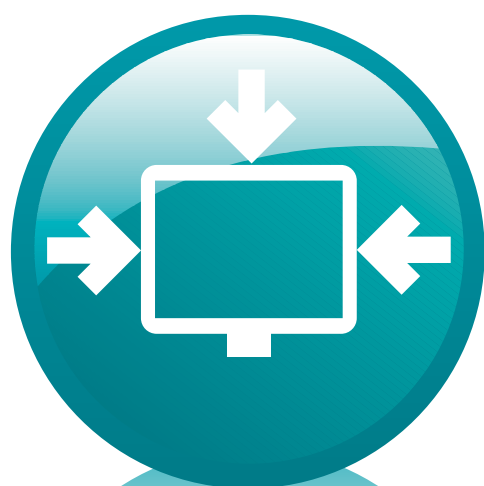


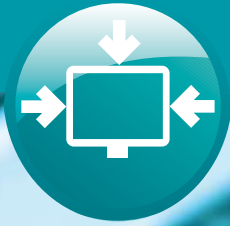
Patient nurse- communication

IP



Á T I C A

Description of system



Ática is a nursing communication and management system using IP technology that can be used for both wired and wireless connections. The features of this system make it ideal for use in hospitals, homes, supervised apartments and day centres.



Increases the safety and comfort of patients and residents

The system is comprised of a set of pushbuttons and wireless sensors which make it possible for nursing staff to keep track at all times of the state of each patient or resident, thereby increasing their safety and comfort.

Optimises the work of nursing staff

Information is sent to fixed control posts, computers and wireless terminals. This enables communication between patients and nurses regardless of location, thus optimising the work of the nursing staff.

Care work management

The system is complemented with management software (Ática Monitoring), which enables staff to record all events and generate alarm and care reports.

IP technology. Convergence of communications and ease of installation and maintenance.

IP technology allows the convergence of a centre's communications, including: Patient-nurse, television, telephony, Internet and CCTV. In addition, it allows for the future inclusion of further systems by the same means.

Wireless System

The wireless feature enables the system to be used in places where wired installations are complicated.

Adaptability and Extensibility

The system is fully modular and highly versatile, adapts to the characteristics of each centre and is very easy to extend.

Besides being a patient-nurse communication system, the Ática Monitoring system includes the following features:

- VoIP switchboard.
- Access control.
- Domotics. It can control lighting, air-conditioning or any other installation through the set of in/out connections it includes.
- Roam alert system.
- Safety. It includes a range of sensors such as door/window, movement, smoke and water leakage.
- Interconnection with other systems to centralise communications and alarms across the centre.
- PA system. The control post in each room can be used as a PA system for alarm warnings.



Room control post and devices



The room post controls the pushbuttons, lights, and sensors in a room; it sends alarms and establishes communication with the nursing staff. It is a versatile and flexible element that allows for future adaptations and extensions. Its most relevant features are:

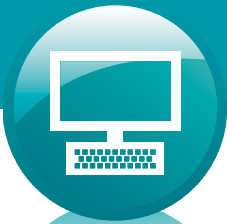
- IP Technology, incorporating VoIP (voice over IP) standards.
- Possibility of wireless communication.
- Hands-free voice communication.
- Information display showing current state of the room and alarms in other rooms.
- Possibility of viewing and responding to alarms from other rooms (mobile control post).
- Different levels of alarm.
- Staff and/or patient identification by RFID.
- Care work documentation from the room itself.
- Presence sensor system for the resident in the room or supervised apartment.
- PA system in all rooms.
- Hands-free phone.
- Braille keyboard to enable operation by visually impaired residents.
- Domotics and systems control. The room central unit has 16 out/in connections that can be configured to control room elements and external devices. Ideal for connection with other systems such as perfusion pumps, lighting, blinds, other types of sensors or any other element with out/in digital connections.



The system is equipped with a wide range of devices fulfilling many functionalities and adaptable to the characteristics of each centre.



