Critical Communications, Security and Multimedia systems for non-residential buildings

ALCAD
f∧cility

Solutions for
NON-RESIDENCIAL
BUILDINGS

IRÚN

REP. CHECA

TURQUÍA

E.A.U.

MADE IN **SPAIN**

We are an **international company with headquarters and factory in Irún (Spain)**, as well as own subsidiaries in **Czech Republic, Turkey** and the **United Arab Emirates**, which **exports to more than 60 countries** worldwide.

We **can draw on:**

- 30 years of experience
- A team of the first rank
- Design and production processes that are fully European
- Our diversification
- Personalised customer service
- Our own laboratory: quality assurance and reliability
- A wide sales network

AENOR ER Empresa Registrada UNE-EN ISO 9001

CERTIFIED IQNet MANAGEMENT SYSTEM

PYME INNOVADORA

ALCAD Facility

WE MANUFACTURE SOLUTIONS FOR NON-RESIDENTIAL BUILDINGS

With 30 years of experience, we continue our **'Made in Europe'** production, with **AENOR certification** and under the **ISO9001 standard**.

A LCAD Facility is the business unit aimed at the design and manufacture of **telecommunications, security and multimedia solutions for non-residential buildings:** hospitals, hotels, nursing homes, shopping centres, correctional facilities, public buildings, etc.
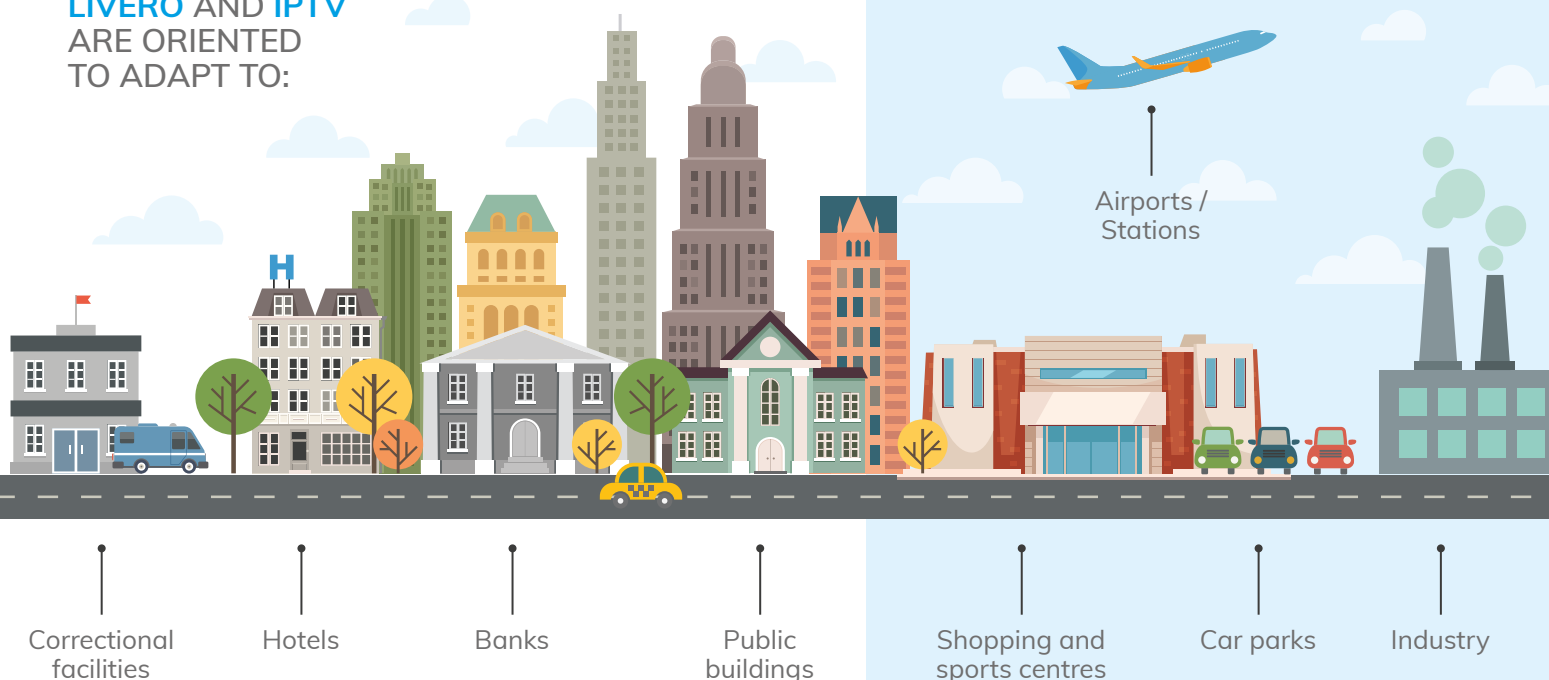
ROBUST AND RELIABLE SOLUTIONS, WITHOUT TRIAL-AND-ERROR

From our factory in Irun and through our extensive sales network, we provide reliable, agile, robust and innovative solutions to the international market in a demanding and constantly evolving sector.

We **contribute** to the improvement of user well-being, capturing vitally important signals through ACCURO and LIVERO, our **100% IP-based professional telecommunications and security platforms**, as well as through ATTENDO, our low-cost warning solution, and our IPTV multimedia system.

All our systems contain functions that make them the **ideal solution for any non-residential building**. These are robust and reliable platforms, without experiments, expensive maintenance or eternal installations.

Our **solutions:**

- **ACCURO** represents a **100% IP-based** telecommunications and security platform **for health centres** that can be integrated into third party systems: HIS, alarms, SIP terminals, etc.

- **LIVERO** is a **100% IP-based** communications and security platform **for non-residential buildings** that can be integrated into third-party systems: PSIM, alarms, SIP terminals, etc.

- **ATTENDO** is a low-cost warning solution that complies with standards regarding **security against the risk of being trapped** in enclosures.

- **IPTV** is a **complete solution for TV over IP networks**, 100% ALCAD from start to finish, with powerful, agile software that's easy to use, intuitive, fast and very reliable.

No costly maintenance or endless installation processes

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

LIVERO AND **IPTV** ARE ORIENTED TO ADAPT TO:

Airports / Stations

Correctional facilities

Hotels

Banks

Public buildings

Shopping and sports centres

Car parks

Industry

LIVERO + IPTV

SECURITY PLATFORM FOR TERTIARY BUILDINGS

LIVERO is ALCAD's 100% IP intercom and access control system for non-residential buildings. Available 100% IP and factory configured, it is ideal for car parks, sports and shopping centres, correctional facilities, shelters, hotels, town halls... In addition, it is easily integrable with our IPTV platform, a complete TV solution over IP networks.

