

### **ALCAD** Facility

## MANUFACTURERS WITH MORE THAN 35 YEARS OF EXPERIENCE

We are specialists in **critical communication**, **security and multimedia systems** for nursing homes

t ALCAD Electronics we are #signal\_hunters: we capture, treat and bring signals from life to the digital world to improve people's health, safety and entertainment.

ALCAD Facility is the business unit focused on designing and manufacturing reliable, agile, robust and innovative solutions.

Our solid and highly competitive infrastructure allows us to offer European quality products and technological systems.

In addition to having a technologically advanced R&D area, we are one of the few manufacturers in Spain to have our own testing & certification laboratory, which gives us great flexibility when designing and launching new products.



Come fly with us through

#### **IN FIGURES**

100 staff members

of annual turnover invested in R&D

commercial subsidiaries worldwide

countries on 5 continents receive our exports





### We can draw on:



35+ years of experience



A team of the first rank



European design and manufacturing



Our diversification



Personalised customer service



Our own laboratory: quality assurance and reliability



A wide sales network

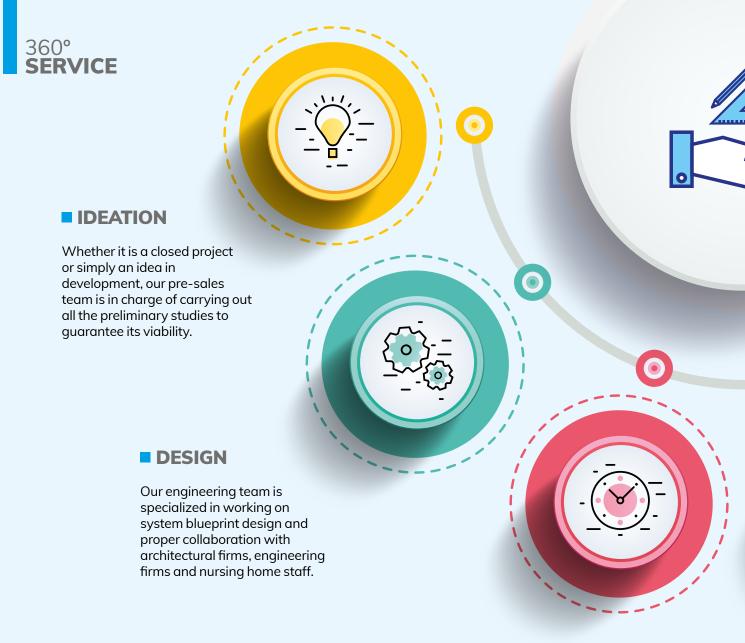












# WE ACCOMPANY YOU THROUGHOUT THE ENTIRE LIFE CYCLE OF YOUR PROJECT

From the creation of your idea or concept to the maintenance of the system to **maximise its useful life** and keep it always "alive"

#### MANUFACTURING

Once all the elements have been approved, including their personalisation, the order is processed and manufactured at our headquarters in Irún (Spain).



#### ADVICE

The order is dispatched by our logistics department and received by the installer / integrator, to whom we provide full support and advice.





#### ACCURO: LEADING TECHNOLOGICAL CHANGE

We design innovative, reliable, robust and agile solutions to improve the wellbeing of the users and facilitate the tasks of the medical team

s a manufacturer of critical communication, security and entertainment solutions, at ALCAD Facility we strive every day to lead technological changes with solutions designed to contribute to the well-being of people:

**ACCURO:** 100% IP telecommunications and security platform. It is a real IP solution, modular and scalable that can be integrated with other ALCAD systems.

Features:

- > Web-based.
- > Secure.
- > Traceable.
- > Intelligent.
- IPTV Healthcare: multimedia system designed for user entertainment, as well as physical, cognitive and social stimulation. With a poweful and agile software. Easy tu use, intuitive, fast and very reliable, it can be operated independently or integrated along with ACCURO.



