



HELPER: IP  
HOSPITALS

Solution for the complete management of the Hospital

**IBERNEX**

Shaping communication solutions beyond the obvious

# HELPEX IP

the most complete solution on the market

**HELPEX IP is the most complete healthcare communication solution for hospitals and nursing homes.** It covers the needs related to **healthcare management, alarm management and wanderer control** in hospitals and nursing homes. It also integrates all the Hospital's **telecommunications services** to optimize its use and facilitate its operation and maintenance. Everything from a perfectly integrated software solution.

In a critical environment, as hospitals are, the staff must receive alarm notifications as soon as they are generated from the patient, by that, via IP networks and different devices, the **medical personnel receives a notice instantly.**

**IP system, incorporating standards of VoIP, based on SIP protocol, with the possibility of PoE power. Compatible with IP phone stations.**



- Terminal VoIP/SIP in each room.
- Supervision and scheduling of all devices in the system over the LAN from the center.
- It Improves the care delivery processes, allowing an improvement in **patient satisfaction**.
- Wireless communication and fixed checkpoints.
- Centralization of communication and information of activities at the Hospital, staff, administrative and accounting.
- It improves the healthcare process.
- **Open architecture.** Standard database with possibility of interconnection with the majority of voice and data standards, TCP/IP, TAPI, SIP, ODBC, HL7.
- Domotics features, relay input to slope light control, presence sensor, solenoid valve, inlet for detectors (smoke , gas...).
- Optional temperature sensor.



# ADVANTAGES

### Maximum reliability

The software monitors and autochecks the system in **real time**, thus, guarantees the receipt of alarms in mobile and fixed devices, increasing the safety and comfort of patients.

### Control and security assistance

All alarm calls are stored in a database. It is a fault-tolerant system, in case of communication error, the information is stored locally in the IP terminals until, it recovers the connection, facilitating the management of human resources.

### Modularity and scalability

Modular system, with the ability to grow gradually and adaptable to each center. Scalability without affecting the service available

### Simplicity of use

Aesthetic, modern and intuitive look. Easy to use for patients and healthcare staff, which ensures a quick and rapid response.

### Compatibility

Compatible with any communication system, fixed and wireless (DECT, DECT's wrist and pagers). It also allows to receive alarms on IP phones , or under Wi-Fi technology on Smartphones and tablets.

### Easy implementation

Total integration between calls and hospital management system from the center (patients information, health personnel, alarms...), so it's necessary to have a single computer system that can extract alarms and reports.

### Energy saving

Monitoring the temperature, air-conditioning, shut on/off lights management, using a system of home automation.

### Customizable settings

Which is a modular system that allows to install and program, via remote, the terminal individually in each room, optimizing costs. In addition, the alarms can be configured individually.

### Optimization installation costs

The use of multifunction devices allows a cost-saving installation.

