FLAMENCO ^{IP}
FLAMENCO ^{IP+}

From human to human.
The digital nurse call for hospitals.

CONTENTS

©Adobe Stock, Wellnhofer Designs

©gettyimages, alvarez

From nurse call to communications platform

More details about the future-proof concept of Flamenco IP+
from page 6
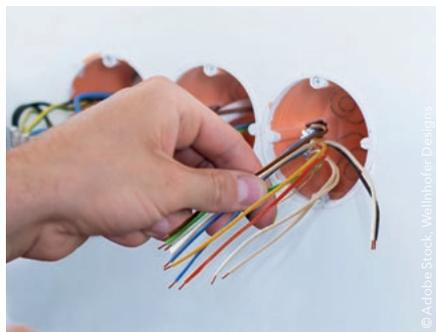
New flexibility for hospital decision-makers

Investment security for every upgrade scenario
from page 8

Efficient organisation of care

The benefits of digitisation for nursing staff
from page 16

Innovation focused on people

Intuitive operation on a new level with the ePat®lite
from page 18

Managed Digitisation.
Secure Communication.

From human to human.

The challenges facing the organisation of care in hospitals today have long been known: With the scarceness of nursing staff, sometimes outdated infrastructure and high cost pressure everywhere, it has been reaching its limits for years. At the same time, there is a lot of potential to improve efficiency and reduce workload. It's a question of rethinking, recognising this potential and investing in new infrastructure.

Digitisation is a key factor in this process. It offers solutions that relieve the pressure on the healthcare system while shaping the future of care. As a long-standing partner and systems market leader, we are well versed in the challenges that come with digitisation. Our Flamenco^{IP+} digital nurse call helps you to master them: Because we focus on flexible and modular solutions that move you forward – with regard to both technology and people!

We allow you to rethink care and, with our efficient and innovative communication platform, create more time for what matters most: people. Patients, nursing staff and hospital administrators are at the centre of this new care concept – NewCare. We will work with you to find the most appropriate, needs-based solution and get the most out of the new digital era – not only today, but also in the future. With solutions from human to human.

Florian Lupfer-Kusenberg and Stefan Göhler

Florian Lupfer-Kusenberg,
Managing Director

Stefan Göhler,
Sales Director D/A/CH

Bold progress.
Future-proofed system.

FLAMENCO ^{IP}
FLAMENCO ^{IP+}

Requirements in hospital care are becoming more and more complex. Conditions and needs are constantly changing. For years our Flamenco modular nurse call system has been helping you to better manage your daily work routine, take the pressure off your team and be more effective for your patients. We support you on your way to a new forward-looking and person-focused care concept.

With Flamenco^{IP} we have already taken the first step towards a digital nurse call system that supports nursing staff, helps patients and simplifies organisation. With Flamenco^{IP+} we're going one step further: As a communication and coordination platform in hospitals, the new nurse call system leverages the potential of digitisation and now brings full IP right into the patient's room.

More confidence and security for the future

We understand the state of the art and the situation in many hospitals. Based on this understanding, we have developed a modular concept – Flamenco^{IP} and Flamenco^{IP+} – which allows you to control the level of digitisation and adapt to changing conditions as required. Through compatibility within the Flamenco system family, we ensure that you can modernise your infrastructure flexibly and reliably – step by step if you wish.

Digitisation is a continuous process.
One in which we will gladly support you.

More time for what matters

One click, one button, one look: All of our new Flamenco^{IP+} components are designed to be intuitive to use. Well-designed user interfaces make a significant contribution to reducing the time spent operating the system and to simplifying communication between nursing staff and patients. This is how mobile and agile working is possible in the hospital of today – also as a supplement to Flamenco^{IP}.

More interaction between people

Flamenco^{IP+} facilitates coordination with colleagues and makes patient care simpler. The time saved as the extent of digitisation increases can finally be reinvested in what really matters – working with and for one another. Our modern nurse call therefore plays an important role in shaping daily care. Join us and take the next step towards the future!

NewCare

Tunstall has a clear vision of better care for the future. In the process of digitisation, we are guided by these key goals:

- To put people at the forefront.
- To make full use of the potential of digitisation.
- To simplify life – with modern user experiences for all users.

"New Care" is a concept and a guide to the digital future of care.
We forge ahead and take you with us – no matter where you and your nurse call system are. Every step of the process takes us closer to digitisation together.