No costly maintenance or endless installation processes



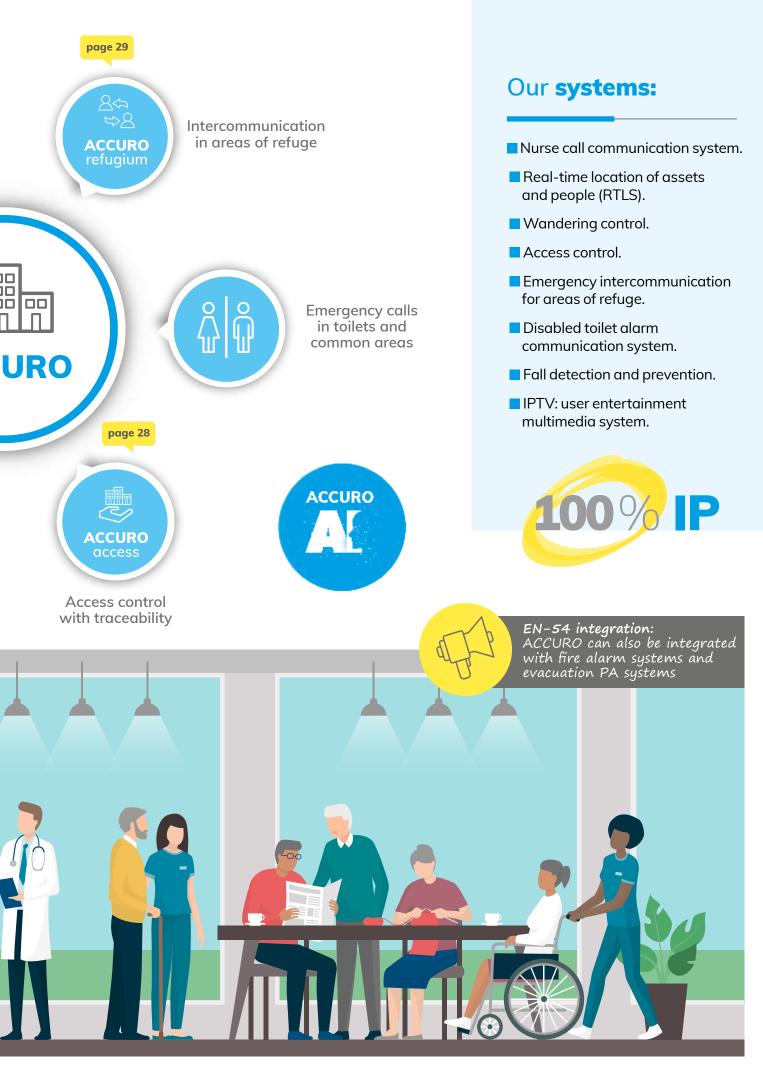
We provide a 100% IP-based solution to capture important signals



Robust and reliable solutions, without experiments









## A ROBUST AND VERSATILE TOOL

The nurse call system is the heart of ACCURO: a tool with multiple installation options and a wide range of devices, made of premium materials and a flat, antimicrobial design

CCURO's nurse call system offers the nursing home a robust and versatile communication tool, designed to assist in the digitisation of the care plan and scheduled tasks of the facility by allowing a record of actions, among other benefits.

Our system offers a wide range of devices, manufactured with **top quality materials and with a flat antimicrobial design**, specifically conceived for intensive use in sensitive environments:

- > Room terminals.
- > Mechanisms.
- > Nurse stations.
- > Corridor sign boards.



Optimises timings



Records actions



Calms the user



Reduces costs







#### Key advantages:

- Full IP (Poe / 24 VOC, existing or dedicated Ethernet network)
- VoIP. Asterisk compatible. Can be integrated with PBX.
- Made in Spain manufacture and design, with top quality materials and the possibility of customisation.
- Antimicrobial flat design.
- Wide range of devices and installation options.
- Integration with HIS and third-party systems.
- User safety and entertainment: possibility of integration with our ACCURO and IPTV systems.
- **Fixed and mobile** nurse stations.

## Round-the-clock fall detection

OUR TECHNOLOGY PROVIDES AN ENTIRELY NEW LEVEL OF PROTECTION:



- 100% discreet.
- Zero stigma.
- 100% immersive.
- Secure.
- No cameras.



- Stand-alone.
- Integrated with ACCURO or other systems.





## A 100% traceable system

ACCUROviewer is responsible for the monitoring and management of users by healthcare personnel. Among other features, its traceability makes it possible to obtain reports / statistics on user monitoring and workflow / workload management (in a personalised manner if RFID readers are included).

The image shows an example of display of calls and alarms in blueprint format via ACCUROviewer, with indication of alarm levels and user presence in the room.



#### A VIRTUAL CAREGIVER IN EVERY ROOM

Older adults demand both constant protection and freedom from buttons and wearables

hey also want the dignity that goes hand-inhand with privacy – nobody wants a camera in the bedroom or bathroom. Our touchless technology is built around non-optical 4D imaging, providing 24/7 fall detection and unique visibility into activity.

