm network with the indoor EkoTek network, you can ensure total coverage across your site, with multiple buildings joined up by outdoor signal repeaters - providing a truly comprehensive safety system to protect your staff, visitors and customers.

## EkoTek ATEX PERSONAL ALARMS

Extend coverage to every part of your facility with our explosive atmosphere-safe EkoTek Messengers.

Some industrial processes produce, or risk producing, an atmosphere which is potentially explosive should a source of ignition, such as an open flame, spark or heat source, be present. Any electronic devices operated in this environment must meet strict special safety requirements to ensure they cannot pose an ignition risk. In Europe, these are set out by the EU's ATEX 2014/34/ EU.

Multitone have developed special ATEX Messengers which are designed to operate safely within a range of potentially explosive atmospheres. This means that any worker who either works partly or fully within an at-risk area can keep their personal Messenger with them - these operate both inside and outside of ATEX areas.

For more information, contact us at [sales@multitone.com](mailto:sales@multitone.com)



## EkoMS

Powerful management software for EkoTek/EkoSecure Multitone's EkoMS management software works in conjunction with the EkoTek staff safety system. It collects all system events and notification information from the EkoTek system and displays this information in a clear, easily accessible format. It allows for centralised monitoring and management of your system in real-time, simplifies administration tasks and provides detailed reports to help you understand how your processes are working, identify areas for improvement and demonstrate compliance with health and safety policies.

Although EkoMS is not required for a fully functional safety alarm system, purchasing EkoTek with EkoMS significantly enhances your ability to manage the system, as well as providing powerful on-screen visual aids which can help staff respond to alarms in a timely fashion.

### Key Features of EkoMS:

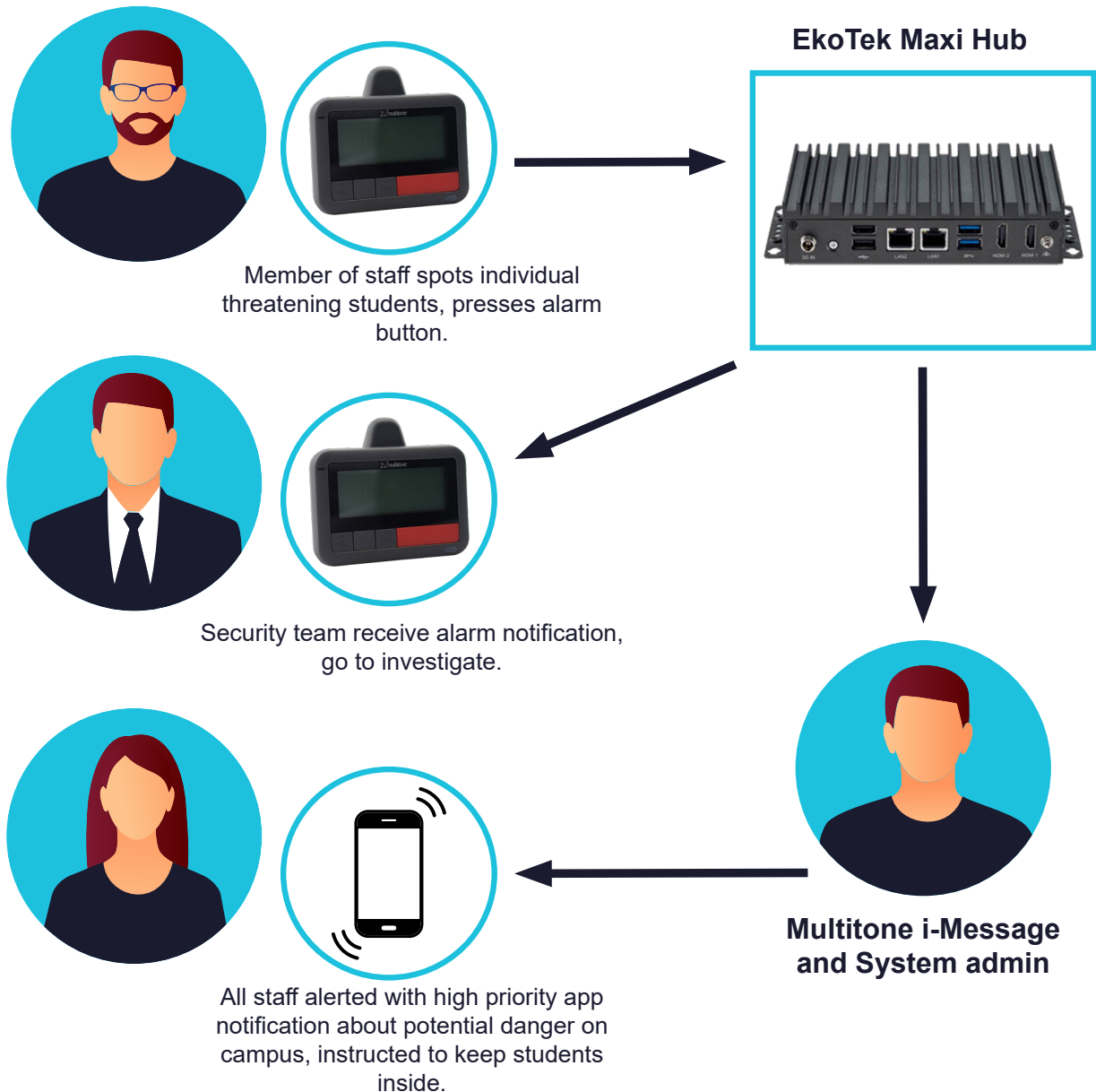
- Dashboard.
- Map boards.
- Live alarm boards.
- EkoMS Notifications desktop application.
- Network configuration.
- User administration.
- Device management.
- Activity logs.
- Custom reports.
- Customisable menus.
- Automatic data backups.

