

# Food Service Data Management Cloud

**Cloud solution for Ho.Re.Ca., ice-cream & pastry, gas stations,  
farm food shops and small stores**



The Food Service Data Management Cloud (FS.Da.Ma.) solution, which includes both portal and Wi-Fi gateway, has been developed for the Food Service market with special attention to applications for Ho.Re.Ca., ice-cream & pastry, farm food shops, gas stations, butcheries, and small food stores. FS.Da.Ma. includes different services to optimize food preservation for the food industry, such as the collection and storage of necessary data for HACCP evaluation as well as alarm notifications of the connected refrigerated cabinets. The remote control allows actions on each single cabinet every time maintenance or parameter changes are needed, guaranteeing rapid response by a high-qualified staff.

FS.Da.Ma. uses a Wi-Fi gateway (named *IoT Gateway*) for the connection of Emerson devices compatible with the portal. The “Zero Touch Configuration” function simplifies installation operations, also for users without specific technical knowledge. The system is completely auto configurable: once a compatible Emerson device is connected to the Wi-Fi gateway, it will be automatically associated to the user account; all information you need about your device will be available directly on your mobile phone, tablet or PC. The integrity and security of the FS.Da.Ma. is continuously monitored and guaranteed by the Emerson cyber security team.

## 1. Main applications

The Food Service Data Management Cloud solution is designed for the Food Service market and is the ideal solution for Ho.Re.Ca, ice-cream & pastry, farm food shops, gas stations, butcheries, and small food stores.

FS.Da.Ma has been developed to be used by each user, from the shop owner to the service staff. Each user has access to services and information necessary aimed at optimizing tasks.