Reactive Care

New Care

FLAMENCO IP+

FLAMENCO IP

FLAMENCO

INTEGRATION

UPGRADE

INTEGRATION
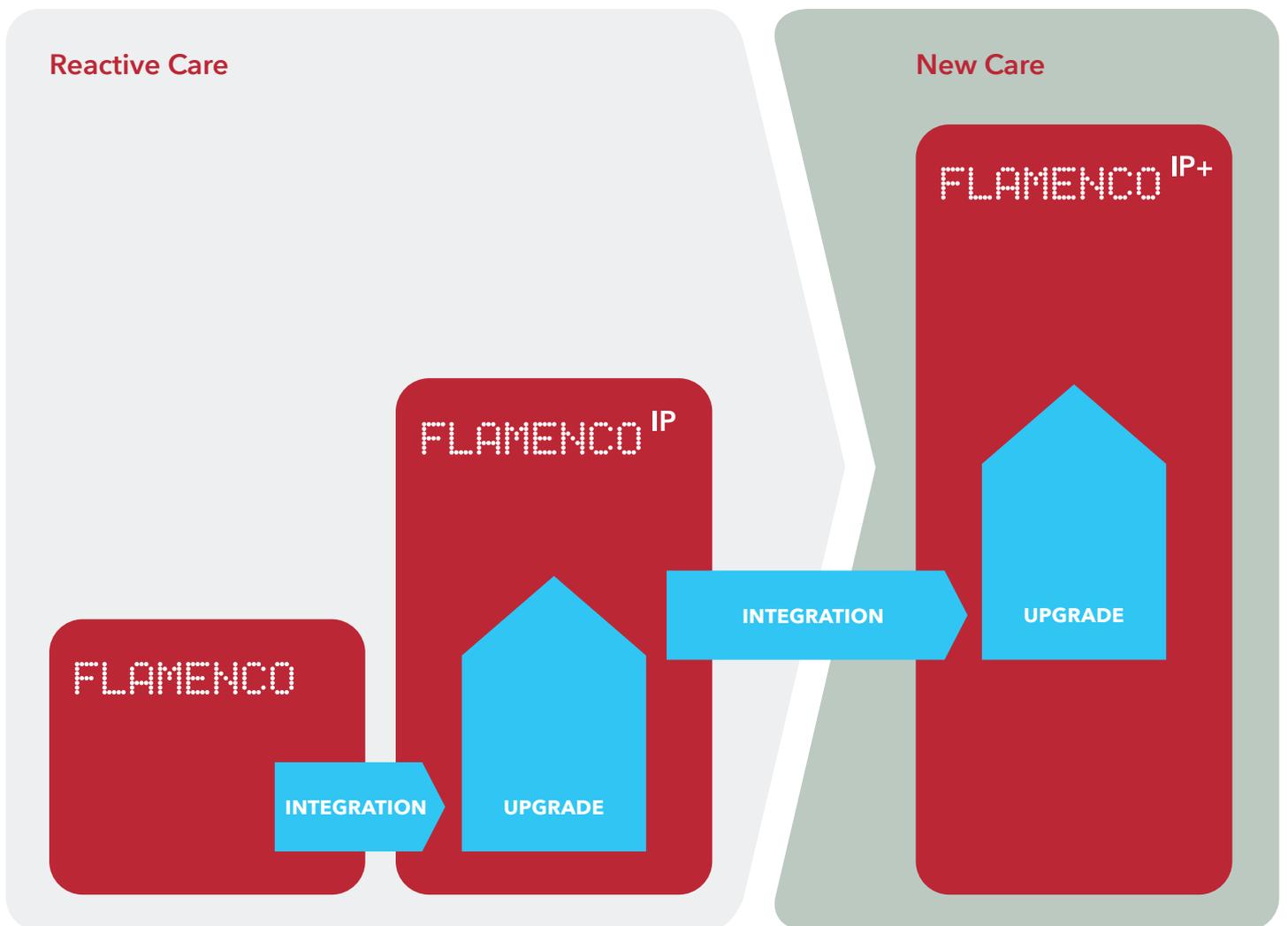
UPGRADE

From the first Flamenco system to the current full IP solution:
All Flamenco generations are compatible with each other, can be used flexibly and have modular upgrades. This is how we solve individual requirements according to needs and enable step-by-step digitisation.

Integrate new equipment. Increase flexibility.

We are constantly setting new standards. We are continuously developing our solutions on the basis of innovative technologies. Flamenco^{IP+} is deliberately designed as a compatible, modular and openly networked system. You benefit from the latest state-of-the-art technology in line with your needs.

With Flamenco^{IP+} we are extending the standard of our IP nurse call and enabling full IP connectivity – from the IP-SystemManager to mobile patient terminals. Furthermore, Flamenco^{IP} with IP backbone remains the ideal introduction to a networked nurse call system for many hospitals. The modular design and high level of compatibility means Flamenco systems can be linked together. In this way we ensure gradual and compatible modernisation as well as safe, reliable and above all flexible operation.

Always perfectly networked
The Flamenco system also allows you to make legacy systems IP-ready with just a few components – so you can gradually add components, wards or even whole buildings. The mixed operation runs according to needs and allows you to react flexibly to changing requirements in the future.

Enjoy the benefits of digitisation
Move step-by-step towards a networked nurse call system. Use the compatibility in legacy systems or realise direct synergies with the IT infrastructure in new ones. The more modern and smart components you can integrate, the more workload is lifted from your staff and the better for your organisation and your patients. Flamenco^{IP+} offers several additional functions, greater efficiency and flexibly networked technologies – enabling a new form of care.

Infrastructure is used.
Resources are conserved.