- Pushbuttons and pull cords.
- Optical and acoustic signage.
- Wireless pushbuttons
- RFID card reader
- Wireless sensors for door/window and movement



Control posts

There are different types of control posts: fixed control post, wireless phone or PC. All control posts have the same basic communication functionalities and one type or another may be used depending on each centre's characteristics.

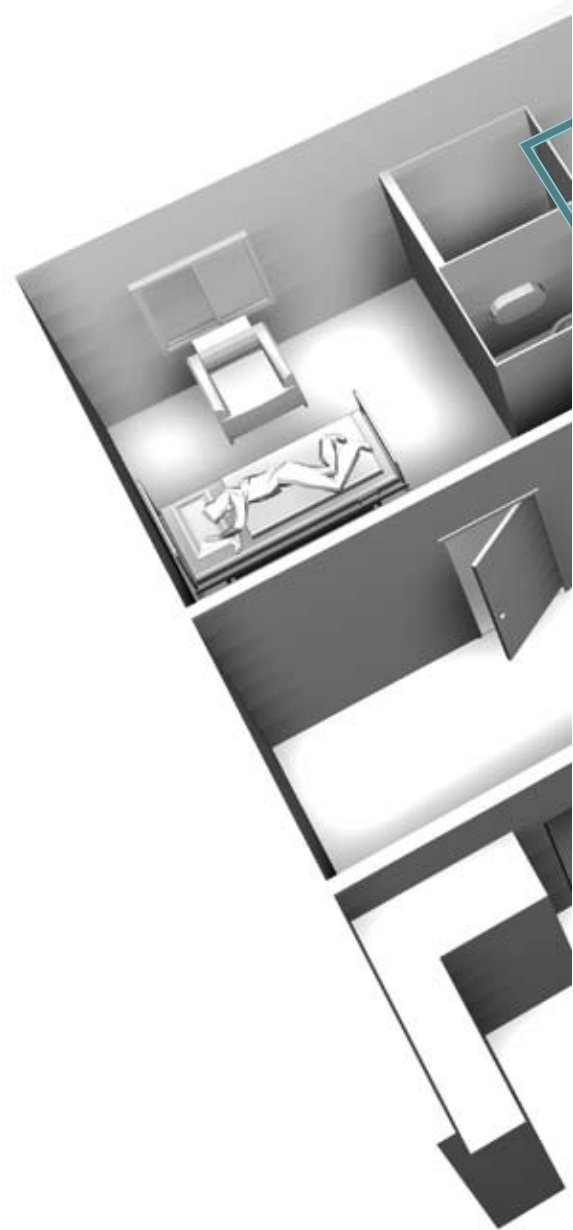


- Fixed control post. Allows viewing and responding to the alarms of different rooms at the same time, as well as added value functions such as shift changeovers.

- PC-based control post. Shows the alarms and reports thanks to the Ática Monitoring management software. The computer at the nursing post can be used, thanks to it being Web-based.

- Wireless phone. Can be a Dect or Wifi terminal. This device is used to see the alarms and communicate with the room, in addition to working as a regular wireless phone.

- Control post in another room. Alarms can also be viewed and responded to from the control post of a different room.