L IVERO is ALCAD's 100% IP platform designed for integration in tertiary use buildings, where the volume of visitors is very high on a daily basis. In these cases, and to **guarantee the safety of the users**, it is essential to have a robust system that allows emergency calls to be transferred reliably to the security personnel.

LIVERO includes an intercom point in each area of refuge area, emergency pull-cords in bathrooms / changing rooms and lights for common areas or bathrooms / changing rooms. All this **centralized and managed from a single or multiple control posts**, assigned by areas according to need.

At the same time, for a correct **management of different access points** of the building, ALCAD offers a manager that allows to **control the different doors and their status** through IP controllers.

IPTV / Digital Signage
The ALCAD IPTV system allows the broadcast of **multimedia content** through an ethernet network to different televisions, both entertainment programs and advertising, or even useful information for the public. All this content is managed through the IPTV Manager in real time, **customized for each customer.**
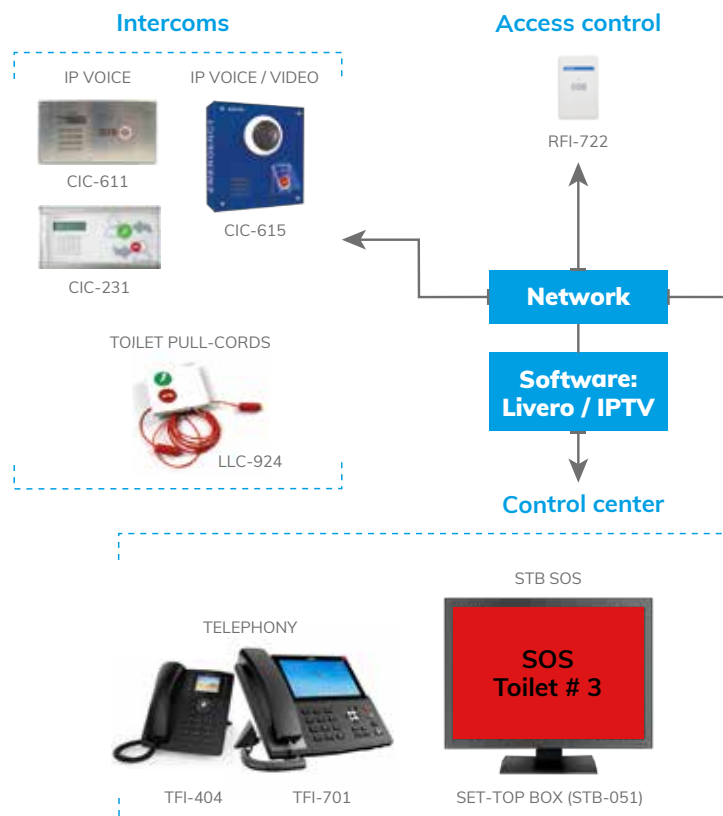
TV over IP system

Access control with traceability

LIVERO by **ALCAD**

Intercommunication in areas of refuge

Intercoms

IP VOICE — CIC-611

IP VOICE / VIDEO — CIC-615

CIC-231

TOILET PULL-CORDS

LLC-924

TELEPHONY

TFI-404   TFI-701

Access control

RFI-722

Network

Software: Livero / IPTV

Control center

STB SOS

SOS Toilet # 3

SET-TOP BOX (STB-051)

100% **IP**

Digital signage

Toilets and common areas

Easily identifiable alert calls

IPTV

DIGITAL SIGNAGE

CONFIGURATION INTERFACE

IPTV AND LIVERO MANAGER

Elements of the system:

■ **CIC-611 / CIC-231** SIP intercom that allows two-way voice intercom. The vandal-proof version has a configurable loudspeaker with **high intensity** (95dB) and **IP55 and IK09 protection.**

■ **CIC-615** **Vandal-proof SIP intercom with wide-angle camera** that allows emergency calls to be made while communicating with a security post. It is possible to play pre-recorded messages remotely.

■ **LLC-921** **Bathroom pull-cord** to be mounted in a universal box, with a 2-meter pull-cord, call button, cancellation button and status LED.

■ **SEN-724** External **multicolored and single-color light indicator** (red, green, blue, yellow), which informs of the existence and status of the calls made.

■ **STB-051** Set-top box designed to fulfill three main functions: **control of the TV over IP system**; **control of the digital signage system** and **quick display of alarms** on TV screens placed in common areas.

■ **TFI-404 / TFI-701** ALCAD offers a wide range of SIP telephones: from 2-line telephones to 20-line touchscreen telephones, which allow you to **view calls and manage LIVERO.**

■ **ST-100 / SS-202 / SS-212** The professional solution to encode in H.264 a maximum of 8 TV / radio programs from a DVB-T and DVB-S / S2 multiplex and transmit a **multicast stream on an IP network**, whether it comes from a terrestrial signal or if does it by satellite.

■ **SH-201** It is the professional solution to encode in H.264 a video signal from an HDMI input and transmit a multicast stream on an IP network. It is capable of streaming **1080p Full HD**.

■ **ACCESS CONTROL** The design of the RFI-722 reader offers a **dynamic solution to identify personnel**, which for greater comfort has the RFI-282 silicone bracelet, IP68 washable. It works without battery.

LIVERO

100% IP INTERCOM AND ACCESS CONTROL SYSTEM

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

Ultra-slim and robust design

Centralised alarms and warnings

Compatible with LIVERO viewer

SIP standard communication, integrable with third party PBX and systems
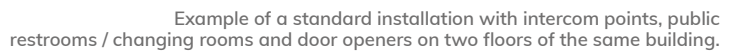
CIC-231 and CIC-611: LIVERO's intercom modules

100% IP, the **CIC-231** and **CIC-611** intercom devices (vandal-proof, in the image) are the main elements of LIVERO. **They allow the connection of a luminous element that warns of a call in progress** to place it in an area visible by security personnel, as well as the possibility of installing a call cancel button.

Applications:

- Designed to be installed in areas of refuge that will allow people with reduced mobility to **communicate via hands-free audio** with a control post (in case of fire emergency and need to use stairs), to assist them in their evacuation.
- At the same time, they integrate, without additional developments or configurations, **bathroom / changing room pull-cords, push buttons or sensors** that can be installed in public bathrooms, changing rooms and common areas of non-residential buildings.