When refurbishing buildings, it is a good idea to rely on a system with high levels of compatibility and connectivity. Flamenco^{IP} and Flamenco^{IP+} allow you to put digitisation into practice step-by-step and flexibly. We use existing systems for a particularly efficient modernisation of your nurse call system.
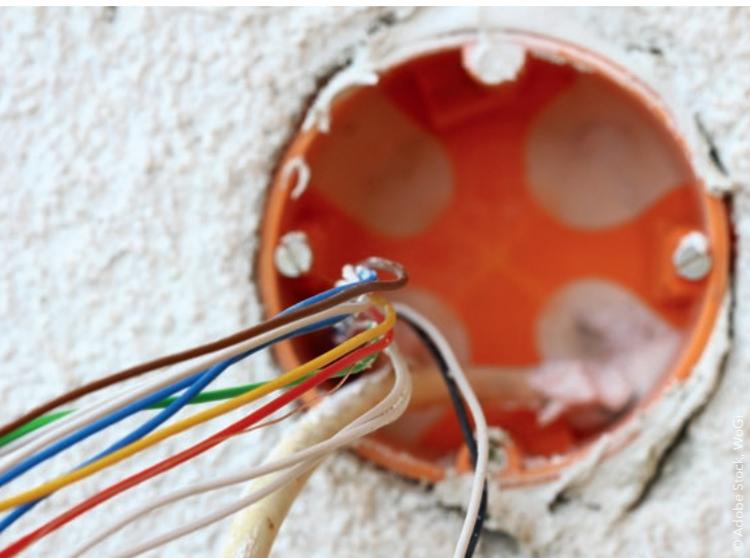
When upgrading the system, existing cabling can be integrated, resulting in a particularly efficient modernisation of the nurse call system.

If refurbishing, it is often possible to reuse existing cabling, technical rooms or even electrical cabinets. This saves costs and allows all new components to be flexibly built around the existing nurse call infrastructure. With Flamenco^{IP}, we offer you modernisation of the nurse call system that ensures maximum benefit at minimum cost.

Step-by-step digitisation
Our IP-SystemManager is compatible with the OSY legacy system adapter, as well as with older systems and their components. This means you can easily network different nurse call generations in one building and gradually equip and supplement individual wards with IP-based equipment. Start with the control system. Building on this basic structure, you then gradually modernise wards, rooms or even entire buildings.

Low investment, long-term benefit
In healthcare in particular, digitisation promises enormous efficiency gains but the cost pressure is high. For us, a gradual modernisation is therefore also an offer of a trusting partnership that provides you with security and a long-term, future-proof solution.

Refurbishment with the Flamenco system: Installation into an existing nurse call infrastructure is as fast as its use by staff is intuitive.

Flexible upgrades
The modular Flamenco system allows a gradual changeover according to needs – room by room, ward by ward or building by building.

Efficient modernisation

Tunstall remains true to its principle of 'Integrate, don't discard' and allows existing infrastructure to be used with minimum effort. Simple planning helps keep costs low and maximise benefits.

Guaranteed safety

Even when converting to a partially IP-based system, failures can be limited locally and errors can be corrected quickly. Whether a complete system or partial integration – it goes without saying that the requirements of DIN VDE 0834 are met.

Custom advice

We provide custom and needs-based advice for each customer, so that you can benefit from our understanding of processes and the possibilities offered by the flexible system.

Benefits of gradual refurbishment

Directly networked: The hospital bed and the nursing staff come closer together through IP-enabled components.

Simple planning

Plan ahead with systems that speak the same language. The structured cabling is also independent of the organisation of care, so you can adapt it whenever you need.

A holistic view

Our nurse call system is a high-performance network that incorporates various services via interfaces in a modern way and networks them flexibly and efficiently.

A safe investment

The initial investment for the full IP system pays off in the long term: Flamenco^{IP+} forms the basis for the organisation of care for the coming decades, has low running costs, offers high reliability and remains scalable as required.

Advantages of complete refurbishment and new construction

Moving with the times.
The future made possible.

For new construction projects and complete refurbishments, you can prepare your care organisation directly for the requirements of tomorrow. Based on a modern cable infrastructure, Flamenco^{IP+} offers you the usual high level of reliability, long-term investment security and, as a communication platform, all the advantages of digitisation.

Flamenco^{IP+} brings you one step closer to human-centred care. With the new nurse call system, you can bring full IP technology right into the patient's room, from where your patients and nursing staff can use modern IP terminals that increase individual comfort and make work easier.