**Ho.Re.Ca**  
(Canteens, Hotels, Restaurants, Catering)

**Farm food shops**



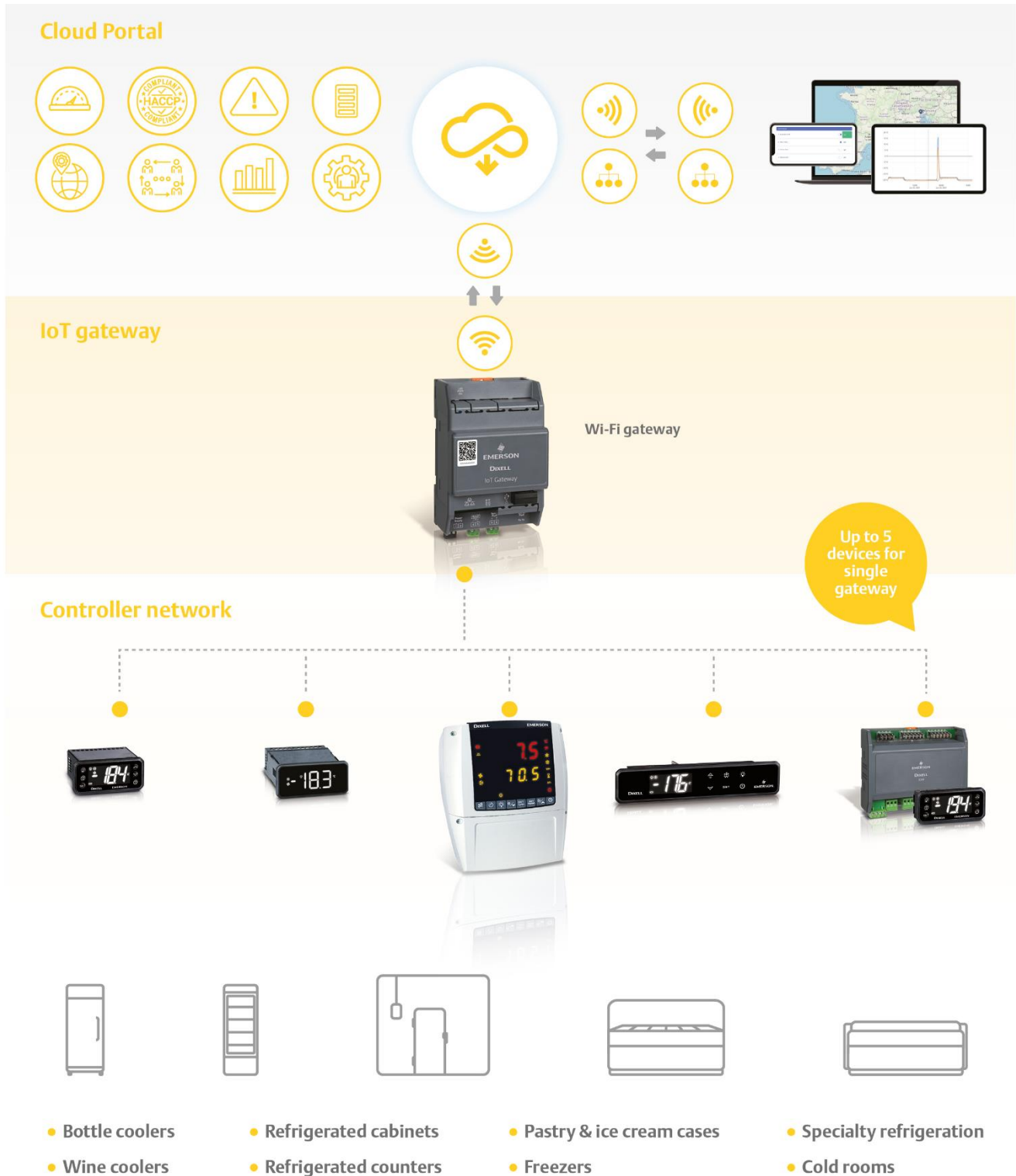
**Ice-cream & pastry**

**Small food stores and gas stations**



## 2. The complete solution

The complete solution comprises the Cloud portal, the IoT gateway, and of controllers directly installed on the units in the field. Emerson offers a management system that is completely integrated and highly flexible, adapting itself perfectly to the needs of any kind of users.



Note: please contact our customer service to receive further information as well as the list of compatible Emerson controllers.

### 3. Main features

#### 3.1 Less than 10 minutes to display your data online

Your installation is now easy to access in a few minutes, wherever you are, thanks to the automatic association of the controllers with the Cloud.

- Fast and intuitive association between the Gateway and the user's account on the Cloud with few and easy steps;
- Quick connection of the Gateway to an access point;
- The “**Zero Touch Configuration**” approach allows you to automatically connect the electronic controllers (compatible with Emerson products and connected to the IoT gateway) to the Cloud portal. The user doesn't need to create or validate any specific configuration before seeing application and the relative alarm data in the Cloud portal.



#### 3.2 Remote control



Quick and easy access to all information you need thanks to the remote control and the simple interaction with the single units on the field; it is possible to modify remotely all parameters through a modern and easy to use interface.

#### 3.3 Charts



It is possible to display charts of variable trends of a connected device. The screen allows selection of an interval from at least few hours to 3 months. Furthermore, both analog and digital variables can be compared in the same chart to better analyze the operation.

#### 3.4 Optimal preservation



FS.Da.Ma. allows data to be saved for 1 year per each connected device (temperature, alarms, and more) ensuring compliance with all international regulations of food safety (HACCP standards). During the valid licensing period, all data of connected devices can be exported in electronic format for consultation or for storage.

### 3.5 Alarm notifications



It is possible to set one or more email addresses for notifications or alarms. Alarms are managed in real time. Furthermore, it is possible to set up 2 virtual alarms per each gateway IoT; these are control conditions that are not managed by the connected device, and are monitored directly from the Cloud **FS.Da.Ma.** logic. An example is the wrong connection between a controller and the Cloud (alarm named “No Link”).

### 3.6 Multi user



To access to the Cloud **FS.Da.Ma.** portal, create an account (email & password). After the system validation, the user can start using all services included on the license. The space and services available for the user are defined as “user subscription”.

A “multi user” logic allows users to be enabled/disabled or added/removed from an existing subscription. In this way it is possible to modify the number of users that can interact with a connected device, and enable more users as “Owner”, which means the owner of special permissions for reading and writing on connected devices.

