



ISM Wireless Nurse Call System



SYSTEM HEAD-END DESIGN

The central Server controls the overall system head-end including the nurse-call administration and reporting software program. This includes optional RTLS, Presence, Duress and Wanderer requirements. The system also features 'automatic email reporting and flexible up-to-date 'Dashboard Display Monitoring' capability.

The key item within the central head-end equipment is the Wireless Input Controller (WIC) which may be duplicated for large systems such

such as those that include comprehensive RTLS (Real Time Tracking) requirements.

To exploit the benefits of having a multi-tasking Head-End system, the central call input equipment may also include an Ethernet POE Switch to accommodate hard-wired connection of Wireless Nodes, IP Call-points or other devices that may be required to communicate with head-end via hard-wired connections.

CALL-POINTS - A CHOICE OF SEAMLESS TECHNOLOGIES



A unique benefit of the ISM nurse call system is its wide range of call-points. They all have the same appearance and operational functions but are able to exploit different add-technologies for different outcomes.

Each ISM call-point may be powered from a battery-backed external 12v DC source or fitted with a high capacity (1AH) long-life lithium battery. Both splash-proof and waterproof versions are available, including those intended for use within the Shower Recess that have resin-encapsulated circuits. Irrespective of the call-point application (as identified by its call button colour), the range of models includes:

CP-ISM

Long-Range ISM (Industrial, Scientific & Medical) wireless call-points

CP-ISM-LOC

As above, but fitted with a Bluetooth RTLS Locator 'Beacon' module.

CP-ISM-PRE

As above but including a second (PIR) technology sensor to provide Staff and Resident 'Location Presence' monitoring.

PSCP

A Prime Slave Call-Point for connection to an ISM Wireless call-point, typically waterproof and located within the shower recess.

All ISM call-points are able to act as a room controller 'Hub' capable of delivering multiple and identifiable hard-wired and/or wireless inputs to the Head-End Server database for call processing, logging, displaying and reporting. Models with 'LOC' suffix include a plug-and-play Bluetooth-BLE transceiver insert to provide RTLS location information. Each locator captures the identity, signal strength and status of all Bluetooth Tags within range for delivery to the Head-End for further processing.

Those call-points with the 'PRE' suffix are further equipped with a second technology in order to provide room level 'Presence' information applicable to both Residents and Staff wearing any in the wide range of RTLS 'Tags'.

All versions in the range of ISM call-points include Call, Cancel and Staff Assist plus diagnostic monitoring whilst also having the same high degree of anti-bacterial and anti-fungal infection control.

ISM WIRELESS DIRECT & VIA NODE OR REPEATER

In addition to providing a comparatively high level of immunity to lightning damage or interference, another benefit of using wireless technology is its ability to enjoy multiple-path communication to the system head-end. Where the primary path normally carries out its prime call processing function, other available and suitably delayed paths can provide a valuable system backup capability if so configured.

ISM wireless transmitting devices include call-points, portable pendants, and a wide range of wireless-equipped accessory devices such as PIRs, smoke detectors, Door Reeds, bed and chair exit sensors etc. The use of wireless technology can, therefore also result in a cordless bedside environment, which is particularly important within dementia-specific locations.

Small systems can be programmed for all wireless devices to communicate directly with the Head-End Wireless Input Controller (WIC) (as illustrated). However, with larger sites, it is usual for separate Wings or floors to include a wireless Repeater or Node. The latter delivers the call traffic via hardwired RS485 or TCP/IP connection to the head-end equipment for processing.



ISM WIRELESS OVERLAY FOR 'LEGACY' SITES

Irrespective of the type, age or brand of an existing nurse call system, there is a significant cost-saving benefit in providing a site-wide and highly flexible ISM wireless overlay or umbrella.

It provides the perfect solution for accommodating temporary or future call-points or accessory items. It usually requires no additional cabling, particularly where additional cabling is either impractical or excessively expensive or is perhaps required for a building that has heritage restrictions. In addition to being able to now introduce cordless sub-systems and accessories, it also accommodates the use of long-range portable ISM pendants for the benefit of both Residents and Staff alike.



SITE-WIDE 'SMART PENDANT'

Both the IP call points and their associated LIN-Bus Smart-Slave call points can include multiple channel UHF short-range wireless receivers in order to provide a cordless bedside environment in addition to providing the Resident with a personal wireless pendant.