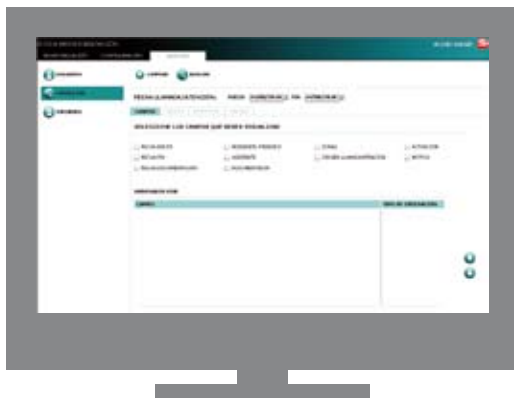
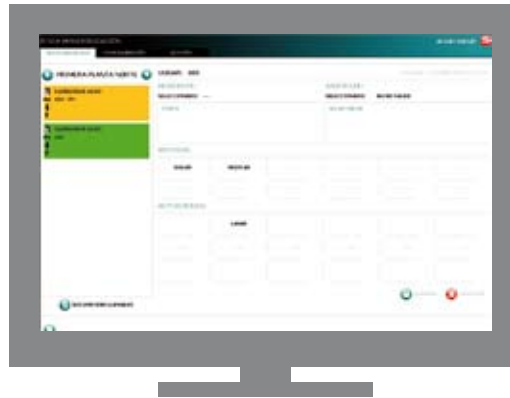
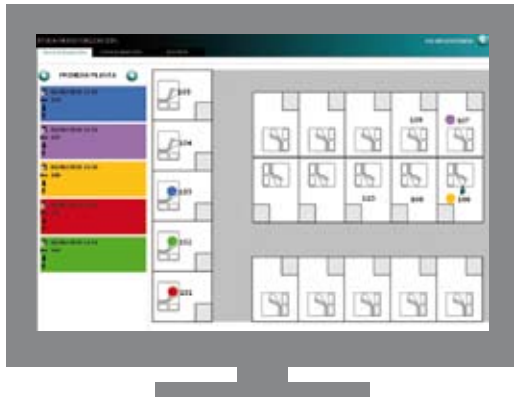


Ática Monitoring Software



The management software Ática Monitoring controls the entire system and offers more advanced functionalities.

- Record of alarms and response times.
- Display of alarms in map format, indicating alarm levels and presence of patient/resident in room or supervised apartment.
- Care work documenting on the computer or from the room itself.
- Automatic work process traceability system using RFID identification cards.
- Generation of reports and statistics related to supervision of patients, work management or centre-specific data.
- Patient, resident and bed management.
- Shift management.
- Connection with hospital or resident management systems.
- Configuration and customisation of the system in accordance with the centre's characteristics.



The software is Web-based and has the following main features:

- Software installation. To view the software, a computer equipped with an Internet browser is required, with no operating system requirements. It can be used on any computer, with no need for installation, such as the PC at the control post.
- Remote running. Ática Monitoring can be run from the building itself or from outside. That is why it is possible to control several centres from a single location.
- Autotest system. The system continuously tests the state of all elements. In the event of detecting an anomaly, it sends a warning to the maintenance service through an internal call, an external call, an email or a mobile message (SMS).
- Tele-maintenance. Ática Monitoring allows users to know the state of the patient-nurse system, reconfigure its operation, make back-up copies and update software.
- All these tasks can be carried out either from the centre itself or from outside.



VoIP Telephone Switchboard Systems Integration



VoIP Telephone Switchboard

Ática is also a VoIP telephone switchboard that enables internal communications within the building and external communications as well as connection with another telephone switchboard.

Cost reduction.

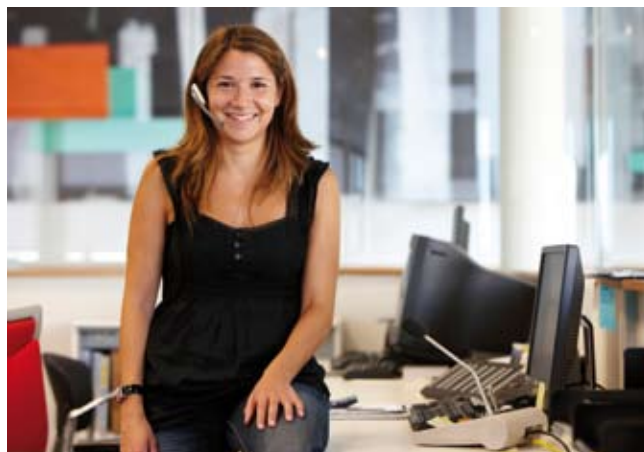
- Reduces initial investment required given that the Ática system incorporates it from the start.
- Ideal for communication between several centres, being free of charge.
- Internet telephony rates are lower.

Switchboard functionalities.

