







IP Intercom solutions

Hospital operating theatres and cleanroom applications



Stay connected. Stay Safe



Critical Communication for Hospitals

The IP intercom system provides a reliable and efficient tool for voice communication. When integrated with building management systems (BMS), access control and CCTV, these systems streamline information flow and significantly reduce staff reaction time to critical events – a vital factor in healthcare environments, where every second can be crucial for patient outcomes.

Equipment in hospital operating rooms, clean rooms and laboratories demands the highest level of sterility and adherence to rigorous hygiene standards. Voice communication systems are no exception. For this reason, intercom designed for these applications feature anti-bacterial coatings, smooth surfaces for easy cleaning and high resistance to damage and chemical cleaning agents.







ICO CLEANROOM

ICO CLEANROOM is an IP intercom dedicated to clean-room environments. The device features a housing with an environmental protection rating of IP67 and a front panel secured with a chemical-resistant, antibacterial protective coating.



ICO FRONTIER

ICO FRONTIER is a basic intercom type equipped with 1 to 3 programmable buttons used for call functions. It provides high-quality, hands-free voice communication thanks to advanced digital algorithms.



ABT-ICD-1

ABT-ICD-1 is a stylish desktop intercom equipped with a clear 2.8-inch display, a functional keypad, a handsfree mode, and a dedicated handset, designed for intuitive call handling and convenient voice announcements.



ISE COMM

ISE COMM is an advanced intercom server responsible for system supervision and maintenance, call handling, and integration with third-party systems. ISE COMM enables easy control and access to information about the status of connected devices and current system status.





ICO Cleanroom

The ICO CLEANROOM IP intercom delivers reliable, high-fidelity voice communication essential for clean-room environments, including hospital operating rooms and laboratories.

- ✓ **Communication** In-house communication for sensitive areas of the facility.
- ✓ **Paging** Effective way of distributing information such as safety instructions, event announcements etc.
- ✓ **Emergency** Two-way emergency communication guarantees fast and adequate incident reaction.
- ✓ Perimeter protection Prevents unwanted access ensuring that the premises are protected from any external threat. Controlled access for visitors, staff and service providers.





DSP POWER

The ICO CLEANROOM offers advanced DSP processing algorithms including Acoustic Echo Cancellation, Noise Reduction and Automatic Gain Control – ensuring good quality voice communication even inside of a reverberant operating room full of noisy medical machinery.



HANDS FREE COMMUNICATION

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

To enhance this feature, the intercom allows to connect an external foot switch located by the treatment table.



ANTI-BACTERIAL COATING

Built to resist bacteria and prevent dirt from collecting in the recesses full of noisy medical machinery.



CLEANING WITH CHEMICALS

Robust front plate fitted with chemical resistant membrane allows for easy cleaning and maintenance.



GPIO

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

1

Use Cases

Reliable communication is crucial in hospitals. IP intercom systems integrate with existing infrastructure, ensuring rapid response in critical areas like operating rooms and isolation units, directly improving patient safety and staff efficiency.



HOSPITAL OPERATING ROOM

In hospital operating rooms, clear communication is crucial for medical teams. Intercom system helps doctors, nurses and staff coordinate effectively during procedures, ensuring accurate information flow and quick responses. This contributes to a safer environment for patients.



LABORATORY

In laboratories, reliable communication is vital for precision and safety. Intercoms enable quick information exchange between staff, which is important for experiments and when working with dangerous materials. They facilitate real-time consultation, instruction and emergency response. In clean labs, intercoms with anti-bacterial coatings help maintain a sterile environment, contributing to efficiency and minimizing errors.



ISOLATION ROOMS

Isolation rooms in hospitals require reliable communication to protect both patients and staff. Intercoms allow for clear communication without the need for direct contact, reducing the risk of contamination. This is crucial for rooms with highly infectious patients. Special intercoms with smooth, easy-to-clean surfaces can further support hygiene protocols. Intercoms help medical staff monitor patients, provide instructions and respond quickly to emergencies, all while minimizing the spread of infection.

Yellow Software

Yellow software acts as a central hub that allows for efficient monitoring, control and integration of intercoms within a broader security framework.





CENTRALIZED MANAGEMENT

Yellow provides a single interface for monitoring and managing intercoms, even if they are installed across multiple locations.



INTEGRATION

Yellow can integrate intercom systems with other security systems, such as PAVA systems, improving overall security and communication capabilities.



GRAPHICAL INTERFACE

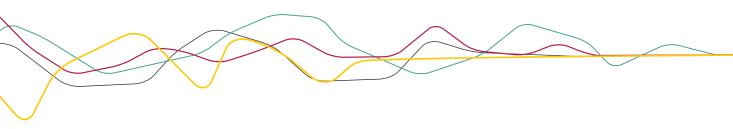
Yellow offers a visual representation of intercom devices and their status within a facility. This allows security personnel to quickly identify the location of an intercom and its operational status.



VOIP COMMUNICATION

Yellow facilitates the sending of messages via VoIP to broadcast groups within the PAVA system configuration.





Ambient System products are continually improved. All specifications are therefore subject to change without prior notice.

EN / 05.2025