One system for everything
The nurse call system is based on structured cabling. This enables modern cable infrastructures that are consistent with other services: Various other services such as the fire alarm system, the PBX or other network components can be flexibly and securely integrated into a Flamenco^{IP+} nurse call system.
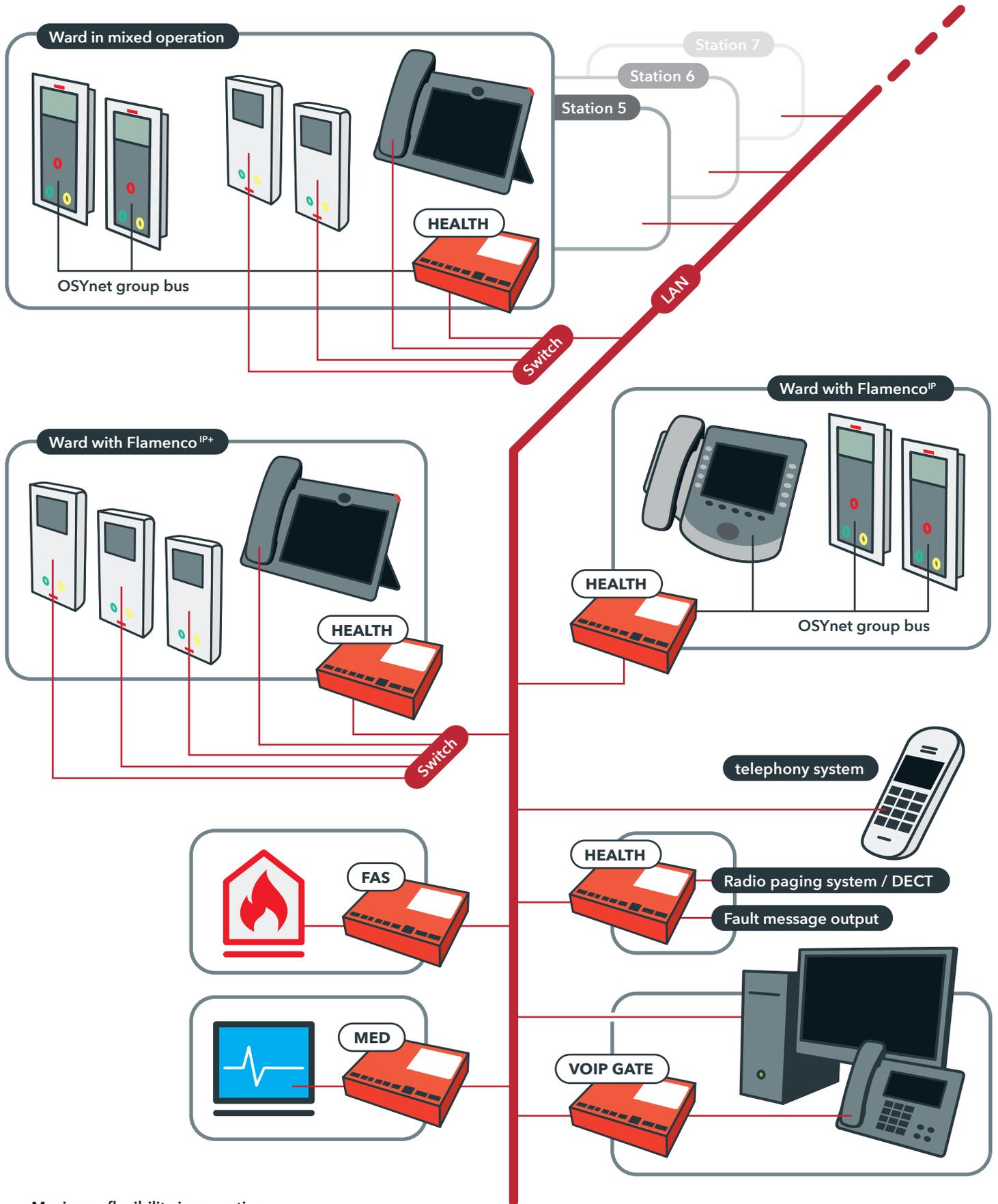
Invest in the future
The modern networking of digital components is becoming increasingly important. They all speak the same language via the Internet protocol. Thanks to simple scalability, you can create ideal conditions for the future and always have capacity reserves available when you need them. With Flamenco^{IP+} you enjoy more freedom than with rigid bus systems and can react to changes with greater flexibility. This allows you to ensure a forward-looking and proactive care organisation for many years to come without having to make follow-up investments.

In a new construction, you can build a custom infrastructure for Flamenco^{IP+} according to needs.

Planning made simple

Use our Planning Manual and our assistance with tendering texts for efficient planning at
www.tunstall.de/FlamencoIPplus

Ward in mixed operation

OSYnet group bus

HEALTH

Station 5

Station 6

Station 7

LAN

Switch

Ward with Flamenco IP

HEALTH

OSYnet group bus

Ward with Flamenco IP+

HEALTH

Switch

telephony system

HEALTH

Radio paging system / DECT

Fault message output

FAS

MED

VOIP GATE

Maximum flexibility in operation

The IP-SystemManager allows wards to simultaneously use IP and BUS components and, thanks to various software system modules, enables the integration of PBX or fire alarm systems, for example.

One
for all.

Every system needs a heart to drive it. In the Flamenco^{IP+} full IP system, this is the IP-SystemManager. We have optimised the decentralised control unit from the ground up for even more extensive functions, more flexible application and even more efficient operation.

