

**LIVERO**

100% IP intercom and  
access control system for  
non-residential buildings

 **ALCAD**  
facility

A woman with long dark hair and glasses, wearing a white security uniform with a 'SECURITY' patch on the sleeve, is sitting at a desk in a control room. She is holding a black telephone receiver to her ear with her right hand and has her left hand on a computer mouse. In the background, other people in similar uniforms are working at their desks, and multiple computer monitors are visible.

Solutions for  
**CORRECTIONAL  
FACILITIES**



# LIVERO

## MANAGE THE INTERCOM AND ACCESS CONTROL SYSTEM IN CORRECTIONAL FACILITIES

100% IP and factory configured, its architecture facilitates bidirectional communication with SIP technology



1 CIC-611  
2 MCA-960



**LIVERO** 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. It is 100% IP and factory-configured, ideal for correctional facilities, car parks, sports centres, shopping centres, areas of refuge, hotels, town halls... In addition, it is easily integrable with our IPTV platform, a complete TV solution over IP networks.

### Safe control of critical points

In the case of correctional facilities, LIVERO facilitates communication between different critical points. Thanks to its architecture, it facilitates bidirectional communication with SIP technology, by interconnecting the various elements with each other and **adapting to each situation**, both in areas with or without supervision by officials. All dangerous components are kept out of the reach of inmates.

LIVERO includes in each critical zone a CIC-611 and MCA-960 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 facility. Two modules with their **elements and operation** are described below:

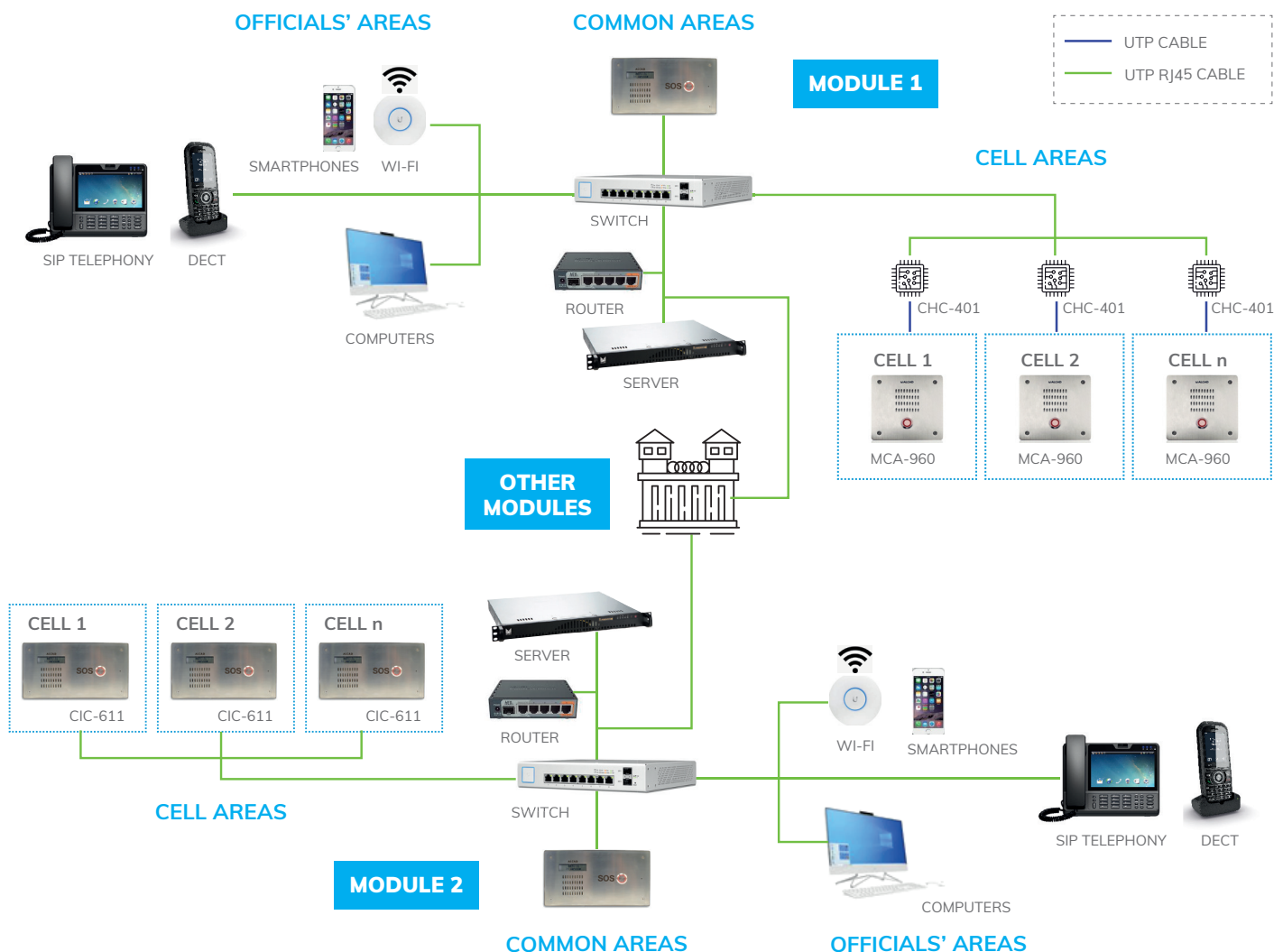
■ **MODULE 1.** The **MCA-960** devices are located inside each cell, allowing **two-way communication** with the officials. The **CHC-401** circuit boards (responsible for carrying out IP communication with the entire system) are placed outside the cell, **preventing them from being misused**.