## How Should I Configure my System?

The number and placement of your signal repeaters, the number of alarm fobs and Messengers, who should carry them, and whether you require indoor and outdoor coverage, depends on the size and nature of your workplace, your industry and the risks you have identified. Multitone's expert engineers will help you determine your requirements, how your system should operate and how it should be installed to achieve optimum results. There will be a minimum number of signal repeaters required to ensure full network coverage, however, the more rooms/areas are equipped with repeaters, the more precise the alarm location will be.

The diagram to below shows how an alarm process might work in a university, where staff and security teams are issued with EkoSecure Messengers with alarm buttons, and there is a mix of indoor and outdoor areas.

In this example, the Multitone staff safety solution is integrated with additional Multitone critical communications technologies, to expand the response beyond the EkoTek system itself. In the context of campus security, it is important that security, site administrators and staff have additional tools with which to communicate, so that security can report further details about the situation and facilitate a greater response if required.



## EkoTek & EkoSecure COMPONENTS

### EkoTek Hub

The hub is the system's central control unit, displaying alarm messages, identifying users, their location and if needed sending messages to devices. Device management, history and configuration is also controlled through the hub via a PC interface and web browser. A variety of hub versions are available. For more information, contact the Multitone sales team.



### EkoTek Repeater

The mesh network repeaters provide the overall network coverage and enable alarm location to be reported. For easy installation, the repeater is battery powered, offering up to 2 years' operation; alternatively, the unit can be mains-powered. A ligature resistant variant is available.



### EkoTek Call Point Repeater

This call-point repeater provides network coverage and enables alarm location to be reported, and also includes a red button for raising emergency alarms and summoning help to its location. For easy installation, the call-point repeater is battery powered, offering up to 2 years' operation; alternatively, the unit can be mains-powered. A ligature resistant variant is available.



### EkoTek Ingress Protected Repeater

The EkoTek Ingress Protected Repeater is designed to operate outdoors and in humid indoor environments, such as spas, greenhouses, labs, breweries, abattoirs or industrial sites.



## EkoTek & EkoSecure COMPONENTS

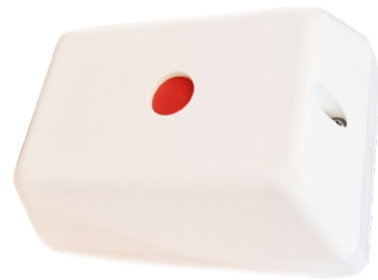
### EkoTek Repeater Vandal Resistant Enclosure

Vandal resistant enclosure for EkoTek Repeaters which protect the unit from deliberate and accidental damage.



### EkoTek Call Point Vandal Resistant Enclosure

Vandal resistant enclosure for EkoTek Call Point Repeaters. Protects unit from deliberate and accidental damage whilst allowing operation of the alarm button.



### EkoTek Alarm Fob

The rechargeable portable alarm fob allows an assistance request or emergency alarm to be raised either through the user pressing a button (blue for assistance, red for emergency), or automatically through the dead-man (acknowledged by the grey button) or man-down features. Accurate location information is obtained from the repeater network and relayed to teams for immediate assistance. The unit is IP67 rated for dust and water resistance and made with antimicrobial materials.



### EkoTek Rechargeable Messenger

The rechargeable Messenger is a multi-functional device, capable of both displaying messages and generating an assistance or emergency alarm. Its multi-colour display shows alarms from other Messengers and call fobs (lighting up blue for assistance, red for emergency), and allows the user to accept the alarm and signal back to confirm that assistance is on its way. Users can also receive messages sent from the hub administrator. The unit is IP67 rated and made with antimicrobial materials.



## EkoTek & EkoSecure COMPONENTS

### EkoTek Multi-functional Messenger

This variant of the rechargeable Messenger is a multi-functional device, capable of both displaying messages and generating an emergency alarm with a single alarm button. Its multi-colour display shows alarms from other Messengers and call fobs (lighting up blue for assistance, red for emergency), and allows the user to accept the alarm and signal back to confirm that assistance is on its way. Users can also receive messages sent from the hub administrator. The unit is IP67 rated and made with antimicrobial materials.



### EkoTek Charging Units

We offer both individual and bulk-charging units for our alarm fobs and Messengers. Individual desk chargers allow users to charge their device at their desk so they can do so while still being able to view messages and receive alarms. Made with antimicrobial materials.



### EkoTek Maxi Hub

The EkoTek Maxi Hub provides greater power to the EkoTek system, supporting up to 750 devices. It is usually recommended for use with EkoSecure.



### EkoSecure Dual-band Pager

The EkoSecure Dual-band Pager (ESPA) operates at both 2.4 Ghz and 868 Mhz - working with both the indoors EkoTek staff safety system and the outdoor EkoSecure system. It is IP67 certified, rechargeable and has a battery life of up to 48 hours.



## EkoTek & EkoSecure COMPONENTS

### EkoSecure Dual-band Repeater

The EkoSecure Dual-band Repeater (ESREP) is a mains-powered unit with battery backup. It provides EkoSecure network coverage outdoors and is designed to be mounted outside. The EkoSecure repeater range is around 60 metres when working to other ESREPs. It can be operated as a converter from the indoor EkoTek network to the EkoSecure outdoor network (2.4Ghz to 868Mhz). IP66-rated plastic case.



### EkoSecure Location Repeater

The EkoSecure location repeater works in tandem with the ESREP. By placing location repeaters within range of an ESREP, you can improve the location accuracy of the outdoor EkoSecure system.



### EkoSecure External Antenna

The EkoSecure external antenna can be used to provide better coverage for an ESREP by mounting it in a high place.



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