ZONA DE REFUGIO

General outline:

TOILET 1
LLC-924   SEN-724

TOILET 2
LLC-924   SEN-724

TOILET 3
LLC-924   SEN-724

ACC-401
RFI-722
ACC-501
SEN-724
ACC-549

.... up to 12 toilets per CHC-129
ACC-547

CIC-231
CIC-611
AREA OF REFUGE

FAC-050

TOILET TERMINALS (WITHOUT AUDIO)
CHC-129

"Cloud" management

SWITCH (SWI-xxx)

ROUTER (ROU-112)

SERVER (SRG-xxx)

FAC-071 (can be replaced by PoE power)

ACC-501
CHC-129
ACC-547
RFI-722

ACC-501

ACC-401
RFI-722

TELEPHONY

.... up to 16 access points

ACC-401

.... up to 16 access points

	RJ45 UTP CABLE
	2x1,5mm CABLE

Example of a standard installation with intercom points, public restrooms / changing rooms and door openers on two floors of the same building.

IVERO includes an **intercommunication point in each CIC-231 / CIC-611 area of refuge** (100% IP), and **a software module** (installed on a server / PC) compatible with the LIVEROviewer 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 or 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 persons requesting help.

Customizable layout

At ALCAD we are manufacturers, and therefore we give the option of customizing the design of the CIC-231 / CIC-611 intercom modules **to adapt them to any need**. This can be done in different ways:

- Placing the **logo of the centre.**
- Using **corporate colours.**
- Integrating the module in the general decoration of the building, through different **textures**.

IPTV

THE SIMPLEST AND MOST COST-EFFECTIVE TV SOLUTION

ALCAD draws on more than 30 years of experience in the multimedia sector to offer health centres the most profitable IPTV solution on the market, 100% Made-in-ALCAD.

30 years facilitating your entertainment

No costly maintenance or endless installation processes

A complete solution, from receipt of the TV signal to the room or common area

Compatible over networks such as Ethernet and GPON

ALCAD offers **a complete solution for TV over IP networks**: from the capture of the TV signal via terrestrial antenna, satellite or fibre, through the processing head to the room or common areas of the centre, such as the entrance or waiting rooms. Thanks to its powerful and agile middleware or software, it is easy to use, intuitive, fast and very reliable. And 100% Made-in-ALCAD.

In its Basic and Premium modes, it allows an agile and fast installation of the entire system by assigning an IP address to each room or common area automatically, without the need to configure it room-by-room. In addition, **the upgrade from Basic to Premium may be done with a simple software upgrade**.

Basic
For **installations with simple and basic entertainment needs**. The contracted and installed TV channels may be displayed, and it is possible to both configure the language and automatically reorganise the channels.

Premium
This is a complete solution *par excellence*, designed for all types of installations and FULLY INCLUSIVE, allowing **very agile interaction with the user**. The management of the contents is done in a centralised manner, with the option to add as many channels as necessary with **proprietary content**, such as advertising, rehabilitation videos, etc.
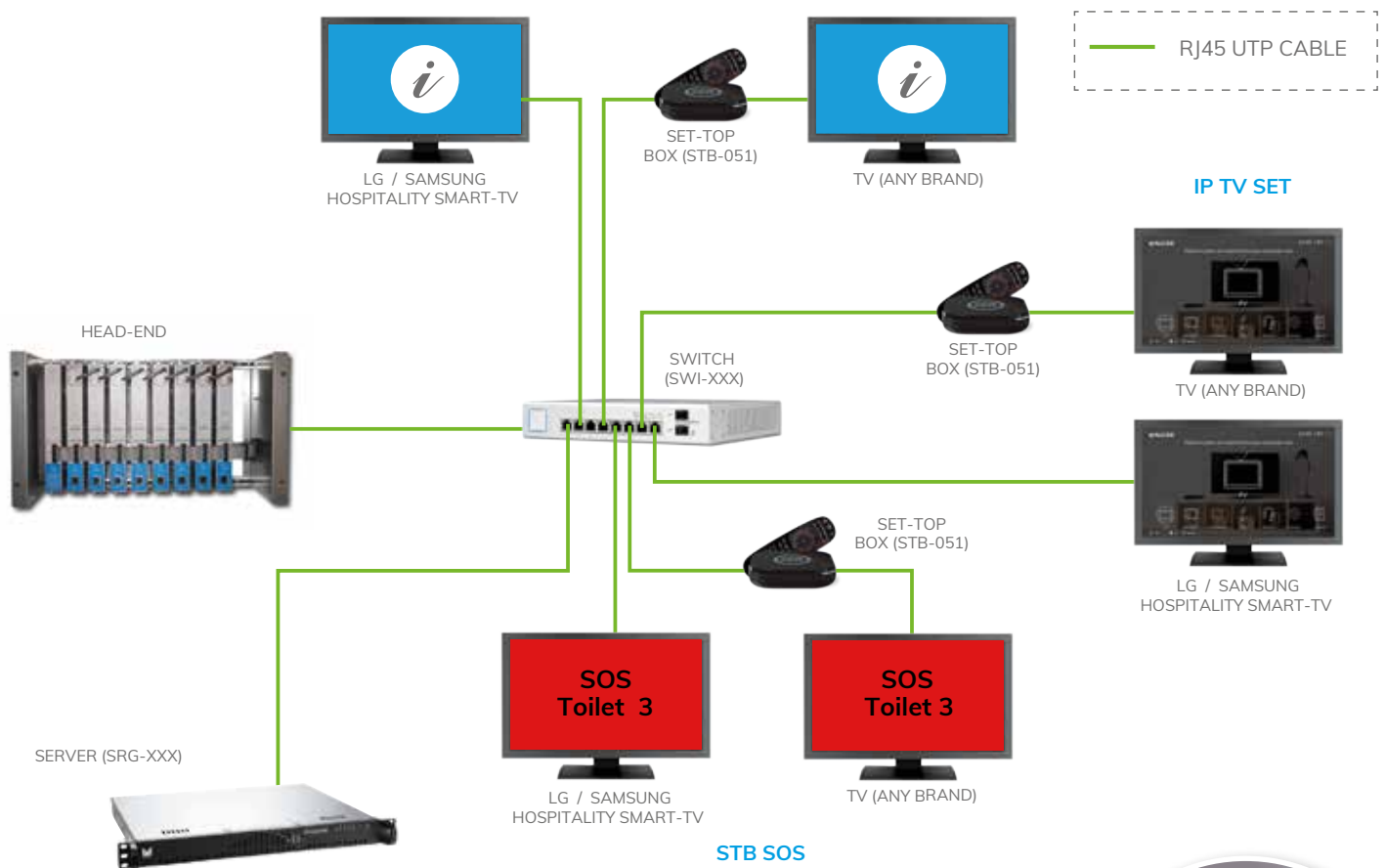
Native SmartTV (LG and Samsung) **mirroring** and **Chromecast** integration to share content from a Smart iOS and Android device with the TV (compatible with STB-051 and SmartTV).