The IP nurse call system, in addition to accommodating the above short-range wireless devices, also accommodates the new long-range ISM Smart Pendant. These communicate directly to the head-end system or via wireless Nodes or repeaters and can, in larger sites, also identify a Resident's location within the overall site. This Personal pendant has special and unique attributes whereby it provides an identifiable wearer 'Call' plus the ability for the Staff to 'Cancel' the call or to dispatch a high-priority 'Staff Assist' call.

Each ISM wireless pendant is supplied with a wrist strap, a necklace, and a pocket clip in order to satisfy those various personal requirements.

It also includes the latest technology, the 'Accelerometer' Falls Detection Sensor, as an optional inclusion. In other words, it has much the same total capabilities as an ISM wall-mounted wireless call point plus the ability to detect a 'Fall' incident.



W-PET-ISM-01



CORRIDOR OVER DOOR LIGHT

The standard mounting plate provides three LED colours in one package-Red, Green and Yellow. Using current LED technology, the light is intensely bright but consume only low power. The output from the source can be reconfigured to drive a single LED or all of the LED's at one time. The display is either in clear or frost acrylic. Trigger output to either low or high is by selectable jumper link. Wiring installation is either by RJ45 or 4-way terminal block.

ANNUNCIATOR DISPLAYS

The wall or ceiling mount LED Annunciator display uses an attractive housing and is available as either a single or double-sided display. They feature a high-intensity LED matrix providing 16-segment 50mm high alphanumeric multicolor characters. However, half-width versions (i.e. 8 x 50 cm) are also available (as illustrated).

Displays are capable of being independently addressed with specific call traffic applicable to each unit's location within the overall network. Hard-wired or wireless-controlled Annunciators are available, the latter being ideally suited to multiple building sites.

They feature automatic day and night audible tone levels and will display time or 'fall-back' messages when not displaying calls in progress. Wi-Fi network-controlled wall-mounted Tablets or Smart TV flat-screen displays are also available.



Standard, 750 x 95 x 50 mm, 80 column White



Mini, 440 x 95 x 40 mm, 40 column White



SMART MONITOR

Providing your care staff with the information they need. The HTC-LAS-Smart Monitor is a purpose-built display that aggregates events and shows the most important information in one convenient location. Smart Monitor is a dedicated Display that can be configured to display events from one, or multiple areas, in real-time, assisting care staff and management in making timely and responsive decisions that deliver a higher level of care for residents and/or patients.

NEAR-FIELD COMMUNICATION (NFC)

Near-Field Communication (NFC) is a technology that allows two devices to communicate with each other when they are in close proximity.

One of the most popular applications of NFC technology is the use of Action Tags. These small, physical tags can be placed in various locations, and when an NFC-enabled device is brought close to the tag, it triggers an action.

Action Tags based on NFC can be used in a variety of settings, such as aged care, independent living units, and hospitals

Overall, NFC technology and Action Tags offer a world of possibilities for aged care and healthcare sectors. As the technology continues to advance, we can expect to see even more innovative uses for NFC in the future.



HTC BXO LOCAL ALARM SOLUTION (LAS)

LAS WEB VIEWER

LAS reporting, monitoring and alerting solution.

The web viewer is designed to offer customers the most appropriate system for their facility. It delivers comprehensive and dependable real-time visibility reports on the performance of their staff and systems.

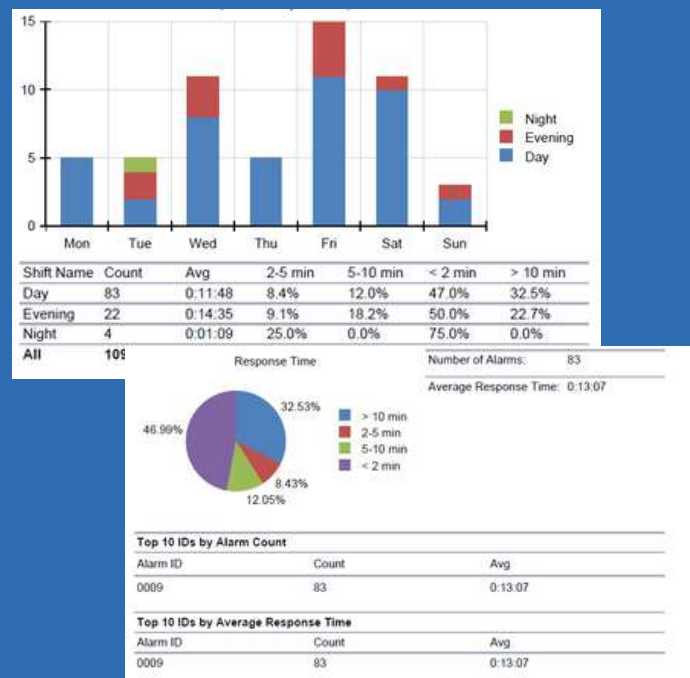


AUTOMATED REPORTING

HTC BXO LAS simplifies the process of generating customised facility reports that suit your specific site or environment.