### Cost savings in wiring

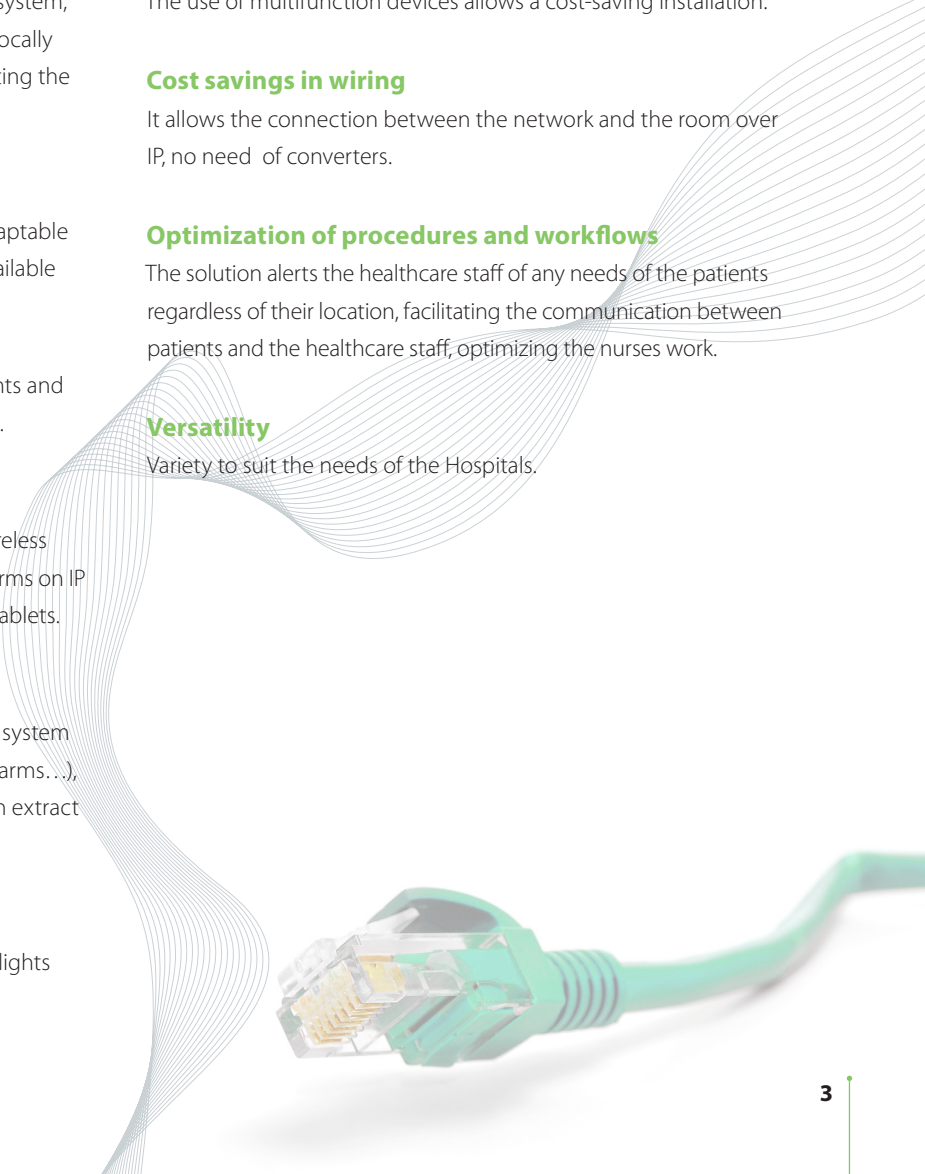
It allows the connection between the network and the room over IP, no need of converters.

### Optimization of procedures and workflows

The solution alerts the healthcare staff of any needs of the patients regardless of their location, facilitating the communication between patients and the healthcare staff, optimizing the nurses work.

### Versatility

Variety to suit the needs of the Hospitals.



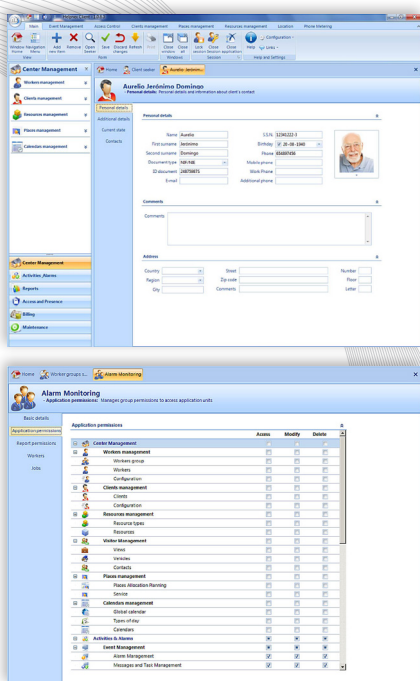
# SOFTWARE

## Modern and visual solution

The **HELPNEX IP** software is defined as a **modular system**, built on a single and unique software platform. It allows developing new modules **covering** the **market needs** with the possibility **of integrating them easily in the software platform**.