General **outline:**

DIGITAL SIGNAGE

LG / SAMSUNG
HOSPITALITY SMART-TV

SET-TOP
BOX (STB-051)

TV (ANY BRAND)

RJ45 UTP CABLE

IP TV SET

HEAD-END

SWITCH
(SWI-XXX)

SET-TOP
BOX (STB-051)

TV (ANY BRAND)

SET-TOP
BOX (STB-051)

LG / SAMSUNG
HOSPITALITY SMART-TV

SERVER (SRG-XXX)

SOS
Toilet 3

SOS
Toilet 3

LG / SAMSUNG
HOSPITALITY SMART-TV

TV (ANY BRAND)

STB SOS

ALCAD DS: the simplest way to show your message

ALCAD Digital Signage is a **centralised web management tool** that provides dynamic, effective and well-adapted communication and is very simple to use; the management software creates and distributes the contents and enables the creation of sequences and schedules.

Its advantage compared to printing is clear: in addition to being more cost-effective, **the content is displayed more attractively and offers greater market segmentation,** ultimately achieving better results.

Where? It is ideal for:
- Menus in restaurants.
- Advertising in a shop window.
- Information on performances in a theatre.
- Timetables at a bus station.
- Guidance / help messages in emergency situations.

Up to 8 emergency alarms, displayed in real time

The ALCAD set-top boxes allow to display, in real time, emergency calls generated within the building. These alarms show the **exact type of alarm** and i**ts location in real time** on a large color screen.

Each monitor allows the simultaneous display of **up to 8 calls**. In addition, by means of a color code, the responsible personnel will be able to easily differentiate the type of emergency.

The system allows you to configure alarms **by zones**, so that each checkpoint will only receive calls from its assigned area. This solution is ideal for those buildings where staff do not have a single station and have the need to see alarms from long distances, such as in corridors.

1	TFI-701
2	STB-051
3	CIC-611
4	SEN-724
5	RFI-722
6	LLC-921
7	LLC-942

HOTELES
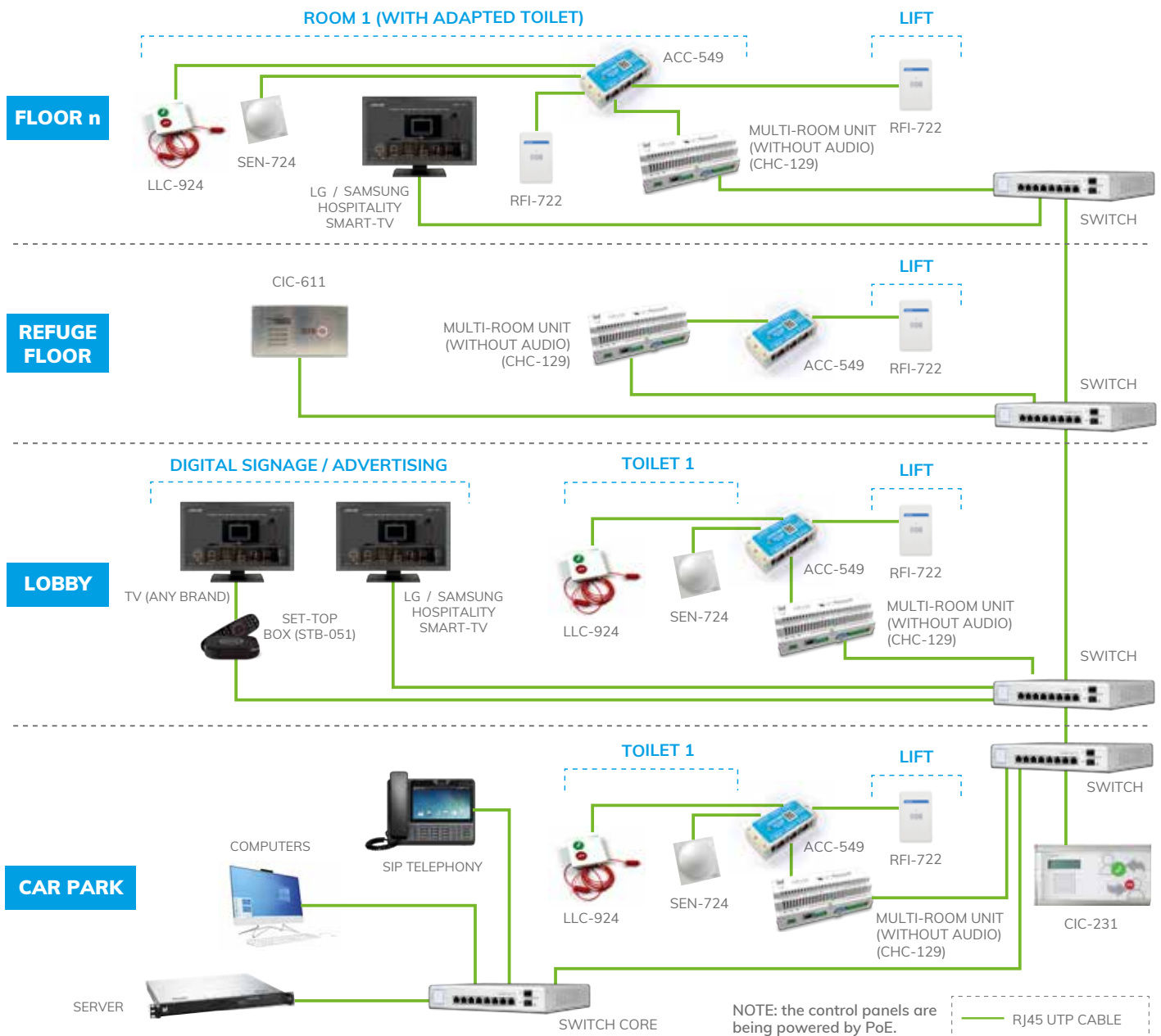
GUESTS WELL CARED FOR UPON ARRIVAL

When a client arrives at a hotel they want to feel at home from the first moment. For this reason, it is important to offer them security and entertainment solutions that make their stay a memorable experience.