Our **API integration** allows it to work with all nurse and warden call systems, social alarm units and care platforms.



No intrusive cameras



No hardto-reach buttons



No embarrassing wearables



Sate: harmless RF waves

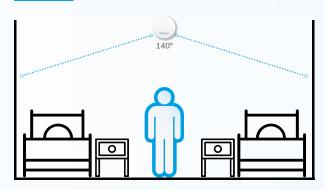


- Fall detection: eliminates long lies.
- Fall prediction:
  identifies unreported
- Wander control: notifies on empty room.
- Unwanted visitor: alerts on unauthorized presence.

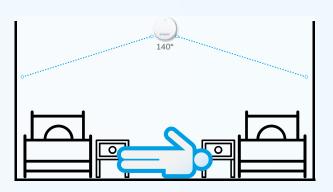


- Loneliness prevention: monitors time alone in room
- Mobility assessment: measures time at rest
- UTI identification: tracks bathroom usage
- Staffing support: registers resident interactions.

#### **How** it works



The system detects that **there are people in the room** and analyses the environment, which has been previously configured.

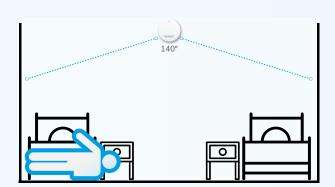


When a person falls, the system analyses whether they can get up or if someone comes to their aid for 120 seconds. During this time, it can emit acoustic or visual signals to reassure the person.



- Operates effectively in steam ideal for bathrooms.
- **Small and flexible** form factor.

(\*) The surface area is  $5x4m^2$  when the device is placed on the ceiling. On a wall, the area is  $4x4m^2$ .



RF

module

Integrated

chip

Digital

board

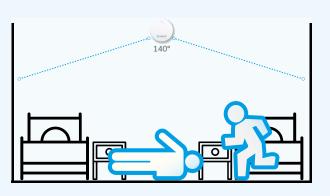
Plastic case

(back)

Plastic case

(front)

The system, which works via microwaves, prevents people who **fall in places that are 'hidden' from view** from being assisted, as the detector is able to analyse the situation even in these cases.



If help arrives before the sensor triggers the alarm, it restarts and re-analyses the situation. This way, if both people fall, the system is able to detect it and send an alarm.



#### **AN "IP BRAIN" REACHING EVERY ROOM**

ACCURO is installed over IP networks with no intermediate elements needed. It is ready to be integrated with any thirdparty IP and future system that makes use of ACCURO

ts configuration guarantees the transmission of warnings to the healthcare team, whether they come from a user's request (by pressing a button) or from other types of sensors: windows, doors, thermostats, presence, intrusion, etc. And last but not least, from sensors adapted for people with reduced mobility.

CABLE or superior)