The IP-SystemManager
Thanks to further developed software, the control unit nurse call system becomes even more flexible: IP-based equipment and equipment in the OSYnet group bus can be operated in parallel using an IP-SystemManager.
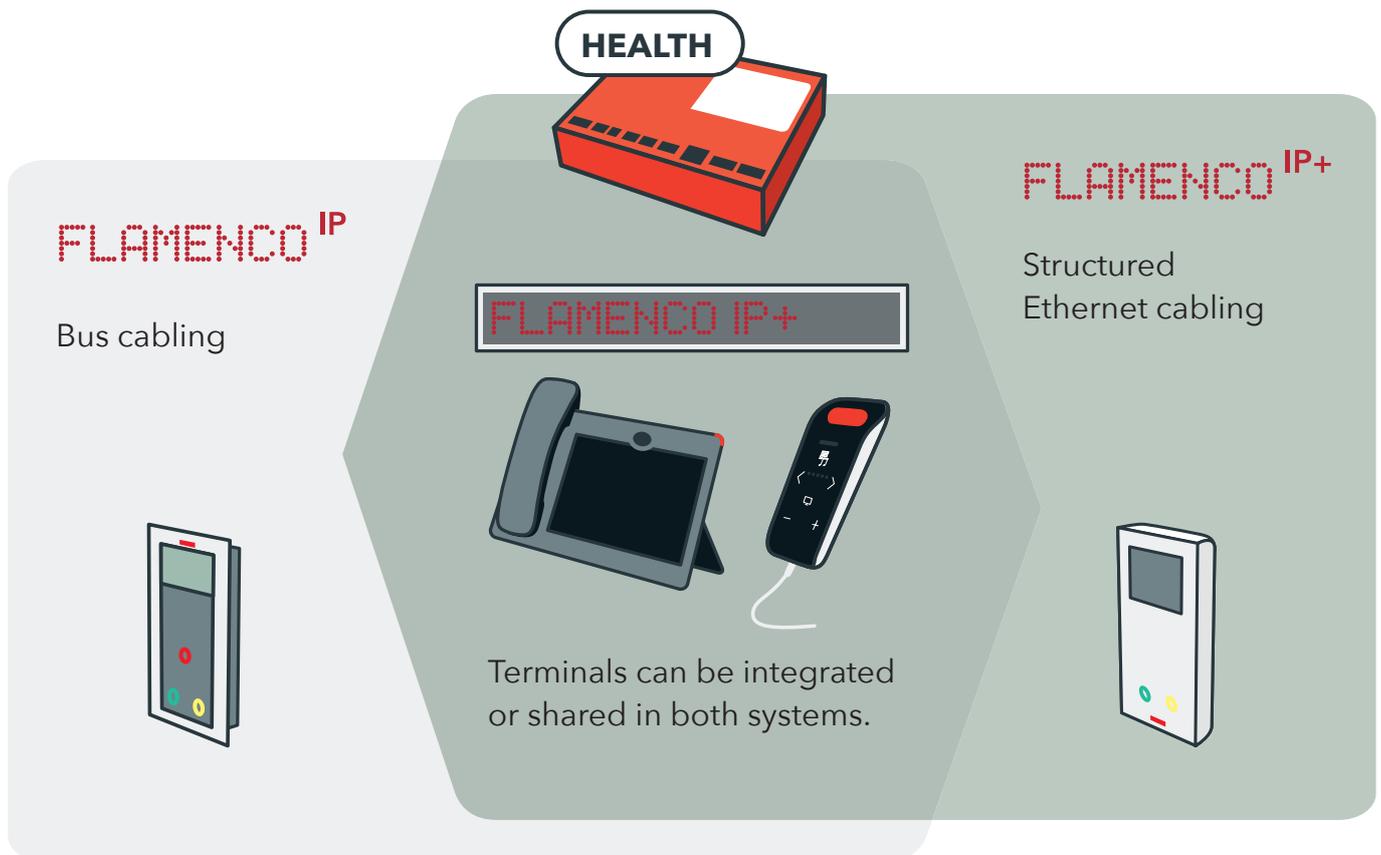
Scalable, according to your needs
Flamenco^{IP+} works modularly: You can upgrade it as required, add or reorganise wards or scale its functionality. From the actual nurse call to complex interfaces, it offers numerous system and functional modules that support you in your everyday nursing tasks. Up to 63 IP-SystemManagers can be installed per nurse call system and be responsible for the control and organisation of your wards in accordance with DIN VDE 0834.

Features and functions of the IP-SystemManager:

• Decentralised control of wards and organisational groups

• Ward coupling, speech communication, higher-level system messages and other inter-ward functions

• Configuration via individual system and functional modules

• Excellent voice quality thanks to digital voice processors and VoIP technology

• System status visible locally and system-wide at any time

• High system reliability: All IP-SystemManagers continue to work even if one IP-SystemManager fails

• Remote access or system updates via the IP network

• System upgrades or system changes can also be applied at a later date

• Suitable for connecting paging systems, DECT systems, fire alarm systems and medical systems

13

Everything perfectly connected.

The IP-SystemManager is the link between the two Flamenco environments. As a control unit with various software system modules, it enables the simultaneous operation of BUS and IP components in one network. This means that even in an existing ward with BUS cabling, modern IP-based devices can be connected via Ethernet without needing to alter the cable infrastructure. Regardless of the connected device, you benefit from fully integrated operation.

HEALTH

FLAMENCO IP

Bus cabling

FLAMENCO IP+

FLAMENCO IP+

Structured
Ethernet cabling

Terminals can be integrated
or shared in both systems.

Clever solution to investment backlog

The legacy system adapters OSYlink AS-CCS and OSYlink AS-L200 make the IP-SystemManager a genuine all-rounder: This makes it possible to integrate older Tunstall nurse call systems, refurbish ward by ward and gradually reduce the investment backlog.