A hotel is a second home for the guest who chooses it to stay, be it for one night or a longer stay. To make their **experience as memorable as possible**, these establishments take care of even the smallest detail from the check-in.

ALCAD systems are focused on providing **security and entertainment solutions:**

- **Access control:** it can act as a room key and open key areas of the building with a single card. Intercoms in refuge areas (including car parks).

- **Emergency calls** in adapted toilets in common areas and rooms: in case someone gets locked up or needs help.

- **Digital signage:** allows different types of messages to be displayed: from advertising (even video format) to directions to follow in case of emergency situations.

- **IPTV:** complete TV solution over IP networks. A centralized web management tool that provides dynamic, effective and adapted communication.

General **outline:**

ROOM 1 (WITH ADAPTED TOILET)

LIFT

FLOOR n

ACC-549

SEN-724

LLC-924

LG / SAMSUNG HOSPITALITY SMART-TV

RFI-722

MULTI-ROOM UNIT (WITHOUT AUDIO) (CHC-129)

RFI-722

SWITCH

REFUGE FLOOR

CIC-611

MULTI-ROOM UNIT (WITHOUT AUDIO) (CHC-129)

LIFT

ACC-549

RFI-722

SWITCH

DIGITAL SIGNAGE / ADVERTISING

TOILET 1

LIFT

LOBBY

TV (ANY BRAND)

SET-TOP BOX (STB-051)

LG / SAMSUNG HOSPITALITY SMART-TV

LLC-924

SEN-724

ACC-549

RFI-722

MULTI-ROOM UNIT (WITHOUT AUDIO) (CHC-129)

SWITCH

TOILET 1

LIFT

SWITCH

CAR PARK

COMPUTERS

SIP TELEPHONY

LLC-924

SEN-724

ACC-549

RFI-722

MULTI-ROOM UNIT (WITHOUT AUDIO) (CHC-129)

CIC-231

SERVER

SWITCH CORE

NOTE: the control panels are being powered by PoE.

RJ45 UTP CABLE

The **IPTV system** allows you to:

- **Broadcast IP TV** with terrestrial signal, satellite, local content, VoD...
- Direct connection via **SmartTV**.
- **Mirroring** from Smart devices.
- **Chromecast** from Smart devices.
- **Customize** backgrounds, icons...
- **Icon positioning in the user interface** menu.
- **Weather forecast** on the main screen.

- Create a **positive user experience,** thanks to its new modern look and design.
- Choose from several **languages**: English, French, German, Russian, Turkish, Arabic and Spanish.
- Get **feedback** thanks to its satisfaction survey system.
- **High Availability IPTV** (with 2 parallel physical servers).

- Automate the generation of **system backups.** The option to restore the system with a previous backup is added.
- Compatible with **GPON networks.**

TERTIARY USE BUILDINGS

FAST AND FLEXIBLE COMMUNICATION IN ANY SITUATION

Whether for high-rise buildings, public buildings, administrative buildings, community offices, shopping centres or office buildings, ALCAD offers optimal solutions in emergency intercom and access control, security for staff and visitors, as well as fast and reliable communication.
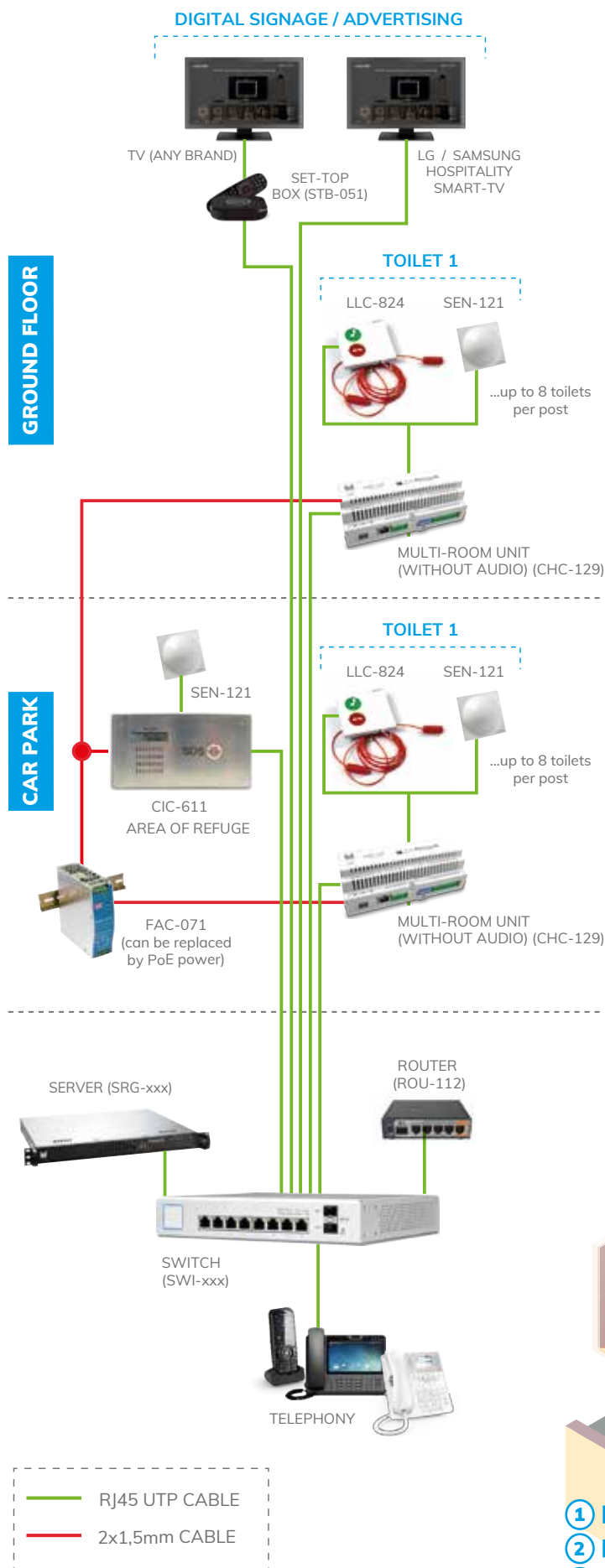
The flexibility offered by the system as a whole allows LIVERO to offer **optimal solutions** for tertiary use buildings in any situation. Its main features:

- ■ **Intercom** for security and emergency calls.