ACCURO SERVER / IPTV

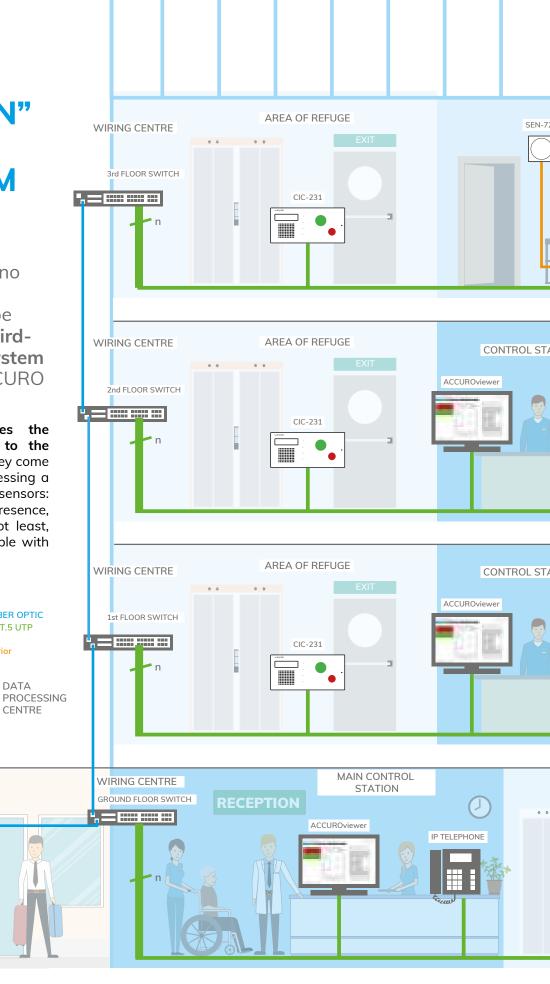
SWITCH CORE 

ETHERNET NETWORK / FIBER OPTIC

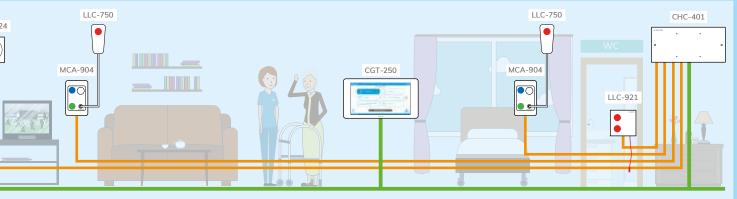
CENTRE

ETHERNET NETWORK (CAT.5 UTP

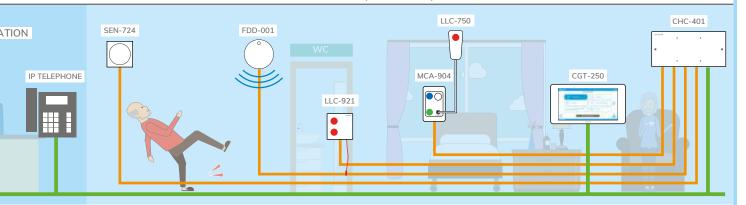
CAT.5 UTP CABLE or superior



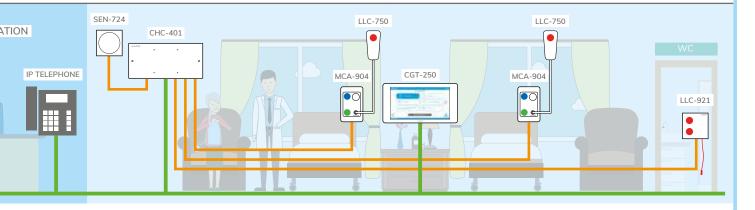
## **Nursing home**



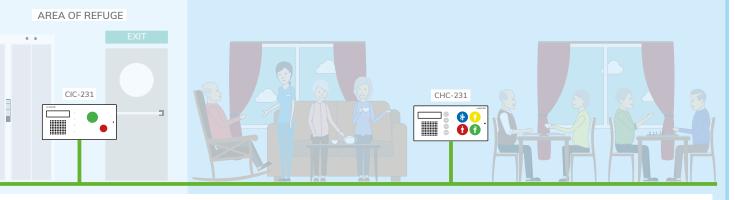
3rd Floor - Supervised Apartments



2nd Floor - Single rooms



1st Floor - Double rooms



Lounges - Living rooms

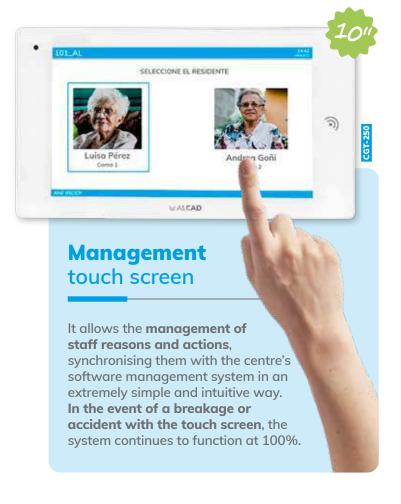


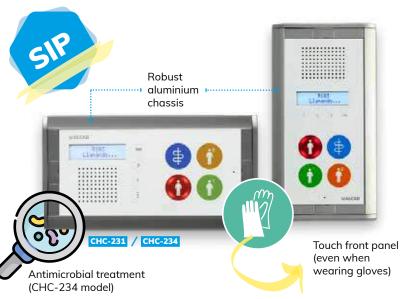
### **ELEMENTS**OF THE SYSTEM

# THE quality materials WIDEST CATALOGUE

ALCAD manufactures its entire range of room terminals and mechanisms in Spain. Providing you with the most extensive and complete range of room elements on the market (see terms and conditions)

#### Room terminals with audio

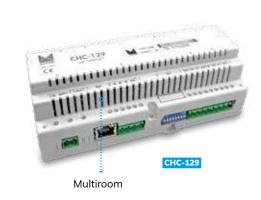








## Room terminal without audio



#### **Call** mechanisms

















#### ACCUROviewer: AN ALLY OF THE NURSING TEAM

The possibility offered by our system to combine fixed and portable elements allows the creation of a more efficient working environment, with the aim of facilitating, as much as possible, the work of the healthcare staff

urse stations are one of the key elements of the nurse call system. To facilitate the work of healthcare personnel as much as possible and adapt to the specific needs of each centre, ACCURO offers the possibility of combining fixed and portable elements in the control stations.