### THE SOFTWARE MODULES

- **Management of the healthcare center:** managing employees and their individual calendars, patients, medical equipment .
- **Activities, alarms and tasks.**
- **Reports in different formats.**
- **Maintenance.**
- **Access and presence** (fingerprint and RFID cards).
- **Location** (indoor and outdoor).
- **Wander control.**
- **Laundry.**
- **Call accounting** for time and steps.
- Integration with other healthcare management applications such as ERP



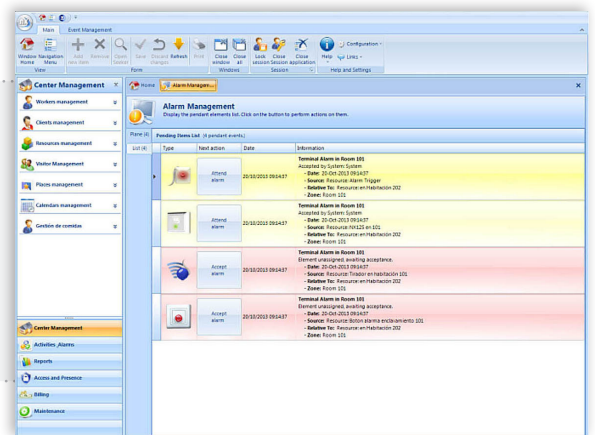
### Features

- Based on FSK communication which allows downloading data in **real time**.
- With possibility of IP and analog communication.
- Based on the latest version of Microsoft.
- Database on **Microsoft SQL Server 2005** or newer version.
- **Easy and simple installation.**
- Similar visual aspect to Microsoft Office 2007.
- **Automatic update** of new software versions.
- A modular and configurable solution.
- **Management** of the access for different user levels.
- **Automatic correction, improvements and updating** of the software.
- Available in several languages.
- Possibility of integrating existing software programs.
- Communication management VoIP/SIP.

- MODULAR** | Composed by a basic module expandable with other developed modules.
- UNIQUE** | All the products are always integrated and their availability is immediate only by activating a new license
- SAFE** | Allows defining the permission management.
- SIMPLE** | Access to content via web.
- VISUAL** | Uses the last technology to present the visual interfaces, showing a common and easy interface for all the modules.

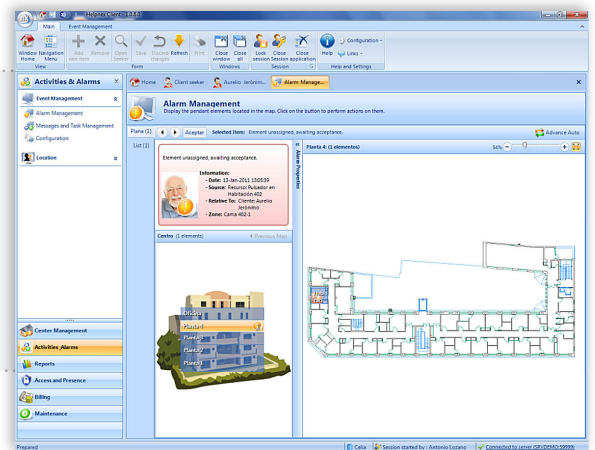
### Alarm module: Alarms views

It allows to visualize and attend to the alarms generated by the installed devices. It is possible to detail the motive of the alarm and add all kinds of comments. All alarms are recorded in the database.



### Alarm module: display at the level

Visualization of the alarms, in real time, on map or plane, facilitating the knowledge of the resident's position. Custom interface for each medical center.



### Reports module

From Helpnex platform you can export reports in which all information about the happened in the center appears. The risk in care is reduced, therefore, the costs are reduced too. There is a tool for designing custom reports.

**Report alarms**

Description of report:  
Displays a report with the generated alarms.

