INTARCON

Electronic control and monitoring

4.0
industry

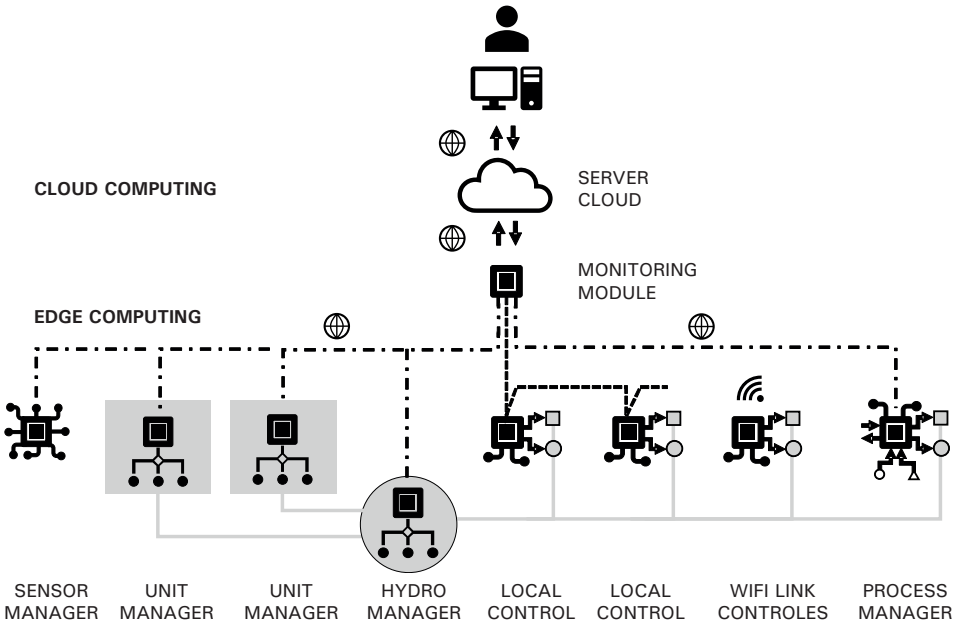
Reliability

Saving
energy

Advanced process control systems

- Highly versatile modular system.
- High reliability.
- Industry 4.0 technologies.

Control systems for thermal processes in industry, with modular architecture, quick to install and easily expandable and scalable. Control modules with customised programming and parameterisation, and cloud-based supervision system.



Process Manager control module

Control of processes under controlled temperature and humidity conditions, applicable to the control of processes in the food industry, such as:

- Temperature lowering.
- Ultra-freezing of foodstuffs.
- Drying, maturing and curing of hams, cheeses and sausages.
- Ripening and degreening of fruit.

Extensive possibilities for control and monitoring of various process parameters:

- Control of ambient temperature and humidity conditions.
- Control of ventilation and air diffusion.
- Controlled atmosphere management (e.g. CO_2 concentration, ethylene, etc.).
- Control of evaporators.
- Product control (internal temperature and PH).
- Control of phases and stages of the process.
- Recording of operating parameters.
- Hazard analysis and critical points (HACCP).
- Customised user interface.

Modular design

The modular design of the control and control system provides great versatility to the installation, high operational reliability, and easy and quick installation.

Sensorisation

Sensorisation of equipment and installations enables accurate and instantaneous knowledge of process status, intelligent control and facilitates decision making.

Edge Computing

Local computing enables real-time data processing, instantaneous, autonomous and reliable.

Hyperconnectivity

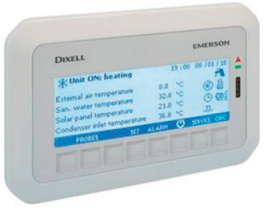
Control platform of INTARCON is equipped with hyperconnectivity to the cloud via fixed (Ethernet), wireless (Wifi) or mobile (4G) communication lines.

Cloud Computing

Cloud computing enables secure and unlimited data storage with wide and fast accessibility from anywhere.

Local control interface

Control modules are equipped with an optimised local interface to facilitate basic operations by the user. They also allow full interaction with the control parameterisation as well as data download via USB.



Hydro manager module control

Module for control of hydraulic systems for circulation and accumulation of cold and heat, applicable to the control of processes with hydraulic circuits, such as:

- Heat and cold distribution management by means of heat transfer fluid (glycol or brine).
- Hydrocooling of food products.
- Accumulation of cold in ice basins.
- Heat recovery from refrigeration condensers.
- Management of hot glycol defrosting of evaporators.

It has programmed functions for system control:

- Management and rotation of circulator pumps.
- Control of primary/secondary circuits.
- Management of control valves and mixing valves.
- Control of storage temperatures.
- Parallel control of thermal generators and chillers.

Unit manager control module

Module for the control of condensing units and chiller:

- Management and rotation of compressors and condensers.
- Control of compressor capacity according to demand.
- Control of multiple refrigeration circuits.
- Energy management with floating set points.
- Safety and alarms.

IntarSensor module

Probe reading and data acquisition modules for monitoring and control of equipment and processes:

- Pressure transducers.
- Temperature and humidity probes.
- Atmosphere control probes (CO_2, ethylene, etc.).
- Flow meters.
- Product immersion probes: temperature and PH.

Monitoring module

Remote monitoring and control module with kiconex technology, for data acquisition and storage in the cloud. It also allows remote parameterisation and master management of the installation.

- Geolocation of installations.
- Integration of multiple devices from different manufacturers.
- Layout of control panel and operation synoptic.
- Reading of parameters in real time.
- Historical data logging.
- Multi-user interface with access profiles.
- Intelligent programming.
- Energy management of the installation.
- Documentary management of the installation.