ACCUROviewer is the software responsible for the **monitoring and management of users** by healthcare staff.

Among other features, thanks to its traceability it is possible to obtain reports / statistics on user monitoring and workflow and work-load management (in a personalised manner if RFID readers are included).



## **Optimized** workloads

In this sense, the possibility of entering and updating information remotely makes it possible to reduce timings, as it is no longer necessary to do it at the nursing station. Thus, the workload of the team is optimised.



#### 'Map' format

On the other hand,
ACCUROviewer offers the
visualisation of calls and alarms
in 'map' format, indicating alarm
levels and the presence of the user
in the room, or the automatic and
configurable call escalation
depending on the zones and
shift changes (which have
been determined in
advance).

#### **Portable** elements:

Smartphones and tablets can receive calls, as well as host ACCUROviewer thanks to its web technology base programmed in HTML5, without the need of additional software installation.

**DECT cordless telephones** allow identification of the calling number, type and origin of the call. The TFD-422 model has an antimicrobial treatment.



In common areas (corridors, rest rooms...) calls can be displayed on led panels (SEN-343 model) or by type / colour and origin on screens (STB-052 model).



#### Fixed elements:

The 10" touch screen control panel with RFID reader is mounted on the wall of the room (model CGT-250). There is also a desktop version for the nurse station (CGT-150).

The **IP phones** receive calls and alerts generated from rooms, areas of refuge or adapted bathrooms / changing rooms. The system is compatible and can be integrated with other SIP and PBX terminals.



#### ACCUROmanager: CONTROL THE ENTIRE SYSTEM REMOTELY OR VIA THE LOCAL NETWORK

ACCUROmanager is a web-based application. Does not require any further installations, thus providing the system a guaranteed future and continuity

ully developed by ALCAD, ACCUROmanager is the system maintenance and management tool and the key to the flexibility and robustness of a fully customisable system.

The maintenance and configuration of the system can be monitored through the local network or even, if necessary, remotely, allowing a centralised support to several locations.



## Main **functionalities:**

Can be **integrated into the centre's HIS**, allowing, for example:

- Its connection with the nursing home management systems by means of XML files, APIrest, WebSockets, HL7 or others.
- Analysis of all system elements.
- Customisable error notification.
- Configuration and customisation of the system to the requirement and specifications of the centre.
- Knowing the status of all elements of the system.
- Performing backups and software updates.









Automatic alerts can also be programmed (via SMS or email, for example) and are sent as soon as the system detects a problem.



### Redundant servers

Optionally, in order to increase the security of the system, it is possible to configure the servers and the system in high availability (redundant servers).



# LOCALISATION OF PEOPLE AND ASSETS WITH ALARMS

ACCUROrtls is the indoor location system to **identify, track, protect and manage** a wide variety of objects (assets, medical equipment...) and people

he Real Time Location System (RTLS) is the ultimate positioning solution to **identify, track, protect and manage objects and people** in facilities where there are many aspects to control, and where security is vital.

Especially those where there is a growing need to **optimise resources**, both human and material (such as nursing homes).

For management, keeping track of both personnel and asset flows is vital. For the healthcare team, the focus is on user tracking, especially when it comes to wandering users management systems.

#### Prevention is better than cure

We also see recurrent reports of users with mental illness or cognitive impairment who leave a social care facility and spend hours or days wandering the streets.

From our position as a manufacturer specialising in critical communication systems in nursing homes, we have updated our Real Time Locating System (RTLS) in order to prevent these cases and, if they occur, to provide a quick and effective solution.



## Protection against cyber-attacks

ACCUROrtls is a proprietary system of the client, installed on its own server, so it does not require an internet connection or, therefore, the contracting of cloud services (Azure, DataFlow, AWS, etc.). This is a decisive advantage, as it protects the centre from possible cyber-attacks from the outside, making it possible to create a 100% secure working environment.





#### Main advantages:

- Increased cost efficiency.
- Optimisation of material and human resources.
- Improved attention to users.
- Native integration with ACCURO and LIVERO platforms for reporting alerts and calls.
- Creation of preventive maintenance based on data.
- Location of assets, avoiding theft and wasted time in fruitless searches.
- Location of users with a "disorientation" tendency, reducing staff search time.
- Location of colleagues. A solution that locates team members without causing any sort of duty interruption.
- **Prevention** of possible escapes.
- Analysis of staff workflow and workload.
- No need for internet connection.
- No recurring subscriptions.