Table of results:									
Client	Room	Source Type	Source	Alarm Text	Shooting date	Accepted	Acceptance Date	Attended by	Assent
Aurelio Jerónimo Domingo	Room 101	Pull cord	Pull Cord in Room 101 Bath	Alarm from Pull Cord in Room 101	26/04/2012 9:43:25				
Claudia Lopez Sanz	Chambre 301	Wireless pull cord	Cord Pull in 301 Room	Alarme de cordon dans la chambre 301	17/04/2012 9:00:11	Antonio Lozano	17/04/2012 8:59:02	Antonio Lozano	17/04/2012 9:02:37
Benito cortés Portugal	Room 102	Pushbutton	Pushbutton in 102 Room	Alarme de poussoir dans la chambre 301	17/04/2012 9:00:11	Antonio Lozano	17/04/2012 9:02:42	Antonio Lozano	17/04/2012 9:05:28
Claudia Lopez Sanz	Room 102	Terminal	00001200	Alarme dans la chambre 102	17/04/2012 9:00:11	Antonio Lozano	17/04/2012 9:05:28	Antonio Lozano	
Aurelio Jerónimo Domingo	Room 101	Pull cord	Pull Cord in Room 101 Bath	Alarme de cordon dans la chambre 101	17/04/2012 9:00:11	Antonio Lozano	17/04/2012 9:04:11	Antonio Lozano	
Benito cortés Portugal	Room 102	Pushbutton	Pushbutton in 102 Room	Alarme de poussoir dans la chambre 102	17/04/2012 9:00:11	Antonio Lozano	17/04/2012 9:04:11	Antonio Lozano	
Claudia Lopez Sanz	Chambre 301	Wireless pull cord	Cord Pull in 301 Room	Alarme de cordon dans la chambre 301	17/04/2012 9:00:11	Antonio Lozano	17/04/2012 9:31:02	Antonio Lozano	
Claudia Lopez Sanz	Room 102	Pushbutton	Pushbutton in 102 Room	Alarme de poussoir dans la chambre 102	17/04/2012 9:00:11	Antonio Lozano	17/04/2012 9:05:47	Antonio Lozano	

# COMPONENTS

## ROOM DEVICE



- Surface version (audio and RFID integrated) and recessed format and the recessed bed pushbuttons in universal box.
- VoIP/SIP calls, to ensure patient-health personnel contact.
- Autonomous operation capacity.
- Possibility of using PoE terminal and elements connected to it.

## GENERAL ALARM DEVICES



- It permits generating alarms by activating a pull.
- A red led will light up until its completion.
- Waterproof.
- The units are constantly monitored.
- Multifunction wall module for bed pushbutton.
- Bed pushbutton with membrane keypad to provide greater protection against water splashes.
- Pushbutton with Braille code identification for people with sight impairment.
- The units are constantly monitored.
- Bed pushbutton with microphone and speaker

## NOTICE AND CANCELLATION DEVICES



- The illuminated buttons allow to generate a request for help, urgent calls and medical alarms.
- RFID option to facilitate the registration of healthcare staff and to provide a complete traceability.

## REPORTING DEVICES



- Four-coloured door warning light (white, red, green and a fourth configurable). LED technology.
- Automatic adjustment of luminosity to cope with supply voltage variations.
- Excellent side visibility.

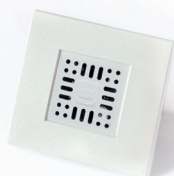


- Light indicator that shows the type and origin of pending alarm.
- Location: Corridors and control areas.
- Remote viewing.



- The Healthcare staff can answer from nurse's fixed positions (IP call console with PoE and tactile control position), or mobiles (DECT, wírst DECT, pagers and Smartphone).
- It is indicated the room number and the type of alarm generated.

## INTERCOMMUNICATION FOR WALL UNITS AND HEADBOARD SOLUTIONS



- Recessed speaker and microphone. Full dúplex intercom, between the patient and the health personnel.

# COMPONENTS

## NOTICE, CANCELLATION AND ENCODING DEVICES



- Encode tasks and alarms attended.
- Enter incidents into the system.
- Consult pending tasks.
- Record presence in room by means of a RFID reader or a touch screen
- Information on screen of normal tasks and incidents.
- Traceability.

## AUDIO SELECTOR



- It allows to control the audio broadcast system integrated in IP room terminals.
- It uses RTP multicast paging channels.
- Possibility of selecting up to 10 different audio channels.

## RFID PERIPHERALS AND RF



- RFID card, RFID card cover and card holder (expandable): it allows to know the identification of health personnel in the accomplishment of tasks.
- Not require physical contact with the reading device. Dirt and moisture resistant.
- RCU (Remote Control Unit), allows the patient to generate alarms from any place in the room just by pressing a button.