Hybrid: Flamenco^IP	Full-IP: Flamenco^IP+	System characteristics:
●	●	Room components are networked via an intelligent RAN room bus and form a functional unit. Up to 30 components can be interconnected in a given room area network. The individual devices form the basis of the nurse call system and remain functional even if higher-level control units fail.
●	●	Power supply, 24 volt, safety extra-low voltage (SELV)
○	●	PoE (for some devices PoE+) power supply possible as alternative to 24 volt power supply
Bus cabling	**Structured with Ethernet**	Cabling at ward level
●	●	IP-SystemManager is the control unit at ward level, can be networked to create a complete system via an IP infrastructure and is the system interface for external systems
●	●	System configuration in accordance with DIN VDE 0834
○	●	Maximum freedom through IP addressing
○	●	Integration of IP terminals to complement the nurse call system
○	●	Remote maintenance options up to terminal or duty room level
●	●	Contemporary UX design on all operable devices, intuitive operation via touch displays (on ComTerminal^IP and ComStation^IP)
System separation	**Local separation**	Electrical safety: Separation in accordance with DIN EN 60601-1

● included

○ not included

With full IP, everything speaks one language

- The ePat^®lite networks multimedia devices at the patient's bed to the lighting and blinds control system and the call devices.
- At ward level, all Flamenco systems are easily connected via the Internet protocol.
- Flamenco^IP+ also centrally integrates third-party systems such as fire alarm systems or telephony infrastructure.

Flexible planning.
Efficient organisation.

In day-to-day nursing, no two days are the same. Shifts, occupancy or ward affiliations often change on short notice. With Flamenco you can react quickly and flexibly to changes in the organisation of care, thus ensuring orderly structures, a clear distribution of tasks and efficient work.

Organise capacities according to demand
During quiet times it often makes sense to change the regular ward operations. Simply combine two or more wards into one organisational unit. Incoming calls from the unit can then be received and read by staff at all call handling consoles, ensuring a fast response with minimal staffing requirements.

Simple shift and area organisation
Even within a ward, Flamenco uses 'zones' to create spatial areas for different teams and time-based shift divisions. One ComStation^{IP} per zone offers greater convenience and makes work easier. Zones and shifts are created in the SystemOrganizer and can be easily activated by staff.

Central call handling
Central operation of the nurse call system is also possible on a temporary, transitional or permanent basis. All calls are then bundled, evaluated and answered at one call handling console via the ManagementCenter. In addition, you can integrate further functional areas such as administration, X-ray or pharmacy or even combine several buildings and locations.
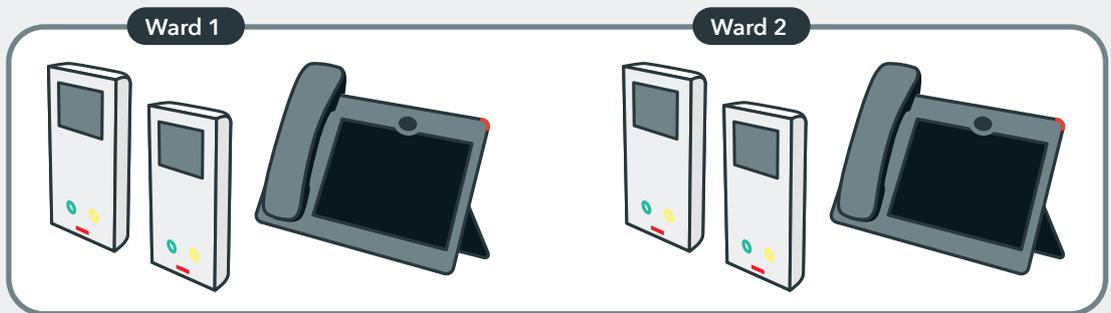
Tried and tested

Many of our customers have been enjoying the benefits of central call handling for years. The workload for staff on the wards is noticeably reduced, creating a more stress-free working atmosphere and increasing the quality of patient care.
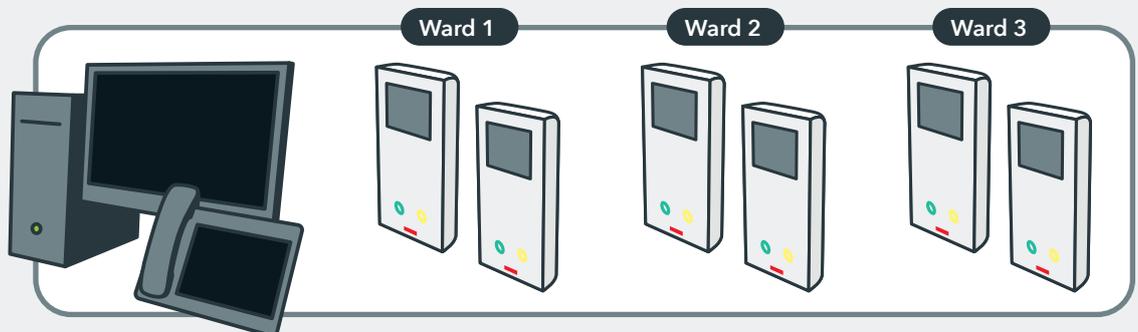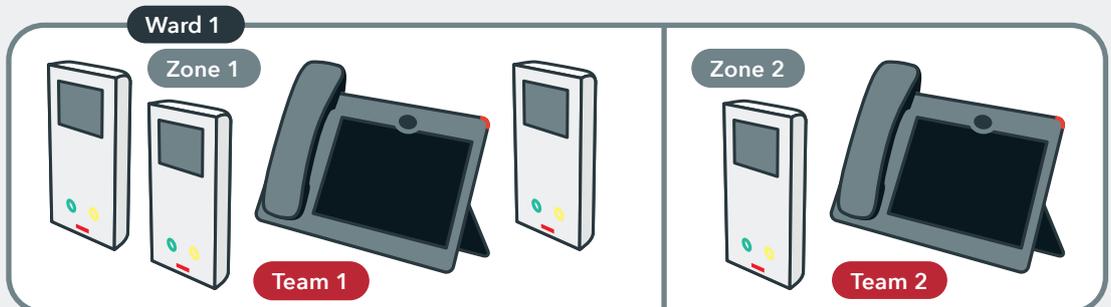
Normal ward mode — Ward 1, Ward 2