#### 100 % configurable

Because the RTLS system is a native part of ACCURO, the platform allows you to **configure** alerts, warnings and calls to IP phones and terminals connected to the system. For example, if we want to prevent medical equipment (such as a biometric measurement trolley) from leaving a specific area or a floor or door.

In this case, we can configure a warning call to be executed in the ACCUROviewer software and at the same time to one or more DECT terminals, room terminals or IP telephones so that security personnel can prevent its theft or similar. The same example could be applied to users or even staff.













## SAFER USERS IN NURSING HOMES

Safety in nursing homes is key, as they are environments where vulnerable people live and can become disorientated at any time

his is the case of elderly people or those with mental or cognitive problems. In this regard, we often see news of users who leave a socio-healthcare facility and spend hours or days wandering the streets.

From our position as a manufacturer specialising in critical communication systems in nursing homes, we set to work to provide an adapted response to this need, and so we have updated our Real Time Locating System (RTLS).

#### WANDERING USER CONTROL

The wandering user control has **devices that alert the presence of users** in sensitive areas, where specific antennas will be installed.

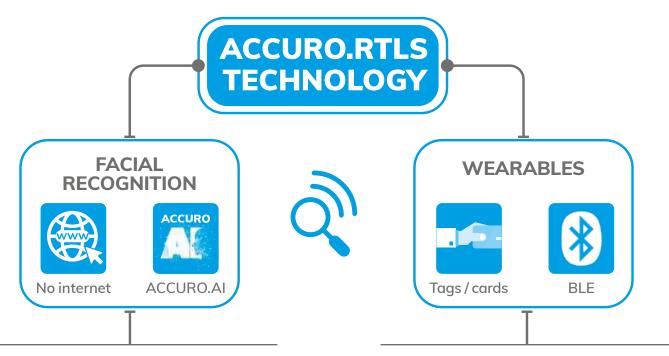
Users have a device with IP67 dust and water protection, which triggers the alarm if the resident wearing it approaches an unauthorised area.

#### TRACEABILITY AND SECURITY FOR STAFF

The system also has advantages for health and social care staff, who can be **present with their ID card** in any room, allowing the traceability of all the equipment.

The card also has a **panic button**, which the professional can activate if he/she feels in danger.

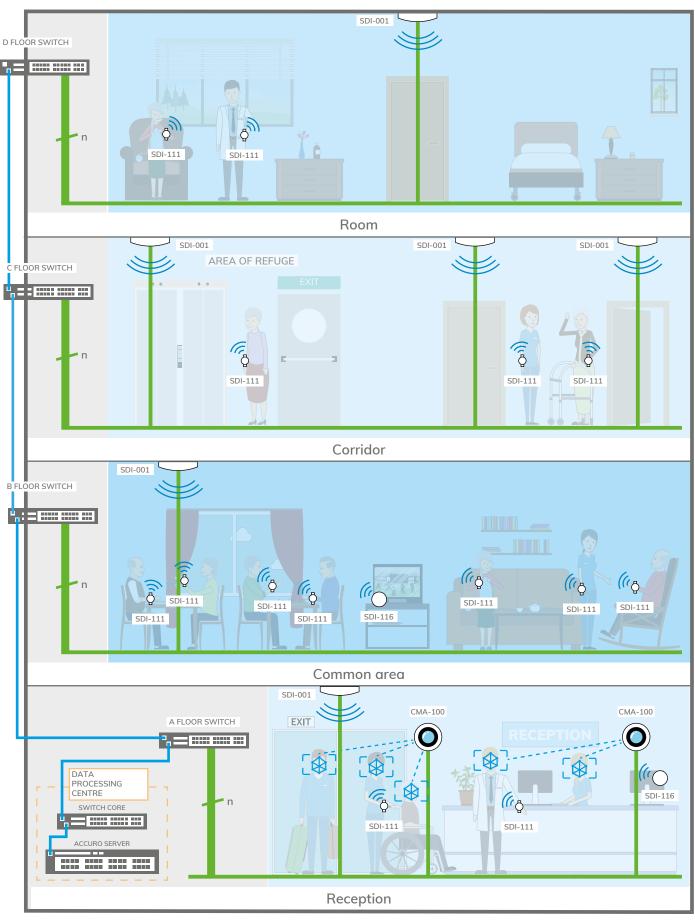
The system allows the **creation of up to 6 user levels**, with different permissions and even door-to-door permission control.