## RFID readers functionalities

- **Traceability:** Meeting the person who has realized the attention.
- **Security:** Only an authorized profile can use the reader.
- **Response time:** Knowing the nurse who went to the room and the time she took.
- **Duration of the attention service.**
- **Bonding** interaction with the corridor lights.
- **Check the workload** of health personnel in individual and concrete way.
- **Rounds control** if they it were necessary and together, using HL7, central management software.
- **Controls the cleaning's tasks** to know, in real time, if the room is ready for the next patient.



# EXAMPLES of integration

## INTEGRATION OF TOUCH SCREEN

The bedside touch screen is an optional solution which can be integrated. It's designed **to make the stay of the patients more comfortable** in the hospital.

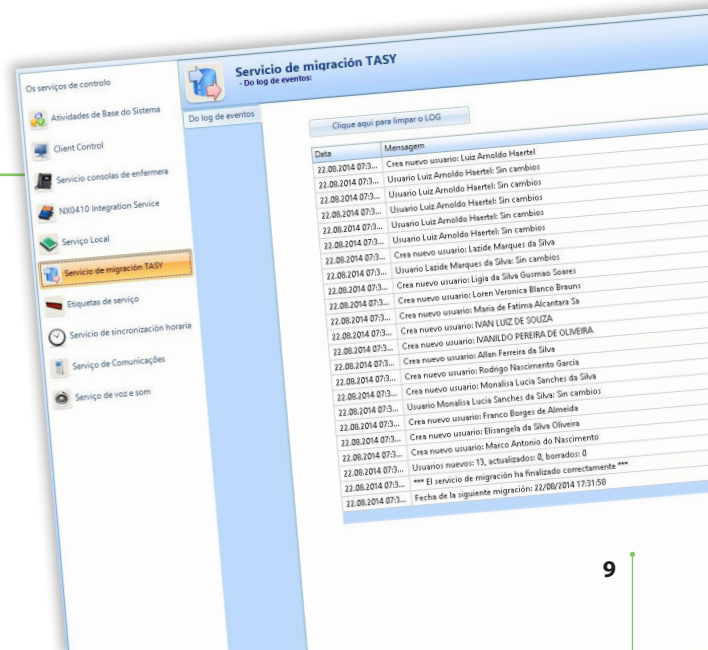


### INTEGRATION OF BED-SIDES TOUCH SCREEN

- Digital communication channel between patients and health personnel.
- Touch screen: Fully sealed, with antibacterial treatment, IP connection. Easy to use.
- The patient can generate healthcare alarms from the touchscreen.
- Possibility of service and encoding by the healthcare staff.
- Consultation of pending tasks and their encoding.
- Only the medical staff with a RFID card has access to the healthcare system and the electronic patient records (**privacy**).
- Possibility of hands-free audio or from the screen telephone.
- Diversion of notifications to different screens if required.
- All the rooms have touchscreens from which the patients access an extensive offer of entertainment and communications services.
- The patient has connection to Internet and e-mail.
- Possibility via the webcam on the touch screen to have a video conference between the patient and the nurse station.
- Communicates with hospital management system (HIS) that allows physicians to verify the information, review analysis, an X-ray view or change the medication.
- Access to historical records by PACS and EHR for hospital use.

