Advanced communication solutions for restricted access zones

Ip intercom solution for prisons, detention centers and juvenile correctional applications.

ambient SYSTEM

Stay connected. Stay Safe

Foreword

An IP intercom system is a modern, reliable tool for voice communication in high-security facilities.

PC workstation
with Yellow software

ABT-ICDG-1
SIP paging unit

ABT-W6
Wall-mount loudspeaker

ISE COMM
SIP server

smartVES
Modular system

TCP/IP

3rd party systems:
IP-PBX, SCADA, BMS, PSIM

ABT-DFMS
Emergency
microphone

PRISON SECURITY CENTER

System Visualisation & Remote Management

Paging 2-way conversation

OPEN AREAS

Public Address system

Intercom Management, Voice recording, System log Integrations

2-way communicaton / Emergency calls

PRISON CELLS / VISITOR AREAS / BLOCK PASSAGES

ISE VES SYSTEM GATEWAY
Seamless integration
PAVA with Intercoms

ICO EMERGENCY S03
SIP Intercom

ICO STRONG
SIP Intercom

ICO EMERGENCY S02
SIP Intercom

Integrating intercoms with the building's security systems improves information flow and reduces staff response times in situations requiring immediate action. A critical aspect in environments such as prisons, detention centers, secure psychiatric hospitals and other controlled-access institutions is fast, controlled and reliable communication. In high-security environments such as prisons, detention centers, and secure psychiatric institutions, equipment must meet not only specific functional requirements but also offer maximum resistance to mechanical damage, tampering attempts and demanding operating conditions. The same applies to voice communication systems. Devices used in such facilities must feature exceptionally durable, vandal-resistant construction, while ensuring reliable and immediate voice transmission in every situation.

Key features for intercom in prison

Prison staff and security personnel require reliable tools that enable them to respond quickly and effectively to any situation requiring intervention.

Efficient information flow is one of the key factors in ensuring the safety of inmates, staff and the entire facility. Modern intercom systems improve communication processes, allow for immediate transmission of instructions, incident reporting and coordination of emergency response actions. Additionally, intercoms installed in cells or residential units can serve as local control panels — allowing inmates, for example, to control lighting, operate windows or send requests for assistance to staff. This solution not only enhances overall safety standards but also streamlines the management of everyday activities in a controlled and secure manner.

MONITORING CENTER

The effectiveness of correctional staff's work largely depends on the ability to quickly gain insight into the entire system's status and make decisions from a single, centralized location. A modern IP intercom system, installed in the correctional officers' room, transforms this space into a communication command center. Thanks to an intuitive graphical interface on monitors, officers have full visualization of the status of all connections – from active calls from cells, through the status of individual intercoms, to line availability. They can see which cells are awaiting a response, which calls are in progress and whether there have been any unauthorized attempts to tamper with the system.

CONTACT WITH PRISON STAFF

The Intercom System provides an effective and immediate communication tool in such situations, enabling inmates to establish a connection with a correctional officer or designated staff member. Dedicated intercom stations installed in cells or residential units are mechanically and structurally adapted to the demands of correctional environments — vandal-resistant, tamper-proof, and compliant with safety standards. Every call is logged and can be monitored in real time or archived for documentation and review purposes.

INMATE COMMUNICATION WITH OFFICER

The Intercom System allows an inmate to request a connection with an officer by pressing a button on the intercom panel inside the cell. Once activated, a signal lamp above the cell door illuminates to notify the officer of the request. The officer can then engage in a conversation and terminate the call by pressing a dedicated cancel button located next to the cell door. This solution enables swift response to inmate requests while maintaining full control over the communication process and ensuring proper call logging within the system.