Our reporting system allows you to schedule reports at specific times and frequencies. This means that you can analyze data as soon as it becomes available, giving you all the information you need to make informed decisions.

- Alarm Duration
- Alarm Frequency (Daily)
- Alarm Frequency (Weekly)
- Alarm History
- Attendance
- Care Minutes
- Excessive Response
- Time List of Alarms
- List of Operational Alarms
- Number of Alarms per ID
- Number of Alarms per Type
- Response Time and Time of Care Given
- Time to Respond Time Tracking



MOBILE DEVICE MANAGEMENT (MDM)

Hexnode UEM provides complete mobility management by allowing the configuration of smart devices, restricting access to websites, and ensuring the security of devices. The platform supports all major operating systems, including iOS and Android, guaranteeing coverage for every mobile device within the organisation.

Features:

- Self-enrollment
- Batch enrollment
- App management
- Kiosk lockdown
- Content management
- Security management
- Expense management
- Device monitoring
- Geofencing
- Data segregation
- Mass deployment
- Compliance monitoring
- Auto lockdown
- Application black/whitelisting
- Location tracking
- Location history



PORTABLE DISPLAYS + VOICE COMMUNICATION



The tendency to deploy the site's Wi-Fi infrastructure to provide text and voice communication is rapidly gaining acceptance. Accordingly, IP nurse call systems include the ability to deploy economically priced robust and waterproof Android Smartphones. Alternative or additional DECT, alphanumeric paging, Vocera and other communication techniques are also supported.

This special messaging capability is an integral part of the overall nurse call system while allowing site-wide and external both-way telephone access.

The special Smartphone icons use the Australian Standard AS3811 colours and associated audio tones, thereby easily identifying the priority level of each incoming call. Suitability configured Smartphone can also be configured to automatically switch between local Wi-Fi and external SIM services, therefore being ideally suited for large sites including Retirement Villages.

SMARTPHONE SOLUTIONS

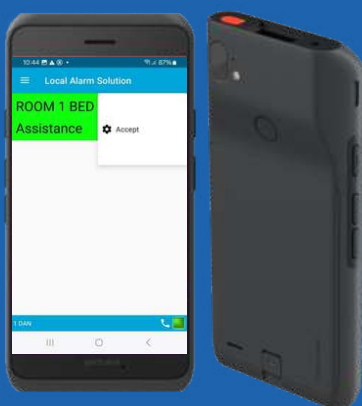
SAMSUNG XCOVER 7

Clinicians need to move about the ward to do their jobs effectively, but still need to stay connected to their teammates while caring for patients. The Samsung Galaxy XCover7 solves this problem by putting alerts and patient information into clinicians' hands, increasing efficiency, improving communication, and supporting reliable, uninterrupted care around the clock.

- A rugged Android device that's as intuitive and portable as a personal smartphone, built to MIL-STD-810H standards and IP68-rated against drops, dust and water
- Lightweight at 240g and slim enough to fit easily into a pocket or uniform
- A dedicated XCover key can be programmed for instant nurse call acknowledgement or push-to-talk communication
- Enables clear, reliable voice communication with tuned stereo speakers and glove- and wet-touch-enabled screen, so alerts can be received and answered even mid-task
- A 6.6" display makes it easy to view patient records, call details and care instructions at a glance
- Hot-swappable battery means zero downtime, so a device on shift never has to leave a clinician's hands
- 5G and Wi-Fi 6E connectivity keeps nurse call alerts and data flowing without delay



SPECTRALINK VERSITY



Clinicians, retail clerks, hospitality workers, and equipment operators must stay mobile while remaining connected to their teams. Varsity devices put knowledge and communication into users' hands—boosting efficiency, streamlining collaboration, and enabling reliable, uninterrupted connectivity around the clock.

- Devices that are as intuitive, versatile and portable as a personal smartphone, but with the power and durability of an enterprise device
- Lighter than competitive devices and can fit easily into a pocket
- Enable more effective communication and collaboration with best-in-class crystal-clear voice quality
- Empower your teams to deliver superior customer experiences by giving them the information and tools they need at their fingertips
- Deploy, manage and troubleshoot your Varsity devices with AMIE, our mobile intelligence dashboard for insights into your fleet to avoid downtime and optimise operations
- Ideal for data-driven workflows (lengthier communications, patient records) and more complex applications
- True hot-swappable batteries for zero downtime





PAGERS

The alphanumeric pagers include a number of versatile and indispensable features, all wrapped in a robust, durable casing. The plastic enclosure for the pagers has been rigorously tested to handle the toughest environments. These pagers boast a plastic casing that is triple the thickness of other market offerings, a wrap-around holster to protect the LCD, and a superior mechanical design to protect against the impact of drops. Colour - coded medical-grade rubber housing is also available to cushion impact further and protect against liquid entering the device (ingression).

