

INTEGRATED FIRE AND SECURITY SOLUTIONS

Maximum protection for buildings







Johnson Controls: expert qualified in building protection

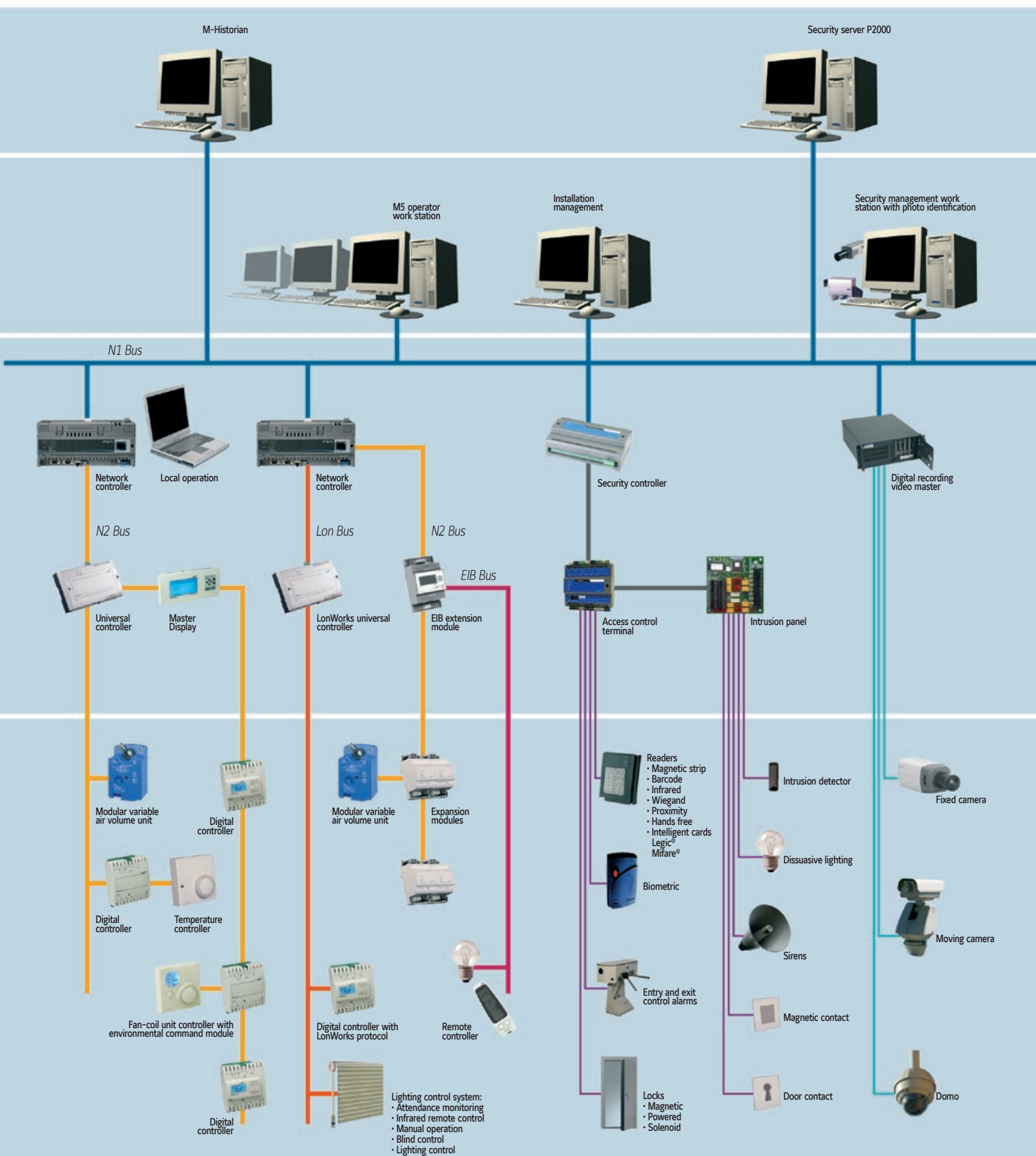
Johnson Controls is the recognised world leader in integrating systems, committed to the creation of quality, healthy and safe building environments that use energy efficiently and productively. Our solutions include the integration of fire, security and building management systems, helping our clients to protect their employees, assets and intellectual property.