Facial recognition: no internet connection required.
Thanks to Artificial Intelligence and not needing any physical element, it is possible to eliminate any accessory that may be lost. It only needs an image hosted on the server.

Wearables (tags and cards): which can be worn by the centre's employees – they can be attached to objectives or assets (medical equipment, technical aids, etc.), or by users. It works thanks to BLE (Bluetooth Low Energy) technology.





## AN INTUITIVE INTERFACE

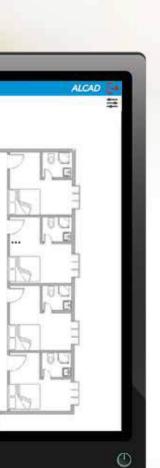




As it is not connected to the Internet and the user will have given express consent to the use of their photo, data protection laws are granted by the system.



The ACCUROrtls floating menu greatly facilitates the management task. Its filtering tool allows this operation to be carried out under different parameters.



### ■ REAL-TIME INFORMATION

ACCUROrtls has a highly visual and intuitive interface. At a glance, the user can check the status of each critical zone in real time, while accessing the different functions of the system at the click of a button.

#### **Alert call**

When the system detects the presence of a person or object in an unauthorised area, it immediately triggers an alert call to warn of this situation.





It is possible to search by name or select a specific group of people to find their location within the facility.



Similarly, when selecting a point in the facility, the system provides information about who has been there and their last location.





#### A PERSONALISED EXPERIENCE

By means of an articulating or fixed arm, the 10-inch CGT-250 touch panel can be placed at the bedside, allowing the user to enjoy a more personalised experience of all-in-one care and entertainment.



# USER ENTERTAINMENT AND SAFETY ON A SINGLE SCREEN

ACCUROmultimedia brings together all the functions that will allow users to enjoy a **safer and more comfortable** admission

ACCUROmultimedia's graphic interface offers all the multimedia options to make the user's stay more comfortable and safe: information about the health centre, daily menu selection, rehabilitation videos...

Its integration with ACCURO allows **a call to be made to the nursing staff from the main screen**, selecting the reason for the alert: pain, thirst, discomfort, cold... offering the user a feeling of greater security and allowing the healthcare personnel to prioritise their interventions.

The staff can identify themselves with their RFID badge and access the integrated care plan or the ACCUROviewer software to record the reasons for the call and the actions taken in the room.

Digitalisation of tasks according to medical guidelines. Through the RFID reader, it gives the healthcare team access to the recorded actions and tasks prescribed, as well as an access to the user's Electronical Medical Record (EMR).





More than 35 years facilitating people's entertainment



No costly maintenance or endless installation processes



End to end solution, starting with the signal reception and ending with the image broadcast



Compatible over networks such as Ethernet and GPON



## SMART-TV: A PERFECT ALTERNATIVE

ACCUROmultimedia is compatible with the range of smart TVs on the market. Navigation of its interface is done through the TV remote control, with a comfortable and simple user experience.





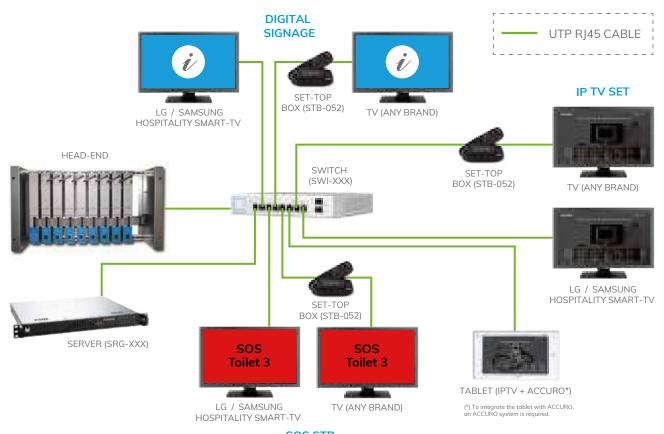
## ALCAD DS: the simplest way to broadcast your message

The **ALCAD DS** (Digital Signage) platform is a centralised web management tool that provides dynamic, effective and adapted communication.

It is very simple to use: the management software creates and distributes content. It also enables the creation of sequences and schedules: videos of the centre, specific rehabilitation exercises, etc.

Where? It is ideal for the centre's reception, visitor areas or communal rest rooms.