Merging of wards — Ward 1, Ward 2

Central call handling — Ward 1, Ward 2, Ward 3

Area-based care — Ward 1, Zone 1 (Team 1), Zone 2 (Team 2)

Programming and functionality do not rely on the system structure or installation of components. Organisational changes such as the merging of wards during the night, shift changes, sub-division into ward areas or the need to be able to handle calls centrally across all wards can be easily and intuitively created in the system using Flamenco[IP+].

The user-friendly interface of the ePat®lite has
an anti-bacterial effect and clearly presents
the patient with all easily selectable functions.

Setting new standards.
Familiar comfort.

Smart devices have long since found their way into every part of our private lives. In hospitals, too, digitisation offers many advantages for communication and a familiar standard for patients. With our 'electronic patient assistant' – ePat® for short – you can create a smart and easy-to-use communication platform between nursing staff and patients.

The communication and control unit with intercom technology and touch interface is used directly at the patient's bed. The ePat®lite in this form is the first version of a new generation of devices that is very similar to users' own living environments. Ease of use and modern design go hand-in-hand with functionality and speech quality in this device concept. Straightforward use thanks to a modern user experience for patients and staff is a clear priority.

All functions at a glance:

• Intuitive operation thanks to simple, understandable symbols

• Excellent voice quality, high-quality microphone and speaker

• Service call for a simple request for non-nursing services

• Ergonomically shaped enclosure, especially suitable for patients with motor limitations

• Red call button with reassurance light and integrated location light

• TV, entertainment control and blinds control

• Control for room light and reading light, including dimming function

• CLEAN button locks the touch panel when cleaning

The bracket gives the ePat®lite a fixed place by the bed. Mounted within reach of the patient, the ePat can be easily taken off and stored away again.

The ComStation^{IP} can be wall mounted or simply placed
on a table. The 7″ five-point Wide SVGA touch display
allows quick and intuitive operation of the system.

Keep track.
Manage your day.

The ComStation^{IP} is a ward console for the nurse station. It ensures that calls are received, handled or distributed and that the care organisation is managed simply and purposefully by staff.

Effective communication among specialist staff also contributes to improving care. This is why we have taken the requirements of nursing staff into account with the ComStation^{IP} and placed particular emphasis on a clear design, simple operation and the best voice quality. The ComStation^{IP} offers plenty of space for information and can be sleekly integrated into the working environment.

With its sleek design, the ComStation^{IP} fits effortlessly into any working environment. Power can be supplied either via a plug-in power supply unit or via Power over Ethernet (PoE).

Features and functions of the ComStation^{IP}:

• Ward console configured for standard ward operation

• Answering and handling of calls

• Selective announcements with up to four defined presence-related person groups

• Enabling and disabling ward couplings, zones and shifts

• Display of system messages

• Handset or hands-free speech

• Capacitive 5-point Wide SVGA touch display, 7", resolution: 1024x600 pixels

• Table or wall mounting

• Integrated manual

The innovative operating front made of high quality
glass meets the highest standards in terms of cleaning,
operation and design.

Simplified operation. Guaranteed safety.

The ComTerminal^{IP} is the communication control centre in the patient room and supports nursing staff in their work. All room functions can be controlled and monitored via the user-friendly interface.

The new large touch display on the ComTerminal^{IP} considerably simplifies the management of room components for the nursing staff. The improved voice quality thanks to VoIP technology also makes a positive impact in daily use. The ComTerminal^{IP} is equipped as standard with all controls that contribute to optimum communication between patients and staff and ensures a high degree of operational reliability, as all basic nurse call functions are still available autonomously in the room even in the event of system faults.

All functions at a glance:

- Touch display with sensor buttons for simple and intuitive operation

- Extremely simple operation thanks to logically and ergonomically arranged controls

- Excellent voice quality thanks to VoIP technology

- High-quality loudspeaker and sensitive electret microphone

- Integrated configuration menu for selecting room functions and setting system parameters

- Integrated function monitoring with status indication

- Closed, smooth surface, easy to clean and disinfect

Thanks to the plug-in electronics, the ComTerminal^{IP} can be installed quickly and easily and makes it possible to identify up to six beds.