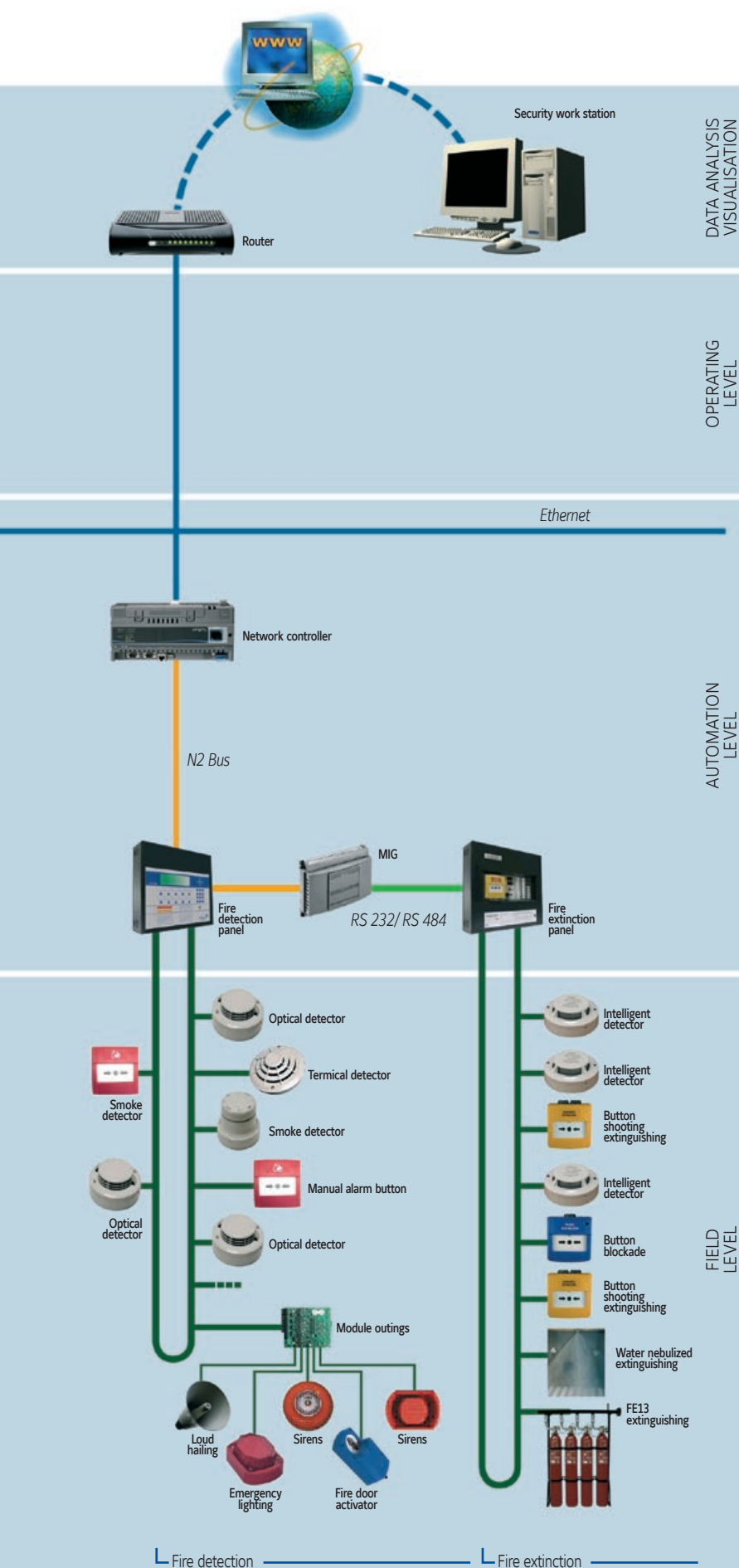
As a single supplier, **Johnson Controls** is perfectly prepared to integrate the most complex aspects of a wide range of products and systems. The result is the best protection for owners and users of buildings. Our solutions cover all of the stages of the process, from the complete initial study of their needs and system start-up, to a continuous programme of maintenance and technical support.