The **CIC-611** unit is placed in common areas, allowing SIP communication. The difference with **MCA-960** units is that the former **includes all the components** to connect to the IP network.

The communicators and units are **connected to the switches of each module**, which in turn is interconnected 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 **MCA-960** intercoms have been **replaced within each cell by the CIC-611** units. In these cells, **the connection is through RJ45** and the intercom has a panel that shows the status of the call.



# ELEMENTS OF THE INSTALLATION



**CIC-611**



**MCA-960**

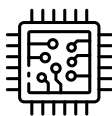
## Intercoms

**CIC-611** is a SIP protocol IP intercom that allows two-way voice intercom. It has an SOS call button with a reassuring light, a screen showing the status of the call, a configurable microphone with great listening capacity and a configurable speaker with great power (95dBa).

It has a high degree of protection against adverse weather conditions (IP55) and great resistance to attacks (IK09).

**MCA-960** is a cell intercom with SIP protocol that allows intercommunication between inmates and officials. This module contains only the button, the speaker and the microphone, allowing the control unit (CHC-401) to be installed outside the cell.

It has a high degree of protection against adverse weather conditions (IP55) and great resistance to attacks (IK09).



## Control board

The **CHC-401** board connects the MCA-960 intercom with the IP network using SIP protocol. It contains the electronic part of the intercom and can be placed outside the inmate's cell, thus keeping all elements susceptible to attack out of the inmates' reach.



**SWI-443**

## Network

The network allows the intercommunication of the different modules with each other, even though each module is managed by its own server. It also allows the installation of Wi-fi hotspots for the use of smartphones.



**SRG-410**

## Server / Redundant server

Each server manages the communication of the assigned module; in this way, in the event that one of the servers goes down, it will allow the rest of the modules to operate normally.

**Redundant servers** can also be installed at different points, which provides the highest quality and safety standard. Thus, in the event that one of the servers stops working, the other will take control of ALL the intercoms on the network, regardless of the module in which they are located.



**TFI-701**

## SIP telephony

ALCAD offers a wide range of SIP telephones for use by facility officials, allowing two-way communication between all elements of the facility.

The range of this type of telephones goes from telephones with 2 lines to telephones with 20 lines with a touch screen, which allow you to view calls and manage LIVERY.

In the example, we can see a terminal with a map of the Modelo prison in Barcelona.



## Smartphones

LIVERY allows officials to use SMART phones and tablets for receiving and communicating SIP calls, as well as accessing LIVERY through the Wi-fi network to view all calls in progress.