### 3.7 Cyber security



**FS.Da.Ma.** is continuously monitored with the goal of to avoiding possible interruptions caused by cyber-threats.

### 3.8 Optimized visualization for mobile devices (mobile phones and tablet)

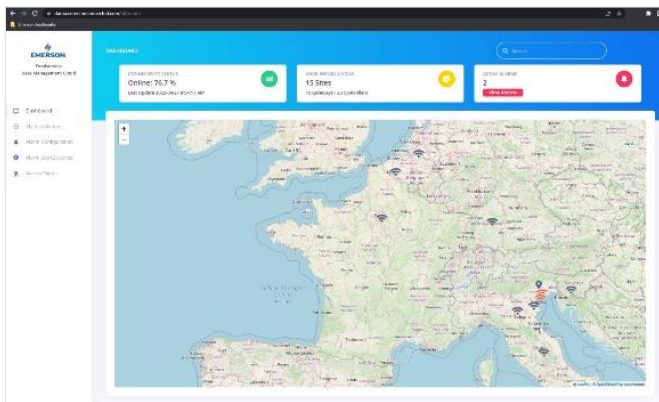


The portal pages, developed with responsive technology, provide an excellent display of information, independently of the type of device used (right image, text dimension and object positioning).

## 4. Cloud portal

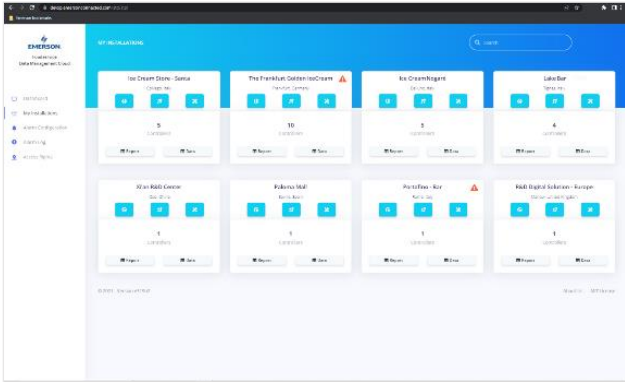
Both in new and existing stores, a simple IoT gateway installation can connect the controllers online into the Cloud portal. Once connected, data are retrieved from the asset and transferred over Wi-Fi network enabling the possibility for the customer to benefit from pre-defined services according to their needs. Users can access with a standard browser to the portal to download the HACCP report, or to change refrigeration settings. Security is guaranteed with accounts management and profile guarantee the access of data (critical parameters) for the correct refrigeration expert. Below are some of the main screens of the portal.

### 4.1 Performance meter and status of connected devices



Multiple kinds of information about the installation are clearly displayed in one screen, also using different colors, such as how many gateways and controllers are connected, and the network status (off-link notification). Immediate alarm notifications are sent in order to avoid food and energy waste.

## 4.2 Site data



Per each cabinet and controller installed the summary with all data and different charts is available.

## 4.3 Interactive map



A careful geographical data analytics helps to keep sites and equipment under control.

## 4.4 Parameter map management

The screenshot shows a table with columns for 'Variable', 'Parameters', and 'Unit'. It lists various parameters such as 'TEMP', 'HUMIDITY', 'CO2', 'PM2.5', etc., with their corresponding units and values. The table is filtered and sorted, with options for 'Export', 'Download map', and 'Alerts'.

The full parameter map can be downloaded automatically creating a Wizmate compatible file format to share with Service or other people. In this way, depending on the needs, it will be possible to modify one or more parameters through a simple parameter search filter (label) or modify all parameters related to a specific group (for example, Defrost).

## 4.5 Features

FEATURES	DESCRIPTION
Kind of cloud service	SaaS (Software as a Service)
Duration and type of licenses	License to use cloud services. One license per Gateway IoT. PROMO: 2 years of included cloud services CLOUD: annual or multi-annual with prepayment, services depending on the offer
Data availability	Always during the valid licensing period. Data are available for 1 month after license expiration. In case of not renewed license, all data will be deleted after 1 month.
Number of monitored variables	Depending on the electronic controller
Number of monitored alarms	Depending on the electronic controller
Number of virtual alarms	2 per device
Number of alarm notifications via email	20 per day per Gateway IoT
Max number of users	5 per Gateway IoT