Improvement of building output

By working directly with the clients and understanding their needs, **Johnson Controls** can optimise the buildings and working environments, reducing the risks and responsibilities, giving a protected work area. The risks and responsibilities include losses of assets and intellectual property, personal harm, prevention of fraud, etc. We also increase the output and reduce the operating risks and management and/or asset costs and the employee data shared through the system, which increases returns on investment.

The ISO 9001 certification of **Johnson Controls** and our professional standards completed over 60 years guarantee high output and reliability. This ensures that your system will be designed competitively, installed efficiently and suitably maintained, all with good service and 100% of the total power.





From risk analysis to system installation

The starting point for evaluating needs with regards to building management is our risk analysis, made with three objectives:

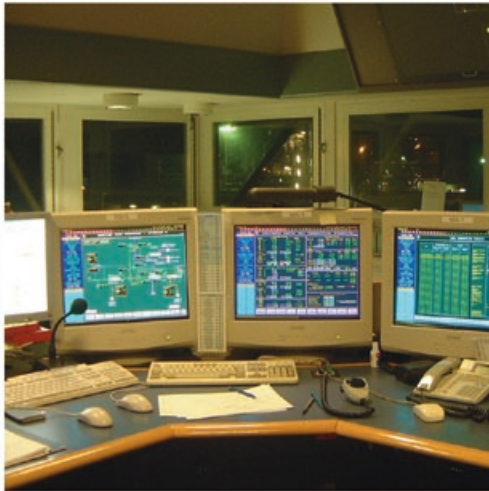
- To evaluate the risk and define the critical goods
- To quantify the risk and establish that it is unacceptable.
- To determine what measures and costs are required to reduce the unacceptable risks to an acceptable level.

Having identified all of the risks and having concluded on the analysis of the cost saving, a detailed proposal will be presented for the protection plan. The **Johnson Controls** solutions are designed as a global integrated system without individual parts. The system architecture provides total flexibility and scalability, and allows the inclusion of current and future user requirements.

Our solutions are presented in detail and include

- List of equipment and locations
- Installation
- Project management
- Start-up
- Plans
- Guarantees
- Maintenance
- Budget

We also guarantee safe, trouble-free installation, operative from the time the system is delivered.



Protection without boundaries

Today, remote management of installations is something common. Centralised data brought in from multiple locations requires all the technical processes to be managed at all times, regardless of the distance.

For multinationals, our system has the added advantage of being globally integrated, of being supplied by a single supplier and being maintained by the broad network of **Johnson Controls** local offices. Today, more than 50,000 non-residential installations around the world trust the experience of **Johnson Controls** to protect their assets effectively and safely.

Our solutions are being used in such diverse sectors as:

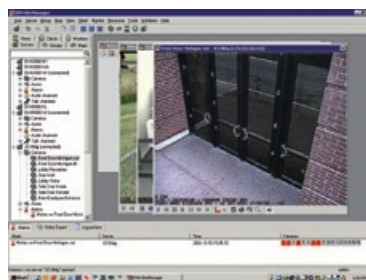
- Administration
- Airports
- Schools and universities
- Insurance companies
- Defence
- Office buildings
- Factories
- Car industry
- Penitentiary institutions
- Petrochemical companies
- Financial sector
- Hospital sector
- Services
- Information technologies
- Transport



Electronic surveillance

Our systems offer safe protection against all intrusions, vandalism and fire.

All the risk areas are monitored and the type and location of the alarms is easily identified by the user graphic interface. On the same screen, the emergency protocols indicate the right action, with the automatic reply option. Effortless surveillance and control of a broad, complex number of areas is also possible with thousands of alarms, as the location of the alarm is instantly found on maps of the installation and detailed drawings of the building.



Car park management

The management of controlled car parks is an important element in the complete security offer of **Johnson Controls**. With the **Johnson Controls** solutions it is possible to know that the spaces are only occupied by your employees. For extra prevention and security, emergency help points may be integrated with CCTV systems used to watch over the parking areas. The smoke hazard alerts and the fire detection systems improve the security levels. Whatever the parking needs, **Johnson Controls** provides the best solution for identifying the type and the location of the alarm at a single glance.