AUDIO MONITORING FOR PRISON CELLS

The Intercom System, through its integration with the central management system, enables authorized personnel to remotely and discreetly monitor sounds from cells. A duty officer or designated staff member, in cases of justified suspicion or as part of routine security procedures, can activate the listening function from the operator's console. Audio from the intercom microphone in the cell is then transmitted to the central station, allowing personnel to assess the situation without the need for physical approach to the cell. All monitoring activities are recorded and logged, ensuring full documentation and auditability of actions.
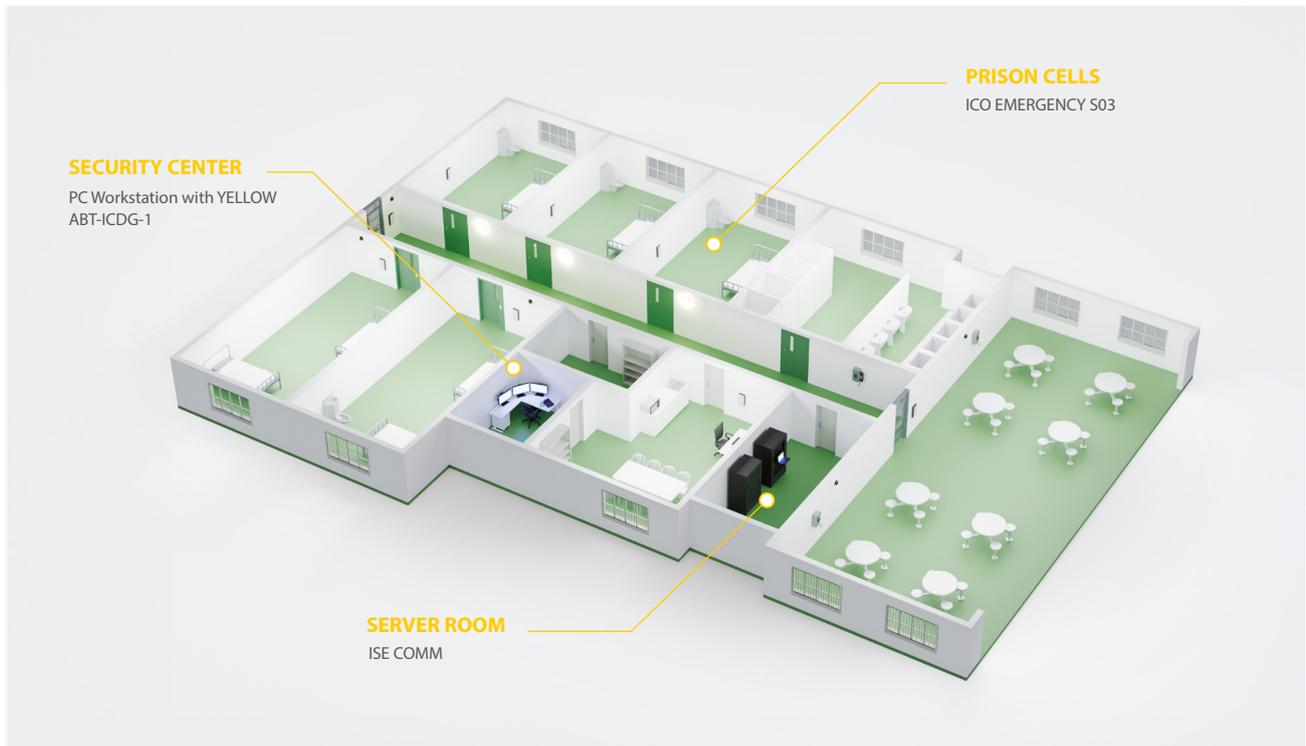

CONTROL PANEL IN THE INMATE'S CELL

The Intercom System, thanks to its built-in control functions and integration with cell infrastructure, can serve as an intuitive control panel for the inmate. From the intercom unit within the cell, the inmate can turn the lighting on or off and, if actuators are installed, open or close the window within limits defined by the facility's security system. Additionally, the intercom can provide access to a central radio broadcast system, allowing for listening to selected news programs or music, which contributes to rehabilitation and normalization of conditions. All these operations are strictly controlled and recorded by the central system.