- Rating.
- Automatic answering.
- Voice mail.
- Voice mail messages to email addresses.
- Videoconference between rooms and nursing control posts.
- Ability to connect to management systems.

Full range of devices.

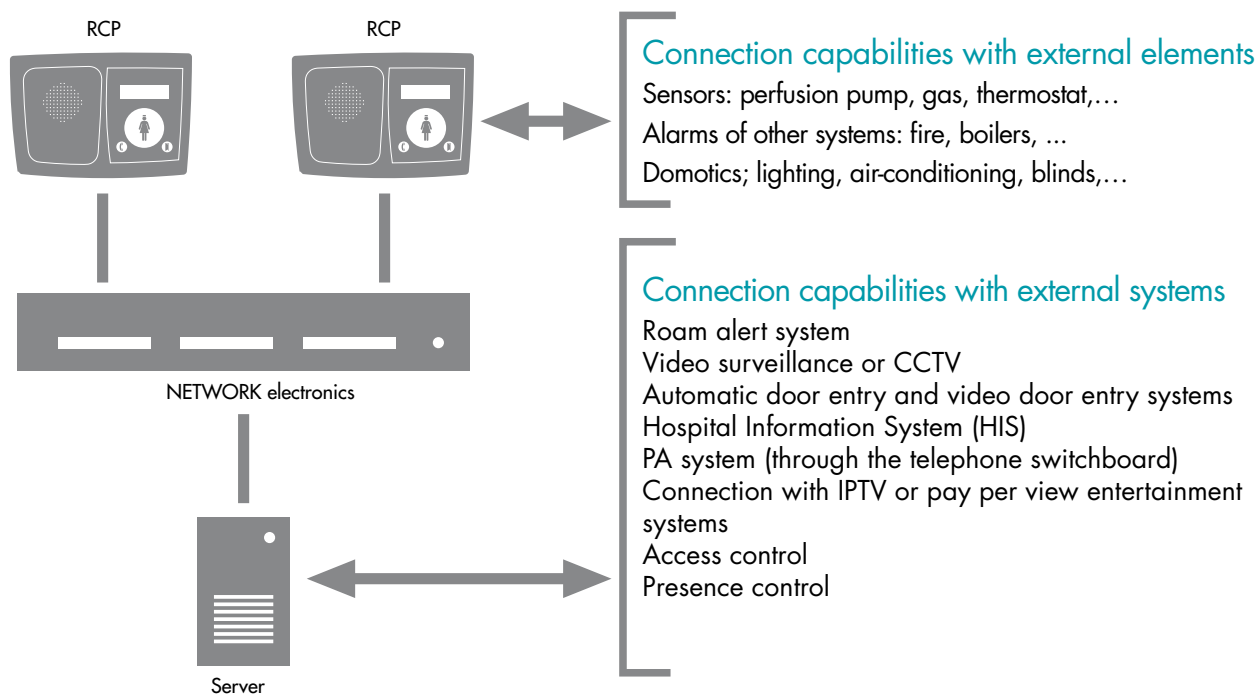
- IP phones, analogue phones, Dect, Wifi or Softphones.
- Adaptors for analogue lines, ISDN Basic or ISDN Primary lines.



Systems Integration

Ática becomes the building's communication management system thanks to its integration capabilities through the room's control post or communications server.

Because it uses IP technology, all communications can use the same physical environment: patient-nurse, television, phone, Internet and CCTV.