- ■ **Visitor reception** intercom.

- ■ Intercom in **areas of refuge** (secure waiting rooms).

- ■ **Access control management** for personnel, parking lots, restricted areas, etc. (different companies can use the system thanks to the access profiles).

- ■ **Remote control** gate and barrier opening.

- ■ Multiple **function stations** (internal, external, areas of refuge call points, parking access, bollards, meter intercom systems, etc.).

- ■ **Planning and information** in common areas or rooms. IPTV.

- ■ Communication and access control for **remote buildings** (displaced or federated complexes).

- ■ Stations compliant with **disability regulations (DDA)**.

1 TFI-701
2 STB-051
3 SEN-724
4 LLC-921

General **outline:**

DIGITAL SIGNAGE / ADVERTISING

GROUND FLOOR

TV (ANY BRAND)

SET-TOP BOX (STB-051)

LG / SAMSUNG HOSPITALITY SMART-TV

TOILET 1

LLC-824 SEN-121

...up to 8 toilets per post

MULTI-ROOM UNIT (WITHOUT AUDIO) (CHC-129)

CAR PARK

SEN-121

TOILET 1

LLC-824 SEN-121

...up to 8 toilets per post

CIC-611 AREA OF REFUGE

FAC-071 (can be replaced by PoE power)

MULTI-ROOM UNIT (WITHOUT AUDIO) (CHC-129)

ROUTER (ROU-112)

SERVER (SRG-xxx)

SWITCH (SWI-xxx)

TELEPHONY

— RJ45 UTP CABLE

— 2x1,5mm CABLE

Solutions for **car parks**

Our specific solutions for this sector allow secure communication from any intercommunication point, facilitating the exchange of information between those responsible and the users of the car park. Thus, it is possible to offer a **quality of service** that promotes customer loyalty and satisfaction.

Characteristics:

■ Advanced and **easily integrated** solutions for all parking equipment (entrance / exit terminals, intermediate terminals, pedestrian readers, automatic payment in machines, lifts, etc.).

■ **IP network connection** for audio, video.

■ Venues that benefit from optimal **high acoustic quality** and robustness.

■ Complete intercom systems in facilities: fast and efficient communication **between various local points.**

■ Efficient teamwork, thanks to **centralized communication** over IP.

■ Security **intercom systems** (fire alarms, emergency calls), supervision and access control management.

■ **SIP-type solutions** that meet communication interoperability standards and can be seamlessly integrated into centralized management solutions.

■ Posts compliant with **disability regulations.**

1 LLC-824
2 SEN-121
3 CIC-611

IP55 IK09 PROTECTION

CORRECTIONAL FACILITIES

SOLUTION FOR CRITICAL ENVIRONMENTS

LIVERO manages intercommunication and access control in correctional facilities. Its architecture facilitates communication between different critical points, adapting to each situation and keeping dangerous components out of the reach of inmates.

1 — CIC-611
2 — CIC-612

IVERO facilitates **bidirectional communication with SIP technology** between different critical points in a correctional facility. This is possible by interconnecting the various elements with each other and **adapting to each situation**, both in areas with or without supervision by officers. All dangerous components are kept out of the reach of inmates.

LIVERO includes in each critical zone a CIC-611 and CIC-612 intercom point (**100% IP, with IP55 and IK09 protection**), and a software module (installed on a server / PC). **The system is centralized and managed from a single or multiple control posts**, assigned by zones according to need.

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

Autonomous operation between modules

Each module has its own server, allowing the system to **function autonomously**, but at the same time maintaining the interconnection with the rest of the modules of the facilities. Two modules with their **elements and operation** are described below:

■ **MODULE 1. CIC-612** devices are located inside each cell, allowing **bidirectional communication** with officers. Its vandal-resistant steel plate protects any sensitive element from inmates.

In the common areas, the **CIC-611** board is placed, which allows SIP communication and **shows the status of the call** through its screen, while the **CIC-612** device is reserved again for those areas with a greater possibility of suffering some aggression. A third option is to install the **CIC-615** board, which provides, in addition to IP communication, **a 360º view of the area**.

The communicators and boards are **connected to the switches of each module**, which in turn interconnects with other elements, such as the module server, computers, telephones, routers and Wi-Fi points.

SIP phones, DECT phones, computers and smart phones can be used to monitor and receive calls. The latter allow officers to receive calls, communicate with inmates and access LIVERO's Viewer and Manager system wirelessly.

■ **MODULE 2.** In module 2 of this diagram the distribution of the elements and interconnection is similar. In this case, the intercommunication is carried out through the **CIC-612** boards. In these cells, **the connection is through RJ45**.

OFFICERS' AREAS
COMMON AREAS
MODULE 1

CIC-611

SMARTPHONES   WI-FI

SWITCH

SIP TELEPHONY   DECT

COMPUTERS

ROUTER

SERVIDOR

CELL 1   CELL n

CIC-612   CIC-612

CIC-615

CORRIDOR

CELL ZONE

NOTE: the control panels are being powered by PoE.

——— UTP CABLE
——— RJ45 UTP CABLE

OTHER MODULES

TOILET 1

LLC-924   SEN-724

FAC-050

ACC-547

CELL1   CELL 2   CELL n

CIC-612   CIC-612   CIC-612

SERVER

ROUTER

CENTRAL ASEOS CHC-129 (SIN AUDIO)