Communication in restricted access zones

This diagram shows a complete communication system for places that need high security.

PRISON CELLS
ICO EMERGENCY S03

SECURITY CENTER
PC Workstation with YELLOW
ABT-ICDG-1

SERVER ROOM
ISE COMM

ICO EMERGENCY S03

ICO EMERGENCY S03 is an intercom dedicated to use in penitentiary facilities, where increased device resistance to external factors and integration of additional functionalities such as window opening, lighting control and a public address system feature are crucial.

ISE COMM

ISE COMM: An advanced intercom server serving as a central tool for monitoring, maintenance and call management within the intercom system. It enables seamless integration with external systems and provides control over the status of connected devices and the overall system performance.

ABT-ICDG-1

ABT-ICDG-1 is an operator console combining the functionality of an IP phone and a paging control panel. It is equipped with a 4.3-inch display, an additional auxiliary display, a full function keyboard, a handset, a hands-free set and a gooseneck microphone.

YELLOW

Yellow software serves as a central platform for efficient monitoring, management and integration of intercoms within an extensive security system. It enables consistent control and insight into the functioning of all communication devices.

ICO EMERGENCY S03

ICO EMERGENCY S03 is an IP intercom designed to provide reliable, high-quality voice communication in demanding security environments such as prison cells, visitor rooms and isolation wards.

✓ Wall-mounted intercom with **IK10/IP65 robust construction**

✓ **2 programmable** and 4 additional buttons

✓ **Acoustic monitoring** of the speaker-microphone system

✓ **DSP features:** noise reduction, echo cancellation, automatic volume control

DSP POWER

The ICO EMERGENCY offers advanced DSP processing algorithms including Acoustic Echo Cancellation, Noise Reduction and Automatic Gain Control, ensuring good quality voice communication.

HANDS FREE COMMUNICATION

ICO EMERGENCY provides hands free duplex communication – without the need for staff to leave their position in order to listen or take part in the conversation.

VANDAL RESISTANCE

Robust front plate fitted with mechanically resistant joints allows for keeping the device in a maintenance condition regarding the potential destructive activities.

REMOTE AUDIO MONITORING

Built in feature to listen to what's the situation in cells is allowed to react to unreported incidents.

RADIO

Multicast radio distribution with the control buttons directly from the intercom front plate.

GPIO

GPIO and relay interface allows to connect external equipment, such as buttons, flashers, or indicators.

Full range of communication functionalities for facility security

A communication system that meets the highest standards of security and operational efficiency in demanding environments. It ensures full connectivity, rapid response and situational control, supporting both daily operations and emergency actions.

COMMUNICATION
In-house communication for sensitive areas of the facility.