SPECTRALINK DECT SOLUTIONS

7000 SERIES HANDSETS

Feature-rich, reliable, and durable, the Spectralink 7000 Series handsets have been designed with features and tools to help you do the things you need – like highest quality voice connections, backlit displays for dimly lit areas, panic button, two-way text messaging and more.



BENEFITS:

- Maximize employee availability using feature-rich, reliable, and durable devices
- Deliver high-quality and secure voice communications across all enterprise environments
- Dramatically improve responsiveness and productivity of mobile workers
- Increase business efficiency by integrating application systems and business processes with mobile devices
- World-class application partner program for alarms, alerts, and Nurse call systems catering to key vertical workflow needs
- Specifically designed for key vertical markets to protect staff with alerts and alarms for man down or staff duress

S SERIES HANDSETS

A new level of communication, productivity, and safety from the industry's leading DECT experts. With crystal-clear voice quality and reliable connectivity, S Series handsets keep deskless workers connected, anywhere on-site. Designed for teams in motion, the rugged-built handsets feature large displays, icon-based menu structures, and lightweight designs and deliver unparalleled telephony, secure messaging, and critical safety features to workers anywhere on the job. Plus, with over-the-air con

Product Highlights:

- 2.4-inch high-resolution display
- Crystal-clear voice quality
- Rugged designs
- Alarm button & programmable side button*
- Support for leading applications and UCaaS platforms like Microsoft Teams
- Easily managed with AMIE®
- 3 handset model options





DUTY OF CARE

RESIDENT WANDERING SYSTEM

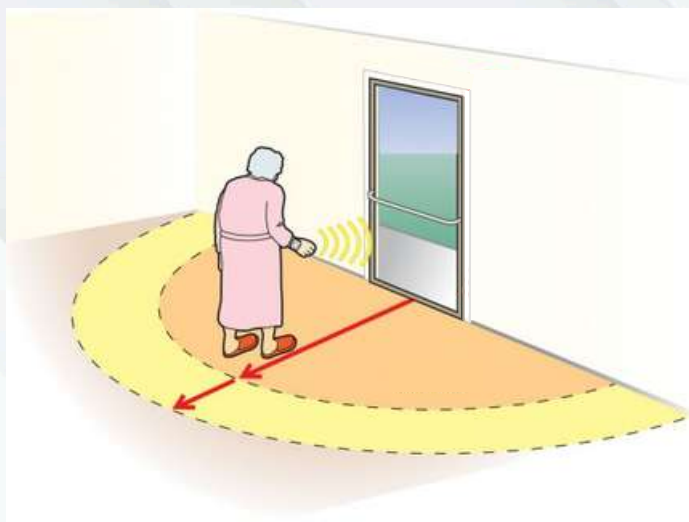
Wander Alarm is the solution for dementia patient wandering systems.

When it comes to safety and protection, Wander Alarm provides a simple solution for monitoring doors and other access points.

Wander Alarm provides supervision and detection for wandering dementia patients by automatically locking doors when patients approach them and if necessary, notifying carers or nursing staff.

This is particularly important as wandering can be a common and dangerous symptom of dementia, resulting in patients becoming lost or injured.

By using Wander Alarm, caregivers can rest assured that their loved ones are safe and secure, while still allowing them the freedom to move about their environment. The system is easy to install and use, and can be customised to fit the unique needs of each patient. With Wander Alarm, caregivers can have peace of mind knowing that their loved ones are being looked after, even when they can't be there in person.



FALL DETECTION SOLUTIONS

HTC Care Sensor offers comprehensive fall detection solutions for Monitoring Health and Well-being.

This non-invasive technology is capable of detecting falls, vital signs, sleep quality, behavioral patterns, location, and more. With 24/7 monitoring, immediate intervention is possible if necessary. Additionally, installation is effortless and can be conveniently mounted on either the wall or ceiling.

The data-driven and person-centered solutions rely on AI and ML to provide ecosystem partners with predictive and preventive analysis reports.