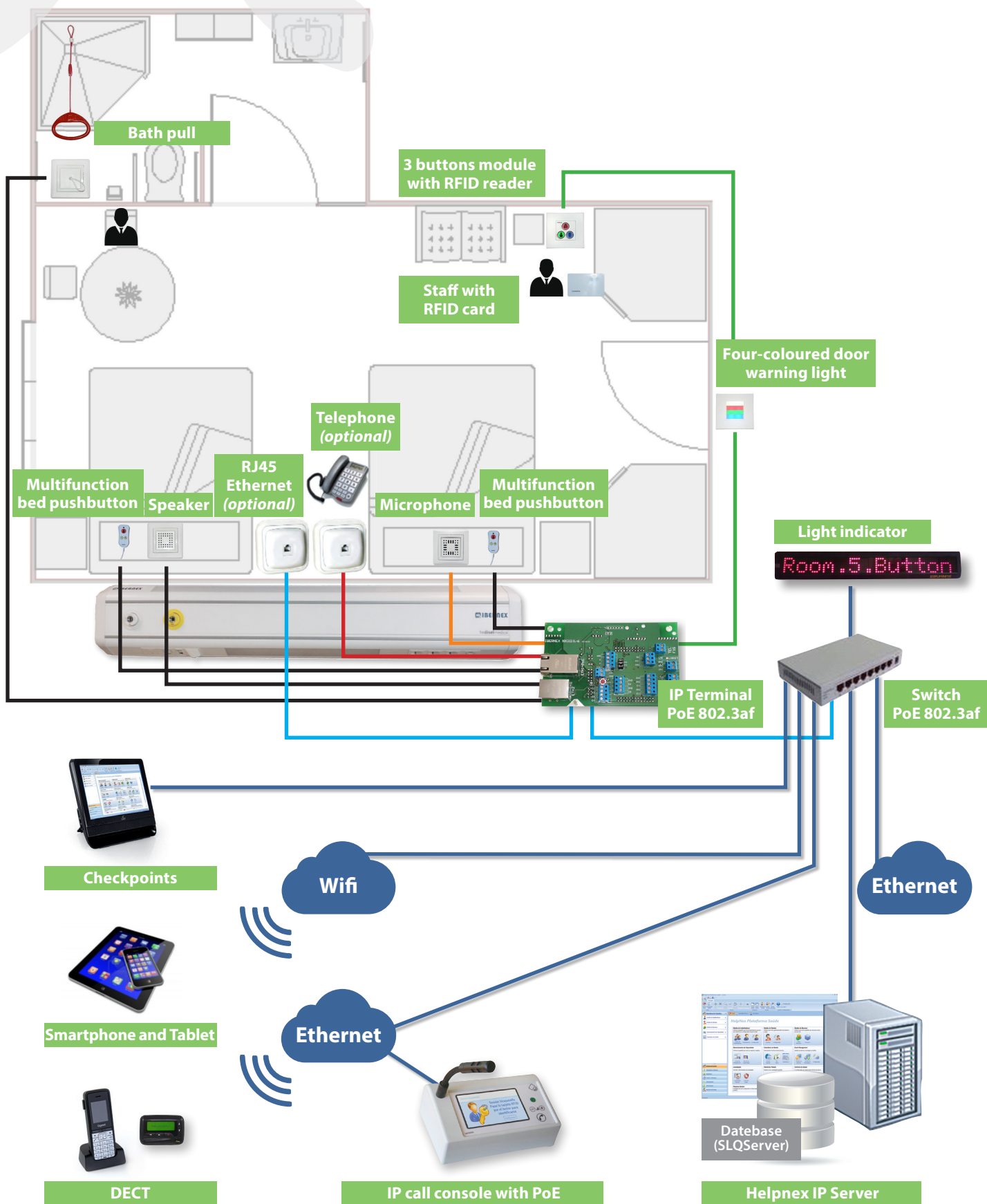
## HIS INTEGRATION

- Integration with software, as is the case TASY, leading hospital management system in Brazil.
- The immigration system is responsible for reading the data of TASY management system and it keeps them updated, adding, modifying or deleting data as appropriate in Helpnex.
- HIS: It facilitates the management of patients' data, because it only has to enter once at HIS



# TECHNICAL INSTALLATION

## Wiring diagram



## Clinic Delgado (Peru)

reopens betting for Helpnex IP.



Clinic Delgado, in its reopened had the **HELPNEX IP healthcare solution**. The clinic has 170 beds and three excellence centers: Emergency, Cardiovascular Unit and Maternity Center. the building has been built under the parameters of the **LEED Certification**, being the only one project with the Healthcare Accreditation in Latin America.