## 5. IoT Gateway

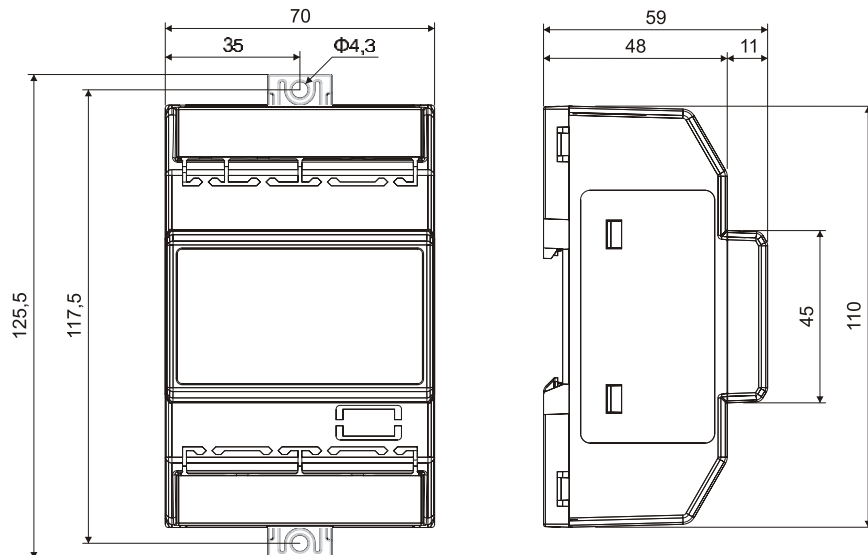
The IoT gateway, available in 4DIN format and with 24Vac power supply, allows you to connect a controller network to the Cloud intuitively and quickly.

### 5.1 Features

FEATURES	DESCRIPTION
Housing	Self-extinguishing PC/PC+ABS
Dimensions	4 DIN module 70x135mm with male and female connectors; depth 60mm
Mounting	DIN RAIL in an omega (3) din rail (EN 50022, DIN 43880)
Degree of protection	IP10
Power supply	24Vac +10/-15%, 50/60Hz; 20 to 36Vdc
Overvoltage category	II
Rated power	30VA (Vac), 25W (Vdc)
Rated impulse voltage	2500V
Software class	A
Terminal blocks	Plug-in terminal blocks, wire section between 0,5 and 2,5 mm <sup>2</sup> Max tightening force: 0.3 N/m for 3,5mm pitch, 0.4 N/m for 5,0mm pitch
Type of action	1
Pollution degree	2, non-condensing humidity
Ambient operating temperature and humidity	-10T50°C; 20-85 rH% (non-condensing humidity)
Shipping and storage temperature	-20T85°C; 20-85 rH% (non-condensing humidity)
Resistance to heat	UL 94 V-0
Purpose of control	Operating control
Construction of control	Incorporated control, intended to be used in Class I or Class II equipment



### 5.2 Dimensions



## 6. How to order

Two kits (IoT gateway + power supply + Wi-Fi dongle) are available and differ for the maximum number of Emerson electronic controllers that can be connected to the Cloud portal.

### 6.1 PROMO OFFER: VALID UNTIL 30.06.2023

NAME		DESCRIPTION
PROMO 3	X0DZF0090003-S01 KIT IPL600D CLOUD WIFI PROMO 3	Up to 3 Emerson electronic controllers per IoT Gateway. <b>2 YEARS of included cloud services.</b>
PROMO 5	X0DZF0090005-S01 KIT IPL600D CLOUD WIFI PROMO 5	Up to 5 Emerson electronic controllers per IoT Gateway. <b>2 years of included cloud services.</b>



### 6.2 STANDARD OFFER: FROM 01.07.2023

NAME	DESCRIPTION
CLOUD 3	Up to 3 Emerson electronic controllers per IoT Gateway. <b>Cloud services require a license purchased separately.</b>
CLOUD 5	Up to 5 Emerson electronic controllers per IoT Gateway. <b>Cloud services require a license purchased separately.</b>

## 7. Pricing

Please contact our Sales department for product pricing and further information.

## 8. Availability and orders

FS.Da.Ma. is available. Please contact our Sales dpt. for delivery times.