.... up to 12 toilets per CHC-129

WI-FI   SMARTPHONES

SWITCH

CELL ZONE

MODULE 2

CIC-615

COMMON AREAS

COMPUTERS

SIP TELEPHONY   DECT
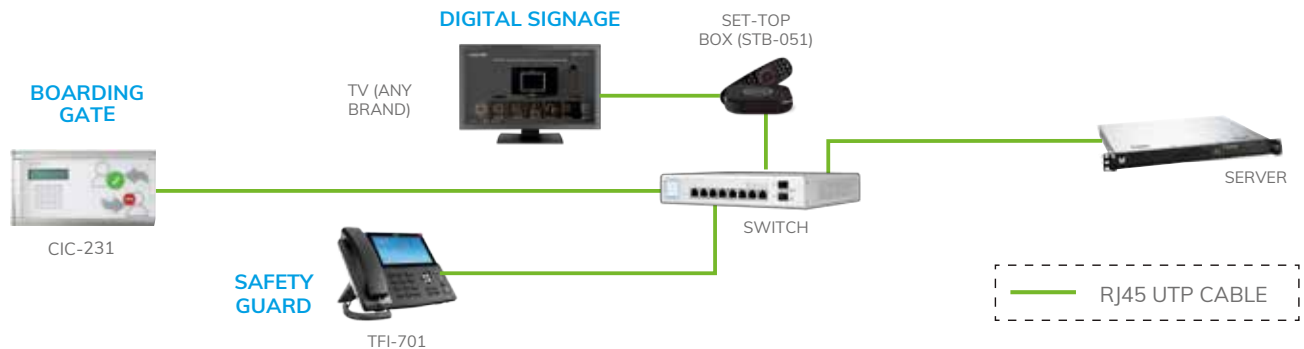
OFFICERS' AREAS

AIRPORTS / STATIONS

CLEAR AND REAL-TIME INFORMATION

Train, bus or metro stations, as well as airports, are busy environments. Any mistake or failure in the information offered can lead passengers to lose their means of transport.
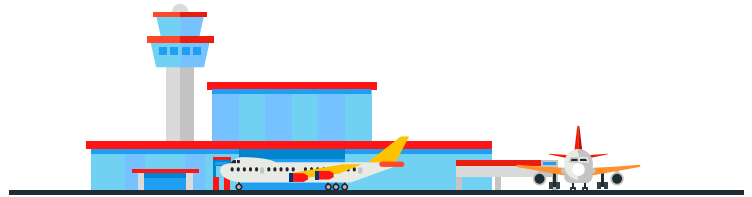
Digital signage allows to reflect, **on screens located in strategic points**, clear and real-time information that will facilitate the passage of users through the installation, avoiding confusion or errors in the transmission of messages. In addition, thanks to the CIC intercoms and SOS posts, the passenger can make an **ordinary or emergency call.**

DIGITAL SIGNAGE

SET-TOP BOX (STB-051)

BOARDING GATE

TV (ANY BRAND)

SERVER

CIC-231

SWITCH

SAFETY GUARD

TFI-701

RJ45 UTP CABLE

INDOOR

OUTDOOR

INDUSTRY

ADAPTED TO NOISY ENVIRONMENTS

CABIN WITH STROBE LIGHT

MEETING POINT

CIC-611

ACC-501

CIC-231

Booths with strobe light, applied to our CIC devices, allow an acoustic and visual signaling of incoming calls.

IVERO is adaptable to noisy environments, such as in industry, through **cabins with strobe light**. When combined with our CIC intercoms, they allow the emission of an acoustic and visual signal on an incoming call from an area of refuge or a bathroom, for example.

SAFETY GUARD

TFI-701

SWITCH

RJ45 UTP CABLE
2x1,5mm CABLE

SERVER
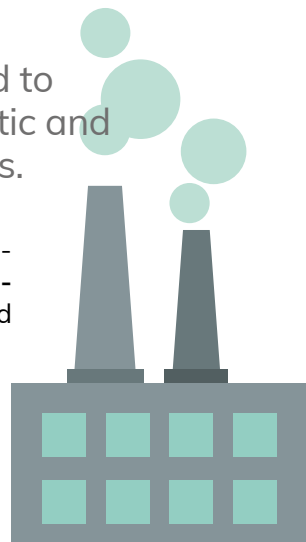
BANKING

AN ALLY OF SECURITY

Bank branches are facilities where security is taken for granted. LIVERO provides a robust and reliable solution to ensure customer peace of mind.

> IVERO's solution adapts perfectly to any need that may arise in a bank branch, **guaranteeing peace of mind for both workers and customers.** LIVERO can be present at spots such as:

Displaced ATMs

These are ATMs that are not located in the branches themselves. The vandal-proof version of our CICs allows direct intercommunication with the bank or, when the branch is closed, **with the emergency switchboard.**

Public toilets

In the event that the branch has a public toilet, our solution provides the possibility of making an **emergency call** if someone is locked inside or needs help.

DIGITAL SIGNAGE

TV (ANY BRAND)
SET-TOP BOX (STB-051)
SERVER
TFI-701
COMPUTERS

SNI-312 (EMERGENCY CALL BRACELET)
SNI-301
LLC-848
SWITCH

TOILET 1
LLC-924
SEN-724
CHC-129

— RJ45 UTP CABLE
))))) WIRELESS CONNECTION

EXTERIOR ATM
CIC-611
CIC-612
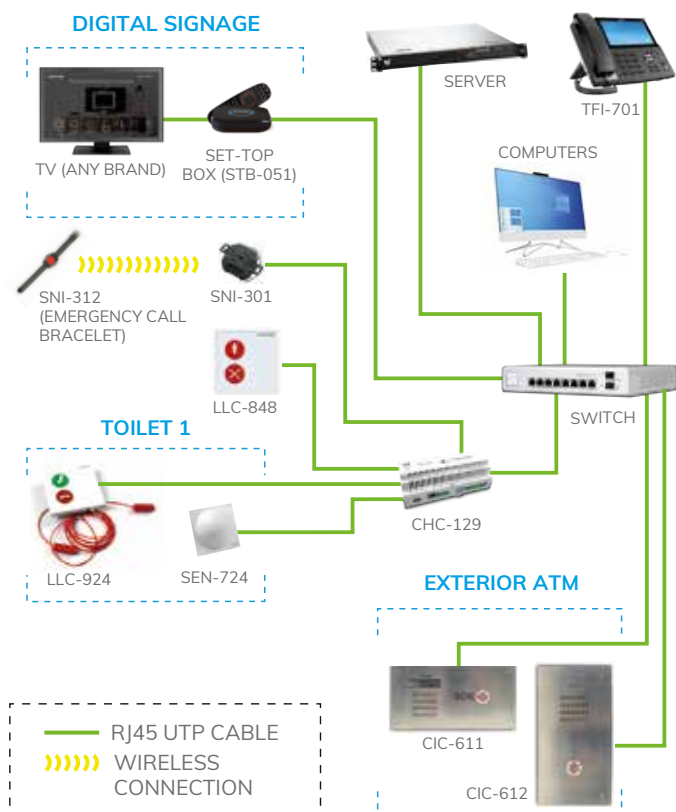
Digital signage

It allows displaying advertising or messages that the bank wants to transmit to the customer, i.e. instructions to follow in case of emergency situations.

Anti-panic alarms

The emergency and anti-panic buttons can be placed under a table or at any other strategic point. Likewise, there is the possibility of adding the version in bracelets or necklaces **for greater employee safety**.