Wide range of purposes.
Smart help.

Our Flamenco^{IP+} full-IP nurse call and communication system ensures comprehensive safety for patients and maximum flexibility for nursing staff through a wide range of components. Flamenco^{IP+} continues to rely on the tried-and-tested RAN room bus. All components are easy and safe to use and ensure greater efficiency in day-to-day nursing.

You can find further components in our extensive system documentation.

Room lamp, three or four sections
Signal lamp with three or four light sections for visual signalling of all call types and staff presence.
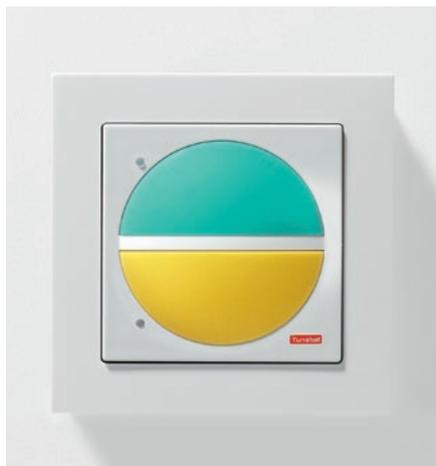
Range of switches
Button in moisture-protected design for switching staff presence, raising calls, WC calls and alarms.

Also with pull-cord, with pneumatic trigger or for call cancellation.

Connection socket
Combined connection socket for connecting patient equipment, for transmitting calls or entertainment programmes and for controlling two relays for light switching.

Handheld transmitter
Wristwatch-style transmitter to manually trigger calls and with easy-care stretch strap. Moisture protection to IP 67.

Wide range of accessories available.

Pull-cord switch
Pull-cord operated call switch for raising calls.

CorridorDisplay[IP]
Display with alphanumerics for calls and general system information for Flamenco[IP+] nurse call systems. Including tone generator for acoustic signals, automatic adaptation of the LED display to the ambient light and a loudspeaker for announcements.

Service called.
Operation secured.

Our nurse call systems are designed for requesting help quickly, reliably and specifically in emergency and dangerous situations. The functional reliability of the system saves lives. Through our competent and comprehensive service and the high-quality components and system modules of our systems, we ensure that Flamenco^{IP+} always remains functional and safe.

Our technical support is available for you 24/7 on request.

With Flamenco^{IP+}, safety and IP are not contradictory.
Our nurse call systems are certified to DIN VDE 0834-1:2016-06 and therefore meet not only the communicative requirements of modern and effective care communication, but also the safety requirements that ensure the protection of patients' lives and health.

This is how we ensure the safety of our systems:
• We support you from the planning stage through to installation, commissioning and seamless operation.

• Our maintenance contracts allow you to increase long-term operational reliability – at clearly calculable costs.

• We support you in troubleshooting and in professional maintenance.

• We provide extensive training in the use of our systems.

• We offer you technical support via our service hotline – including 24/7 on request.

By connecting different systems and using uniform infrastructures, you create maximum flexibility and future reliability in all applications. Along with the high security standard, especially regarding cyber attacks and data protection, open and specific communication also increases. Flamenco^{IP+} allows you to make use of all the opportunities offered by a full-IP based nurse call system while ensuring safe application.

Our service staff will assist you in the installation
and commissioning of your system as well as with
maintenance matters.

Updates for Tunstall nurse call system software

With the introduction of Flamenco^{IP+}, Tunstall offers regular updates for your
Flamenco system software as part of software maintenance contracts. This ensures
the functionality, operational reliability and data security of your nurse call system.

Operational reliability

Regular updates eliminate known errors (bugs)
and ensure the error-free functioning of the nurse
call system and your patients' safety.

Data security

Due to increasing networking, coupling and inte-
gration of external systems within and to a nurse call
system, protection against unauthorised access and
manipulation also becomes increasingly important.
Protect your nurse call system against these dangers
with our updates to offer your patients and nursing
staff the greatest possible safety.

Functionality

Updates are also used to implement or change new
features and to remove obsolete features or those
that are no longer needed. Keep the software of
your nurse call system constantly up-to-date and
benefit from further developments in the future.

Added service included

As a contract customer you will receive additional
services such as extended hotline availability free
of charge.

Nurse call made by Tunstall

As a pioneer and innovator, we are constantly working on the next generation of communication solutions for the healthcare sector. We provide patient-focused solutions to help you overcome the manifold challenges of modern nursing. New technological standards enable efficient organisation of care for patients and staff alike. By combining people, technology and data, we offer you the most appropriate and cost-effective levels of care.

Tunstall uses the power of state-of-the-art technologies to offer future-proof Connected Care and Connected Health solutions: virtually unlimited integration possibilities from all conceivable systems and peripherals, simple installation and maintenance thanks to ready-to-use plug-and-play components, maximum organisational freedom and, last but not least, outstanding design of all patient units.

Our experienced project engineers and competent services ensure that everything works to your satisfaction right from the outset.

For more information on Tunstall's products, please refer to the relevant information sheets.

As we are constantly developing our products, product specifications and the product appearance may change without prior notice.

KK 051-06/145 00896100/12.20   Titel © Adobe Stock, Yakobchuk Olena

Tunstall