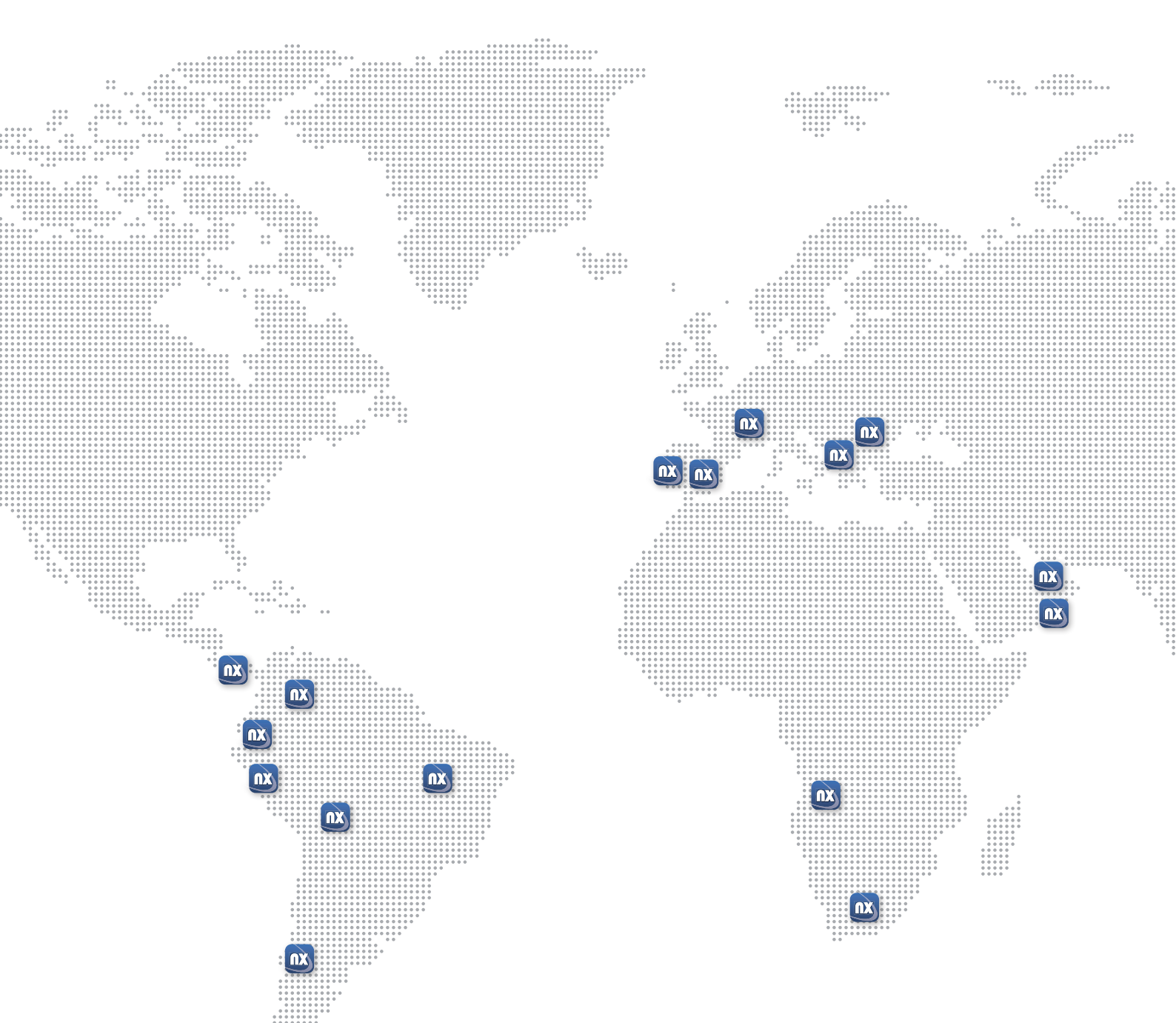
The **patient – nurse call system IP PoE** is integrated into the headboard of the rooms, has a microphone, speaker, notice and cancellation devices with RFID cards reader, bathroom pushbutton, four-colour hallway light and bed IP 67 antibacterial pushbutton that generate alarms can control 3 lights; two in headboards and the room.

The alarms are received by the health personnel in the **IP consoles** in the checkpoint or in the pagers, indicating the number of the room and the type of alarm.



With RFID technology, you can know the **traceability** of the health personnel, monitoring tasks and rounds, and consulting the reports of the software.

**With the presence of Helpnex IP solution in the most modern and complete clinic in Peru, Ibernex strengthens its position in South America.**



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