Its application scenarios and features include:

- Fall Detection & Time on Floor
- Imminent Bed Exits
- Room Presence/Occupancy
- Night-time/Nocturnal Wandering
- Bathroom & Toilet Visits and Times
- In/Out of Bed and Time in Bed (Oversleep)
- Respiratory/Heart Rate
- Time at Rest
- Sleep Quality

Fall Detection



Nursing Home



Care Provider



Hospital & Rehabilitation Centers



Resident Home Care



SELECTION OF ACCESSORIES (WIRELESS & HARD WIRED)

There is no practical limit to the range of Assistive Care Accessories that may be applied to a Resident's room. Perhaps either directly or indirectly connected to the bedside call-point. If preferred wireless Pendants and other wireless-enabled devices are also capable of communicating via a call-point or direct to the head-end or perhaps via a Node or Repeater without the use of other intervening devices or equipment.

An ever-increasing range of up-to-date accessories with prices, video instructions and other supporting information can be found at Smart Caller's accessories website.

TYPICAL ACCESSORIES

- Nurse Call Receiver
- Wireless Pad Transmitter
- Wireless Floor Mat Transmitter
- Wireless Motion Sensor
- Wireless Door/Window Exit Alarm
- Hybrid Bed Sensor Pad - Single Fold
- Hybrid Chair Sensor Pad
- Hybrid Under Mattress Sensor Pad
- Hybrid Floor Sensor Mat - Single Fold
- Hybrid Floor Sensor Mat - Double Fold
- Premium Fully-Sealed Bed Sensor Pad - Foldable
- Premium Fully Sealed Chair Sensor Pad



A-SILICON-2-ST/SR-3M
A-SILICON-2-TS/S-3M



A-SILICON-1-M-3M
A-SILICON-1-TR-3M
A-SILICON-1-TS-3M



A-SL-PRESSURE-PEND-M
A-SL-PRESSURE-PEND-TR
A-SKL-PRESSURE-PEND-TS



A-BP-PET-304-GRA



WPT-01



WMS-01



NCR



CP-01



BP-01



HMP-01



A-MAXI-MAT-CL



CP-01
Cordless Chair Pad

HFM-02
Cordless Heavy
Duty Floor Mat

BP-01
Cordless Bed Pad

NCR
Cordless Mat/Pad Transmitter

HMP-01
Cordless Under-Mattress



WFT-01



WPT-01



WMS-01



WDA-01



PGR-01



A-CURA-LCD-PAGER

RTLS & DURESS MONITORING



B-PET-02



P-PET-B12

The ISM system extends beyond its core functionality, offering additional features such as:

- Site-wide Staff Presence
- Staff Duress Button
- Resident Help Button
- RTLS (Real Time Tracking)

These valuable facilities are achieved by initially (or at some future date) simply plugging a Bluetooth-BLE (Low Energy) 'LOCATOR' module into selected ISM wireless call-points.

A typical Bluetooth tag worn by a Resident/Patient or Staff member can be programmed to simply send periodic RTLS transmissions whilst in motion and to enter a battery-saving mode if stationary.

Unlike other RTLS systems, all Bluetooth-BLE Locators and Tags have fully adjustable 'send' and 'receive' modes and a second technology sensor is included within the call-point for room level 'Presence' detection.



B-PET-10

Depending on the choice of device being worn the wearer pressing a button on the Tag is also able to deliver a 'Help' call. This would typically be a Staff Duress or perhaps a Resident/Patient call for help. 'Falls' Detection is also possible.

The Bluetooth monitoring infrastructure also includes 'GateKeeper' perimeter protection facilities. This provides 'Safe Containment' by protecting those that are inclined to 'Wander' beyond the perimeter unaccompanied or perhaps by prohibiting persons from entering 'no-go' locations.

A wide range of portable devices is possible including those intended for key rings, name badges, wrist-strap tagging in addition to those devices intended to affix to clothes or plant and equipment to assist in location and/or to prevent unauthorized removal.



B-CARD

STAFF PRESENCE

The ability to prove the attendance of one or more Staff members within a room or location in response to one of the many 'duty of care' obligations is likely to become a mandatory requirement.

This typically includes attendance to alarm calls, scheduled hygiene, toileting and feeding and room cleaning requirements in addition to perhaps proving prompt and accurate performance of night duty 'rounds'.

Any Bluetooth Locator equipped call-point is able to be fitted with a PIR lens in order to provide the second technology necessary to pin-point the presence of a tagged Staff member or Service Provider.





24/7 Technical Support

Smart Caller offers a **24/7, 365-day** service response to our valued customers.



Smart Systems Saving Lives

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