1 STB-051
2 CIC-611 / CIC-612
3 LLC-848
4 LLC-848
5 SEN-724
6 LLC-924

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 debate ideas, proposals and alternatives; to work as a team, to **share our 30+ years of experience until we arrive at the solution** that best suits the characteristics of the client.

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**.

Your success is ours; that's why we like to work as a team.

A few examples follow of **some of our most notable case studies.**

More than **30 years' experience**

Present on all **5 continents**

■ Centro Comercial Open Sky
Torrejón de Ardoz (Madrid)
- Open Sky es una combinación de centro comercial y *retail park* con más de 90.000 m² con un lago, un *beach club*, un escenario para conciertos y un espacio para niños.
- Para garantizar la seguridad de todos sus visitantes, ALCAD ha instalado 9 intercomunicadores CIC-231 y 31 intercomunidades antivandálicos CIC-611.
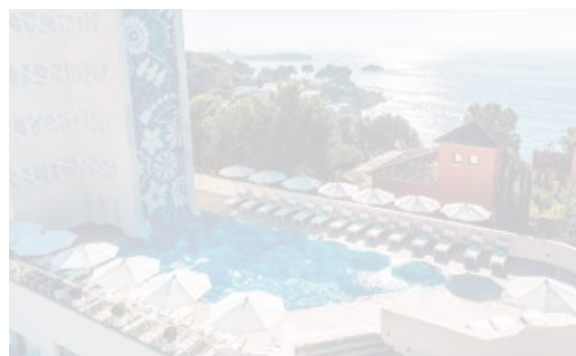
■ Hotel Iberostar Grand Portals
Palma de Mallorca (Baleares)
- Este hotel de 5 estrellas está ubicado frente al mar y cuenta con piscina al aire libre y centro de spa.
- Sus elegantes habitaciones, diseñadas por Marcel Wanders, cuentan con TV vía satélite gracias a nuestra solución IPTV.
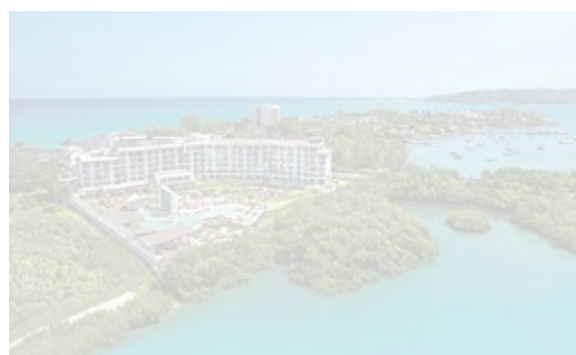
■ Breathless Montego Bay Resort & Spa
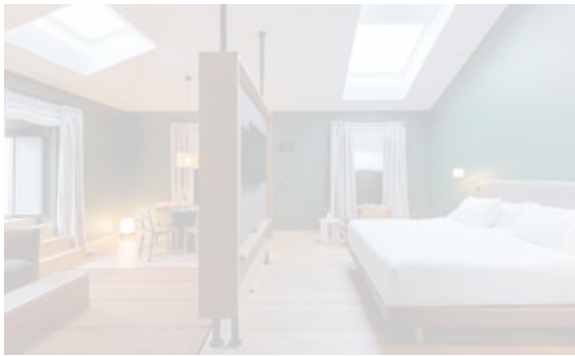**Montego Bay (Jamaica)**
- Se trata de un complejo turístico con todo incluido ubicado en medio de jardines tropicales. Sus elegantes habitaciones ofrecen Wi-Fi gratis, pantallas planas y tabletas.
- ALCAD ofrece a sus clientes su solución IPTV, que da servicio a 163 pantallas de TV.
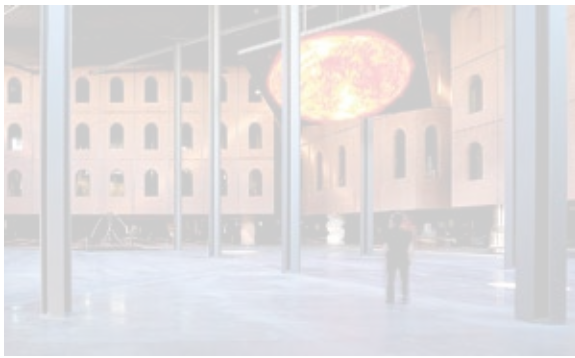
Azkuna Zentroa

Bilbao (Bizkaia)

- Azkuna Zentroa es un antiguo almacén de vino ubicado en la capital vizcaína reconvertido en centro de ocio y cultura.
- Las 11 unidades de la central CHC-129 controlan los diferentes periféricos de aviso y señalización conectados.

Centro Comercial Garbera

Donostia-San Sebastián (Gipuzkoa)

- El nuevo Garbera nace no con el objetivo de ser un mero centro comercial, sino un actor social con un rol transformador que innova para ofrecer experiencias.
- Se han instalado un total de 27 intercomunicadores CIC-231 en su parking para atender cualquier llamada de emergencia que se pueda producir.

Hotel Arbaso

Donostia-San Sebastián (Gipuzkoa)

- Arbaso se ubica en un edificio del centro de la ciudad datado en el siglo XIX, del que se ha respetado en todo momento la integridad de su arquitectura.
- Nuestra solución IPTV permite la emisión de contenido multimedia a los 81 SmartTV conectados. Además, las habitaciones VIP cuentan con solución mirroring integrada con IPTV ALCAD.

Hotel NH Colón

Valencia (Comunidad Valenciana)

- Este pequeño y exclusivo hotel, ubicado en un edificio clásico, sólo dispone de 47 habitaciones, cada una decorada por Lorenzo Castillo.
- LIVERO aporta 17 puntos de intercomunicación (16 CIC-231 y 1 CHC-129) para garantizar la seguridad de sus huéspedes.

Hampton by Hilton

Old Slata-Doha (Qatar)

- Hampton by Hilton forma parte de una cadena de más de 1.900 hoteles en 15 países en todo el mundo, con todo lo que el huésped necesita para un viaje de negocios o esparcimiento.
- LIVERO aporta sus soluciones de llamada de emergencia para aseos adaptados e IPTV.

Nur-Sultan Grand Mosque

Nur-Sultan (Kazakistan)

- Se trata de la tercera mezquita más amplia de Asia Central, con capacidad para 5.000 fieles dentro del templo y 2.000 más en el exterior.
- Nuestra solución IPTV se puede adaptar a todo tipo de necesidades. En este caso, la instalación de set-top boxes en todas las pantallas permite la difusión de canales de TV a los fieles en este emblemático templo.