Felix Nurse Call Platform

Wired (IP PoE), wireless (IoT) and hybrid infrastructure

Distributed ecosystem incorporating redundancy

Enterprise grade scalable solution

Cloud supported maintenance and upgrades

Reporting infographics and advanced analytics

RTLS (real-time location) and wandering resident

Voice activation and resident engagement

Open API platform integration

Australian designed and produced

5-year factory warranty

AS3811 compliant
Felix would have to be the most advanced and versatile nurse call system I have ever seen. The combination of a distributed infrastructure and both wired and wireless functionality provides the ultimate in versatility and reliability.” (IT Manager — Major Hospital)

Felix is a highly scalable hybrid IP nurse call system that supports an unlimited number of both wired and wireless devices. The ecosystem eliminates traditional single points of failure with its distributed redundant infrastructure and features high levels of remote configuration and reporting via secure cloud connectivity.

Overview — Vitalcare’s new Felix nurse call system consists of a network of intelligent call points connected through both wired and wireless protocols fully compliant with the AS3811 standard. Felix uses a unique distributed ecosystem which virtually eliminates single points of failure typical of systems with centralised head-ends. The infrastructure is secure and versatile providing both traditional nurse call functionality and specialist features including voice alert calling, fall detection, and dementia management.

Applications — Felix was designed for the widest range of installation environments including aged care, hospitals, consulting rooms, schools, dementia facilities and other institutional applications. Whether it is a greenfield installation using CAT6 cable, or a retrofit to a historic building without cable access, Vitalcare has the infrastructure for the application.

Scalable — Felix is scalable from a single device to an unlimited number of call points and pendants, supporting both wired and wireless connection within a single location, and via cloud connection, across multiple locations nationally or internationally.

Future Proof — Felix is designed on the very latest computing hardware platforms using existing and emerging protocols including IoT (LoRa), Bluetooth, WiFi, NFC (Near Field Communication) and CAN bus. Improvements and new features can be reliably added even once it is deployed. This extends system life and improves the return on investment by providing new features and functionality without the cost of new hardware or installation.

Reliability — Felix uses a distributed ecosystem infrastructure where the core head end is duplicated within call points across the network. Therefore, if any section of the system is disabled, the rest of the system will continue to function. Felix is designed with a five 9’s reliability objective using only the best components and manufacturing methodologies.

Connectivity — Felix is compatible with all current and legacy Vitalcare systems along with a host of other protocols, products, call bell systems and institutional infrastructure including:

- Dementia management systems
- Access control
- Fire panels
- Security monitoring
- Personal Emergency Response Systems (PERS)
- Patient entertainment systems.

Vitalcare also provides integration through open APIs and custom software and third party systems and equipment.

Features — Felix is a comprehensive nurse call system featuring:

- Call points — full range including waterproof & custom branding
- Pendants — 2-way wireless with 10 times the range
- Wrist alarm — incorporating RTLS and duress
- Voice activation from call points
- RTLS — Real time location system
- Wandering resident management and geofencing
- Dementia monitoring with active behaviour profiling
- Fall detection through machine vision & AI
- Nurse room presence recording
- Colour LCD and LED display screens
- Pagers — one-way and 2-way pagers
- DECT phone integration
- Staff duress cards

Voice Calling — Felix call points support key word voice activation using localised voice recognition. Voice signatures are processed on-site and do not use third party external voice recognition engines.

Wrist Alarm — A wrist worn wireless alarm is also available, typically a preference for male residents. This device can incorporate RTLS and duress functionality.

Notifications — Nurse call notifications can be programed to appear on a wide range of devices subject to staff locations, shifts and the time of day. Devices include:

- Pagers
- LCD and LED
- SmartPhones
- DECT phones
- Web browsers (Vitalcloud)
- External call centres

Reporting — Felix provides a comprehensive enterprise level multi-facility cloud-based reporting engine for benchmarking and system maintenance. Detailed reports and graphic dashboards provide real-time analysis of call volumes, response times and compliance maintenance records. Reports are accessed through any browser connection, or via the Vitalcare application available through the Apple apps or Google Play stores.

FIVE YEAR FACTORY WARRANTY

Vitalcare are so confident of the quality of Felix that the system and products come with a 5-year factory warranty. This is 5 times the industry standard and reflects the confidence of Vitalcare’s team in their technology.
FELIX FLOOR PLAN

- **Call Point**: Wireless call points can be installed anywhere in the room, including wet areas, and are easily relocated.
- **Pendant**: Wireless two-way call points.
- **Programmable Room Light**: Supports ushering for dementia residents.
- **Fall Detection**: Machine vision fall detection.
- **Duress Button**: Staff emergency duress button for lone worker safety.
- **Vitalcloud**: Realtime activity, infographics and reporting.
- **DECT Phone**: Activations to the DECT messaging platform.
- **Display**: High visibility display showing current calls.
- **Wrist Alarm**: Wireless with RTLS and geofencing alert.
- **Floor and Chair Sensor Mats**: Wireless floor and chair mats make installation simple.
- **Pager**: Discrete message paging.
- **Smartphone**: Notifications and reports inside and outside the facility.

FELIX ECOSYSTEM

- **Home**
- **Independent Living Unit**
- **Residential Aged Care**
- **Hospitals**

NOTIFICATIONS

- **Fire**
- **Access Control**
- **Security**
- **Phones**
- **Third Party System**
- **Patient Engagement**
- **Entertainment**

Integration

- **Vitalcloud**

OPERATOR SERVICES

- **Friends and Family**
- **Emergency Services**
- **Reporting**
  - Secure Enterprise Reporting and Maintenance

INTEGRATION

- **Vitalcloud**

PRODUCTS

- **Pendant**
- **Call Point**
- **Wrist Alarm**
- **Staff Duress Card**
- **Dementia Controller**
- **Overdoor Light**
- **Pager**
- **Display**
- **Vitalcloud**
The Felix platform embodies a dynamic hybrid network, consisting of multiple communication protocols between different hardware elements. The entire network infrastructure is modular and scalable. Primary hardware consists of two key components — Masters and Minions. Both use a call point form factor. The Master is equipped with a 600 MHz ARM Cortex-A8 processor with 512 MB DDR3 RAM, capable of high speed application processing, including intelligent machine learning algorithms. The Felix platform is powered through 802.3af PoE, or auxiliary power with battery backup. The Minion device uses an embedded microcontroller, and has the ability to operate in low power mode, running off a CR123a battery for up to 3 years. A designated Master call point hosts the nurse call application and database providing reporting, configuration and diagnostics. This is securely synchronised to a cloud platform. A multi Master Felix ecosystem implements a distributed ledger of the server database to other Master devices, while using active redundancy techniques to allow other Master call points to act as server in the case of malfunction. This eliminates the need for a central server and reduces single points of failure. Each Master is equipped with two high speed CAN buses for interfacing to Minions and other devices such as overdoor lights, sensors and third party integrations. These can be daisy chained through a site to form a ring network, providing chain break redundancy. Both Master and Minion devices support LoRa and Bluetooth through an optional communication module. This provides integration with Vitalcare’s wireless infrastructure, RTLS and commercial Bluetooth sensors and actuators. Each device in the network can be configured and upgraded remotely, or by using an NFC enabled Android phone or tablet device.