#### General outline:





#### Main advantages:

- For the healthcare personnel: who will be able to make presence in each room, opening the door with traceability and confirming presence simultaneously.
- For management: by adapting to the particular needs of each centre. In this sense, permissions can be customized: up to 6 types of users can be created, with different permissions and even with door-to-door permission control.
- For users: their experience also improves, getting closer to the concept of a "guest": their stay will be more pleasant.

## THE IP DOOR AND ACCESS CONTROL SYSTEM

The possibility of creating **up to 6 levels of permissions**, even with door-to-door permission control, multiplies its possibilities, adapting to the needs of each nursing home

CCUROaccess has all the advantages of an access control centre and IP doors with traceability, offering the possibility of registering and generating reports, carrying out a variety of queries...

Its integration in ACCURO offers the centre the fusion, on the same platform, of a nurse call communication system with an access control system and doors with traceability, being able to confirm presence in the room while opening the door.















#### SAFETY IN AREAS OF REFUGE AND ADAPTED TOILETS AND CHANGING ROOMS

ACCUROrefugium is the first complete solution on the market that complies with international regulations concerning fire evacuation procedures in non-residential buildings, as regards intercom systems with a local room terminal







Ultra-slim Centralised and robust alarm and design warning system Compatible Communication with ACCURO with other room viewer terminals

CCUROrefugium includes a CIC-231 or CIC-611 (vandal-proof model, see picture) intercom point in each area of refuge and a software package (installed on a server / PC and compatible with the ACCUROviewer software).

The system also allows the installation of bathroom warning pull-cords as well as door-top warning-lamps for communal areas or bathrooms. All of this is **centralised and managed from one or more control points**, which may be assigned by area as needed.

If required, the system allows the addition of **DECT-type** wireless phones, IP phones or even smartphones, to increase the mobility of security personnel.

From these terminals, the source of the call can be identified and it will be possible to conduct **two-way communication in real time** with the person requesting help.

ACCUROrefugium is the first complete solution on the market that complies with international regulations concerning **fire evacuation procedures in non-residential buildings**, as regards intercom systems with a local room terminal.

# CASE STUDIES THE RESULT OF WORKING AS A TEAM

We like to call each project by its name, understanding the particular needs of each case and offering the best of ourselves.

We like to sit down and discuss ideas, proposals and alternatives; working as a group, sharing our 35+ years of experience until we reach the solution that best suits the client's characteristics.

We like to see the final result, to know that we have covered a need in a professional and efficient way.

We like things well done.

Here are some of our most outstanding case studies.





#### ■ Residencia Mirasierra Aguadulce

Roquetas de Mar (Almería - Spain)

• Nursing home with 116 beds for disabled and dependent people.



#### **■** Residencia Geriasa Doctor Esquerdo

Madrid (Spain)

• Nursing home with 100 bedrooms.



#### ■ Fundación San Rosendo Os Milagros

Galicia (Spain)

- The Foundation has 71 care centres and 3,872 care places throughout the autonomous community.
- ALCAD provides systems with and without audio.



#### **■** Residencia La Pereda

Santander (Cantabria - Spain)

 181 beds and 30 day beds. Access control has been installed in room doors, IP telephony, ACCUROrtls, areas of refuge, etc.



#### ■ Residencia Orpea Pinto

#### Madrid (Spain)

• Nursing home with 123 bedrooms.



#### ■ Residencia DomusVi Fátima

Vigo (Pontevedra - Spain)

• Nursing home with 114 bedrooms.



#### ■ Residencia Entrealamos

Granada (Spain)

 200 beds, which are equipped with the ACCURO care system and the integrated wanderer management system.



#### ■ St. Joseph's Mews

Hawthorn (Australia)

• Nursing home with independent flats. Calls to the nursing team are monitored through the CHC-235 central unit.



#### ■ Residencia Kabia

Hernani (Gipuzkoa - Spain)

• Nursing home with 75 bedrooms.



#### ■ Mensajeros de la Paz

Suances (Cantabria - Spain)

• 98 residential places.



#### ■ Residencia DomusVi Pontevedra

Pontevedra (Spain)

- Nursing home with 120 beds.
- We provide CGT-250 touch-screens and IP telephony.



**■ La Roselière** 

**Bourg Saint Maurice (France)** 

• It has 36 flats with audio and 6 areas of refuge.

**ACCURO** 

100% IP Nurse call system

#### **LIVERO**

100% IP security intercom system

#### **IPTV**

Multimedia solutions for hospitals/nursing homes

#### **ATTENDO**

Emergency call system for public toilets





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