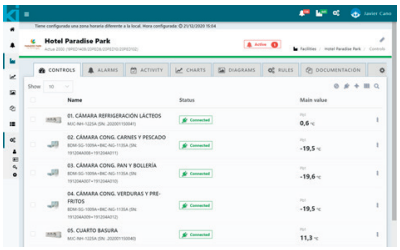
Control modules

The control modules are based on Emerson's iPRO platform. They use high-level programming based on extensively tested and proven control loops.

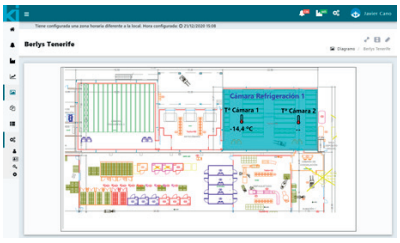
Dedicated monitoring interface

The centralised monitoring and control interface is specifically developed for the control of thermal processes, based on web technology, and accessible from any device with internet access.

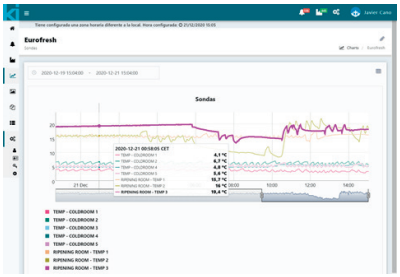
Geolocalisation of installations



Management of multiple devices

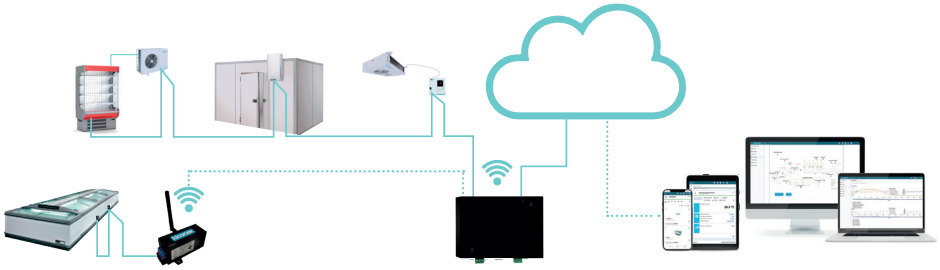


Layout and installation overviews



Graphical data representation

Connected services 4.0 | INTARCON connected services



- Safety and control.
- Operational reliability.
- Increased productivity.
- Energy savings.

Remote control, monitoring and auditing services for refrigeration equipment and installations using kiconex technology.

1. Remote access

Access the control of your installation from any device with an internet connection, receive notifications on your mobile phone and view the log of alarms, temperatures and other parameters.

Our condensing units and chiller come with pre-installed kiconex technology as standard, with internet connectivity, and an advanced data storage and cloud computing service.

We offer you basic access so that you can always keep your installation under control, know the evolution of storage temperatures and the operating status of your equipment.

In addition, with our professional access service you can remotely diagnose the proper functioning of the installation and coordinate a greater number of equipment and maintenance personnel.

2. Proactive monitoring

We offer you a remote support service to resolve any incident. Receive regular reports on the operating status and performance of your refrigeration installation, and suggestions for improvement.

Our support technicians, through remote access with secure connection, carry out a thorough analysis of the operating conditions of your installation and compare it with our extensive experience in auditing refrigeration installations.

With our corrective assistance service, we react to a problem in your installation to solve it remotely or diagnose the solution accurately.

To ensure the proper functioning of your installation and anticipate any problems, we offer a proactive diagnosis service, where we periodically check various preventive control points.

3. Smart optimisation

We optimise the operation of your refrigeration system. We look for the most reliable, most energy-efficient, most productive settings and we implement intelligent operation of the installation adapted to your needs.

Our engineers will audit your installation and collect the specifications, and then design a customised programme to optimise the refrigeration installation, integrating Industry 4.0 technologies, such as: sensorisation and hyperconnectivity of equipment, cloud computing, and intelligent and predictive programming.

With our analysis and optimisation service for your installation, we guarantee significant energy savings from the outset. By integrating intelligent and predictive programming we can take your installation to the highest level of efficiency.

kiconex monitoring and control platform

Access your installation from anywhere and from any device.

Visualise the operation of your installation graphically and intuitively.

Digital worker

And if your installation does not have the kiconex system and you just want to solve a specific problem, our digital operator is at your disposal.

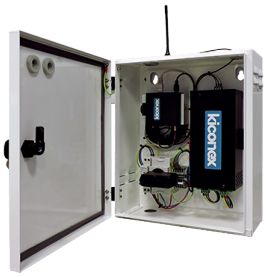


Table of services

	Remote access		Proactive monitoring		Smart optimisation	
	Basic	Professional	Corrective assistance	Proactive diagnosis	Analysis and optimisation	Smart programming
Remote access to equipment status	●	●	●	●	●	●
Remote configuration of parameters	●	●	●	●	●	●
Remote access to historical data	●	●	●	●	●	●
Display of alarms	●	●	●	●	●	●
Multi-user access		●	●	●	●	●
Operating diagrams and overviews		●	●	●	●	●
Advanced alarm management		●	●	●	●	●
Remote configuration support			●	●	●	●
Incident analysis and operating status			●	●	●	●
Periodic status reports				●	●	●
Analysis of improvements and corrective suggestions				●	●	●
Audit and optimisation analysis					●	
Sensorisation of the installation					○	○
Smart programming						●
Predictive programming						●

Remote access

Proactive monitoring

Smart optimisation