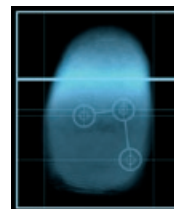
To assure risk areas

The **Johnson Controls** security management system is a main part of the software for managing and identifying employees. It offers access control, photo identification, alarm management and an employee database. The system assures the building and at the same time allows freedom of movement through the facilities for authorised staff, storing the transactions and generating an action audit log.

The flexibility of the system allows the access privileges of an individual or a group to be defined by location, area or door, including associated time bands, for example working times.

In addition to the function of access control, the main one of the system, the complete report degeneration software can be used to generate lists of the meeting points in evacuation checks. Many other existing reports can offer a better understanding of the use of the installations and allow decision-taking on the management of energy and HAV.

The use of biometric devices, such as fingerprints or iris identification through access cards with photo identification will increase security. A combination of access controls with physical barriers, such as turnstiles or revolving doors and/or passing points with metal detectors, is an ideal solution for places with sufficient space.



All at a glimpse: CCTV

A suitably designed closed-circuit television (CCTV) system offers a proven means of dissuading intruders and documentary evidence with the recording system.

Remote CCTV systems are the cheapest means for assuring your goods, especially when they are integrated in the **Johnson Controls** security system for managing one or several installations at the same time.

The user graphic interface offers operators intuitive control of complex facilities, allowing instant notification of alarm activation and cameras to be selected through the maps of the facilities and the floor diagrams. As an added element, the event monitor shows the state and priority of the alarms.

Johnson Controls has a solution for all large and small system requirements, from a simple camera and monitor to multiple cameras and control applications.



Avoid risks early: smoke and fire detection

In an emergency, early detection of the danger is vital for achieving immediate assistance. Heat and flames are not the only risks for people in a building: the smoke caused can be even more dangerous. Just five breaths of toxic smoke can cause unconsciousness, which enormously delays an evacuation. Modern fire detection and contention systems, including smoke elimination, have tremendous potential in protecting human lives.

From early detection to control of the emergency and evacuation of the building, the **Johnson Controls** intelligent controls give full protection for human lives and the goods in the building.

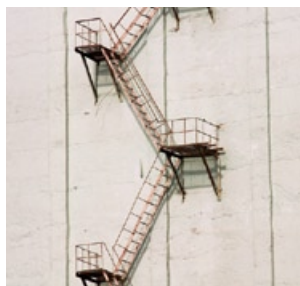


In the event of emergency: choose the escape routes with no smoke

Our units prevent dangerous gases entering the building's ventilation systems. The fire door activators in the smoke evacuation system reply to the signal from the fire detection panel to ensure that the smoke and toxic gases can not be dispersed through the ventilation system. The escape routes are therefore smoke-free and offer safe channels when carrying out an evacuation.

As a founding member of the Smoke Elimination Action Group (Grupo de Acción para Eliminación de Humos - AGE), **Johnson Controls** is a pioneer in developing smoke elimination systems and fire prevention measures.

Independently of the **Johnson Controls** fire detection solution you choose, you can be sure that the dangerous gases will be eliminated fast and effectively.



Single management of your safety



Johnson Controls collects all the information from the monitored areas in a single system. The benefits of an integrated system are maximised with the shared use of the information and the prioritisation of alarms and replies.

We have a wide range of additional applications adapted to your specific needs, which, combined with your central system, give complete safety at an optimised cost, and a solution for the management of installations, which can be done from a single post.

Security

- Active control (tags)
- Biometric: iris recognition, fingerprints, hand geometry
- Logical computer security
- Life control
- Access controllers and security
- Perimeter protection
- Intelligent cards
- Presence control
- Barriers

Fires

- Interphones and communication
- Smoke extraction
- Loud hailing

Building management

- HAV
- Heating and ventilation
- Process data
- Technical alarms
- Maintenance and checking management



A structured service for maximum protection

In an emergency situation, only complete functionality of all the prevention and security systems can guarantee maximum protection for employees, visits and physical and intellectual properties of the building.

Our structured service starts with a detailed inspection to identify potential risks and provide personalised solutions, at an optimal cost. For every new installation, a project leader is assigned to supervise the correct installation of your system. The validation of the system, the planning and the visits for maintenance and remote diagnosis are the main advantages of our broad service network.