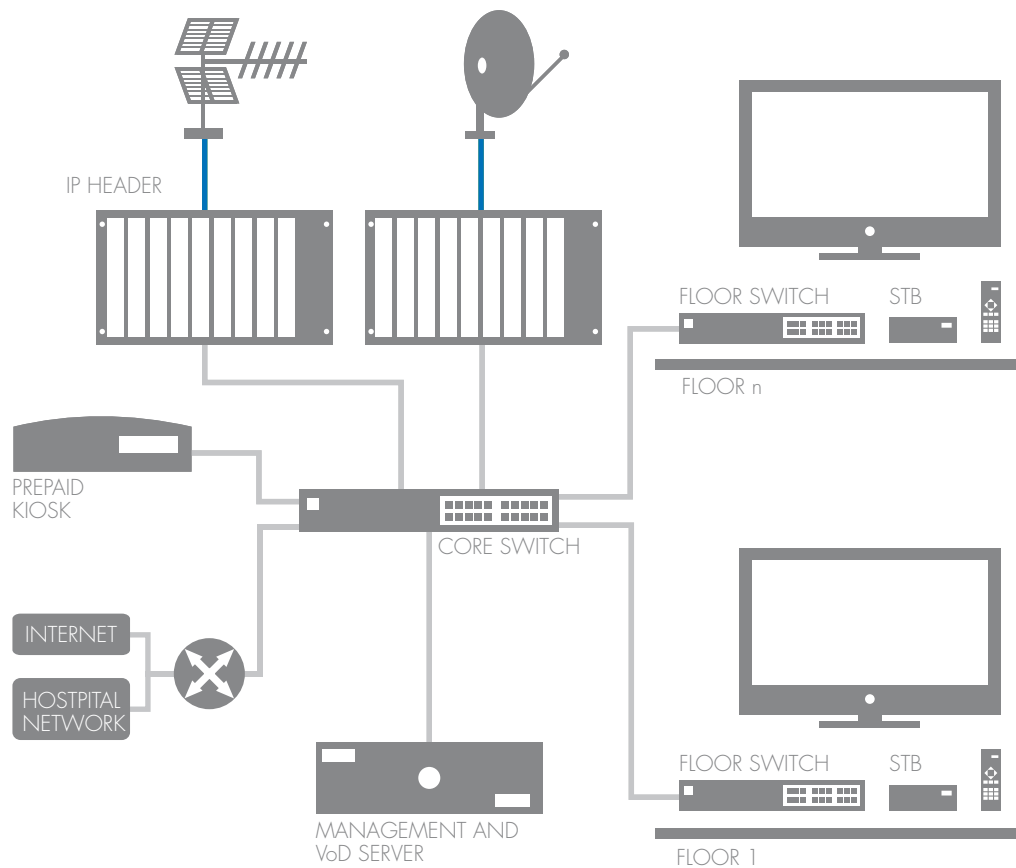


Eloa

The most comprehensive interactive TV system designed to provide patients with quality services and the best entertainment contents. An advanced digital solution with a long useful life and low maintenance cost to guarantee the perfect experience in each room.

Features

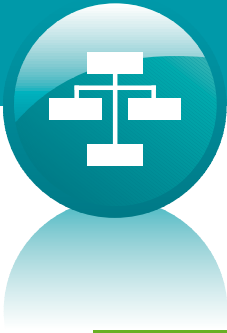
- Direct integration with the patient-nurse communication system.
- Medical services. Eloa communicates with the Hospital Information System (HIS) in such a way that it is possible to view the patient's medical information and issue bedside medical prescriptions.
- Functionalities for patient:
 - TV viewing
 - Video on Demand (VoD)
 - Wake-up alarm
 - Language selection
 - Parental control
 - Internet on TV
- Hospital services:
 - Welcome message
 - Messenger system
 - Hospital information
 - Corporate channels
 - Information and advertising in common areas (Digital signage)



The Eloa system is based on television through IP technology (IPTV). It includes the following components:

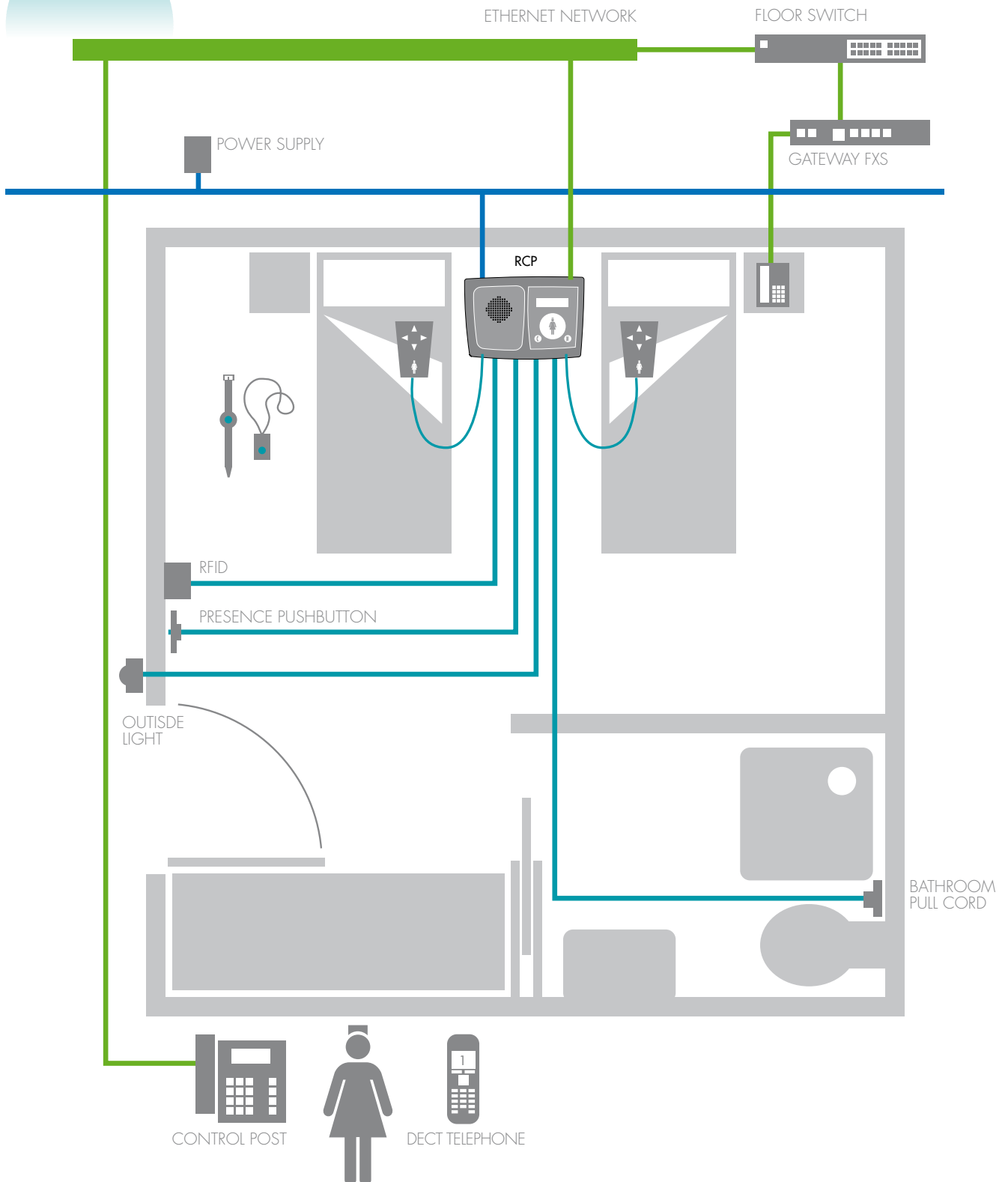


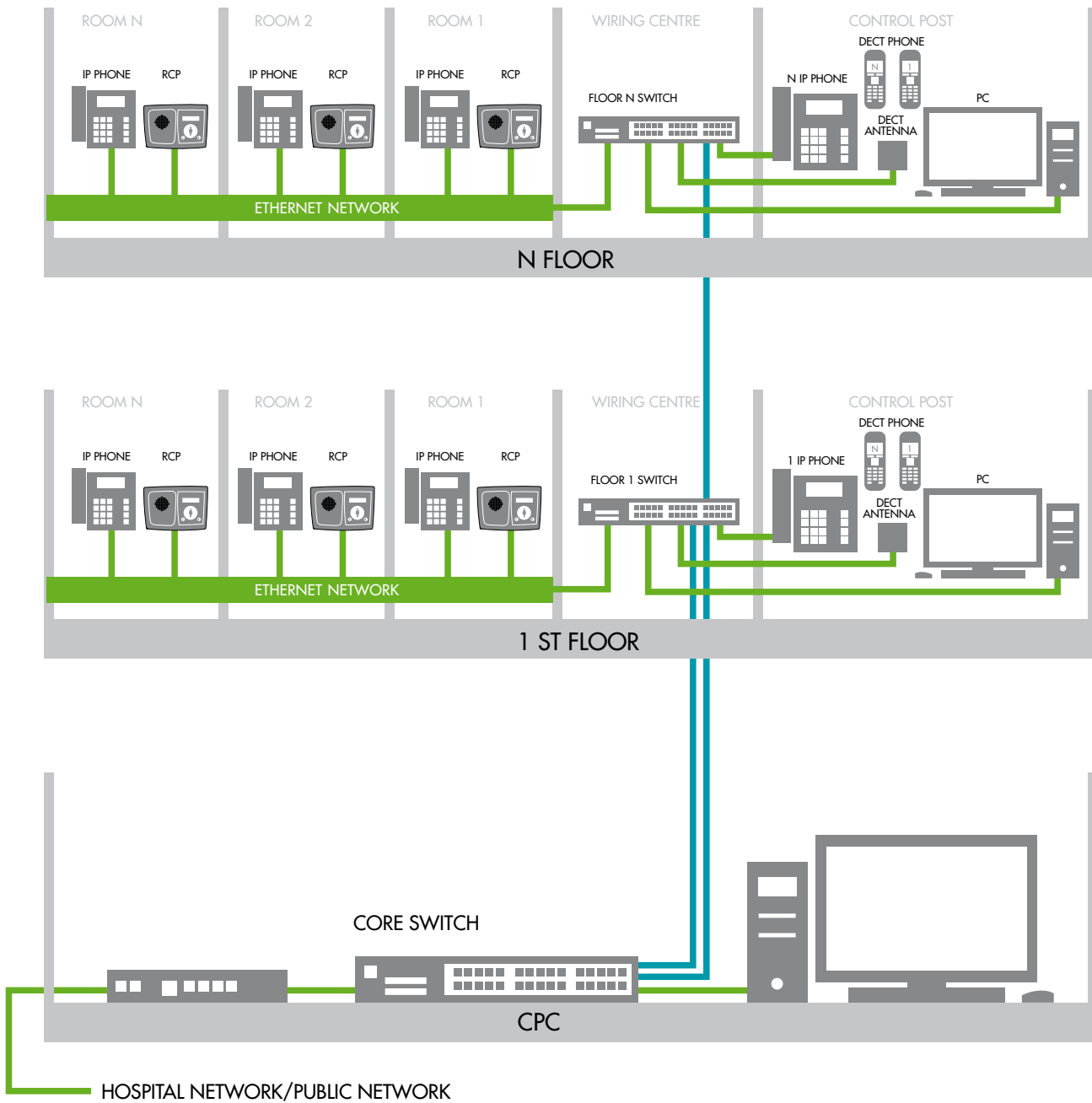
- IP Header. Elements that receive the TDT signal, satellite or A/V inlet signal and convert it to IP.
- Management server. Controls the operation of the system and provides payment collection and Internet connection functionalities.
- Data network to distribute the signal.
- Element that decodes the IP signal for its viewing. It can be a computer with a boom arm or an STB connected to a TV.



Installation Diagrams

As it uses IP technology, the Ática system follows the structured wiring diagram.







Cod. P020028

GS 1000-12-10



K.S.R. ELECTRONICS CO., LTD.

1072 Lardphao Rd., Samsennok, Huaykwang, Bangkok 10320
Tel : 0-2939-8383 Fax : 0-2513-6040
email : ksrelectronics@yahoo.com