PAGING
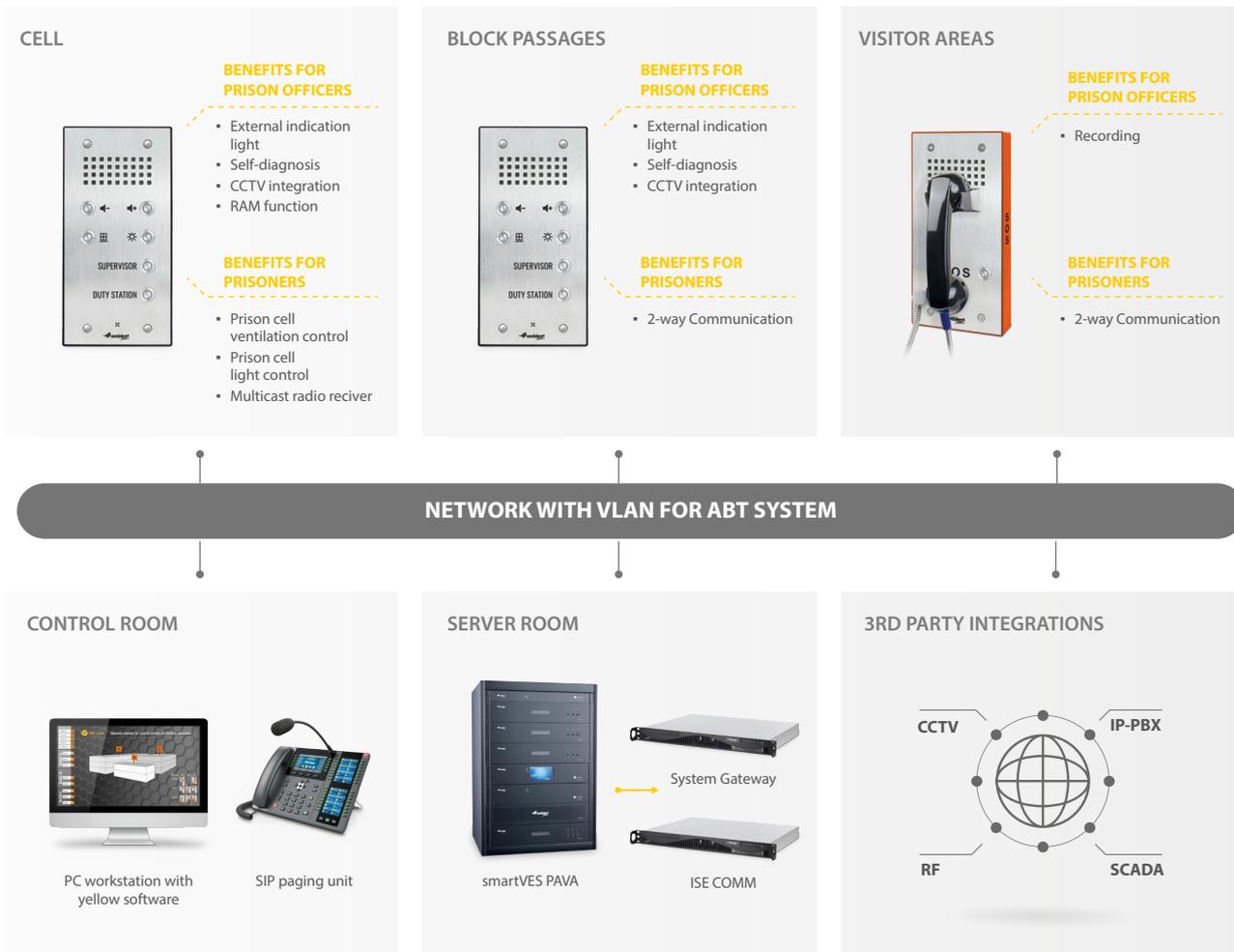Effective way of dsitributing information to all prisoners and detention personel.

EMERGENCY
Emergency two-way communication guarantees fast and adequate incident reaction of the prison guards.

CONTROL OF THE SITUATION
For security, evidentiary, and auditing purposes, discreetly monitor audio from cells and record all communications.

CELL

BENEFITS FOR PRISON OFFICERS
▪ External indication light
▪ Self-diagnosis
▪ CCTV integration
▪ RAM function

BENEFITS FOR PRISONERS
▪ Prison cell ventilation control
▪ Prison cell light control
▪ Multicast radio reciver

BLOCK PASSAGES

BENEFITS FOR PRISON OFFICERS
▪ External indication light
▪ Self-diagnosis
▪ CCTV integration

BENEFITS FOR PRISONERS
▪ 2-way Communication

VISITOR AREAS

BENEFITS FOR PRISON OFFICERS
▪ Recording

BENEFITS FOR PRISONERS
▪ 2-way Communication

NETWORK WITH VLAN FOR ABT SYSTEM

CONTROL ROOM

PC workstation with yellow software

SIP paging unit

SERVER ROOM

smartVES PAVA

System Gateway

ISE COMM

3RD PARTY INTEGRATIONS

CCTV

IP-PBX

RF

SCADA

We make everyday life safer

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