

EG222

Smart Edge Gateway

For Industry 4.0 and IoT, the EG222 Smart Edge Gateway offers an innovative solution for fully networked and automated production. It enables you to control data processing yourself and monitor your production processes from anywhere.



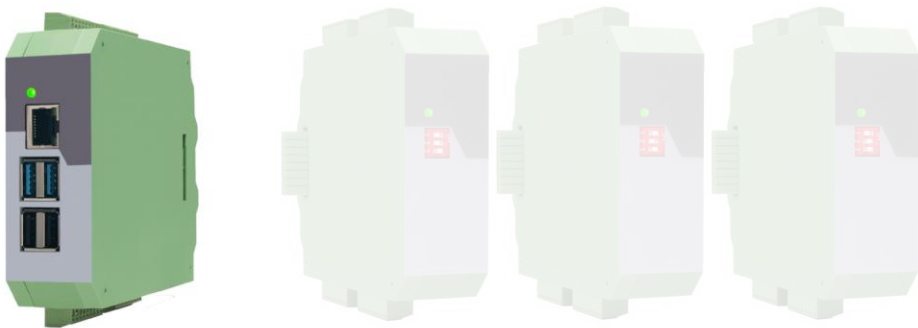
General features

- Highlights
- Master module EG222
- Extension module EM222
- sens2cloud
- Applications

- Flexible connection of various sensor signals and secure transmission of data to the cloud via TLS protocol
- MQTTS container as data layer
- Options for up to 3 pluggable expansion modules
- Automatic hardware detection and dynamic adaptation of web backend and frontend
- The firmware and device parameters are protected by a multi-level security procedure and dongle
- Visualization and configuration via sens2cloud web application
- Various data packages can be booked

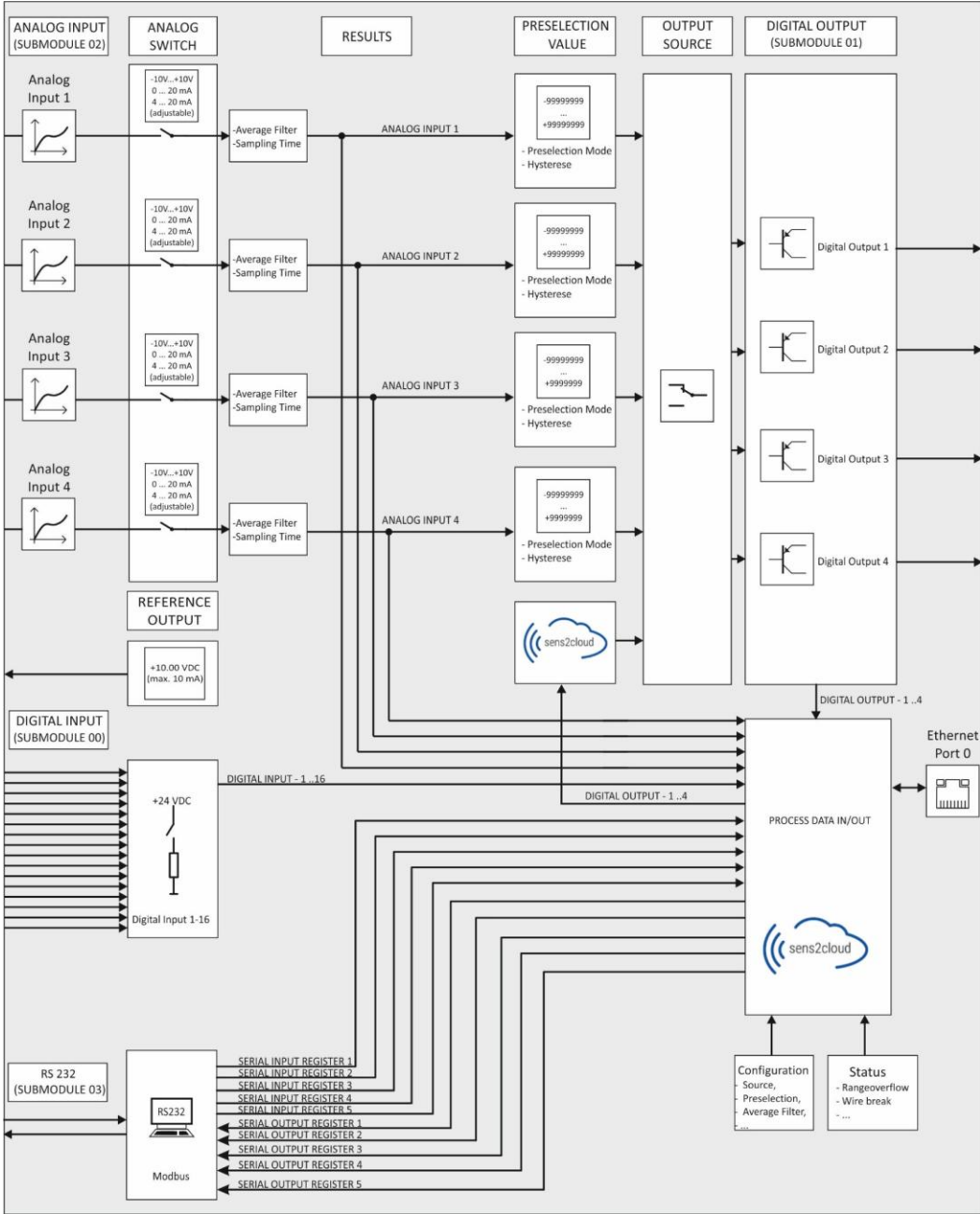
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- RJ45 interface: MQTTS protocol
- 4 USB interface
- 4 analog inputs
- 16 digital inputs
- 4 digital outputs
- Modbus Interface (Gateway)
- Bus connector for extension modules

Function diagram EG222



General features

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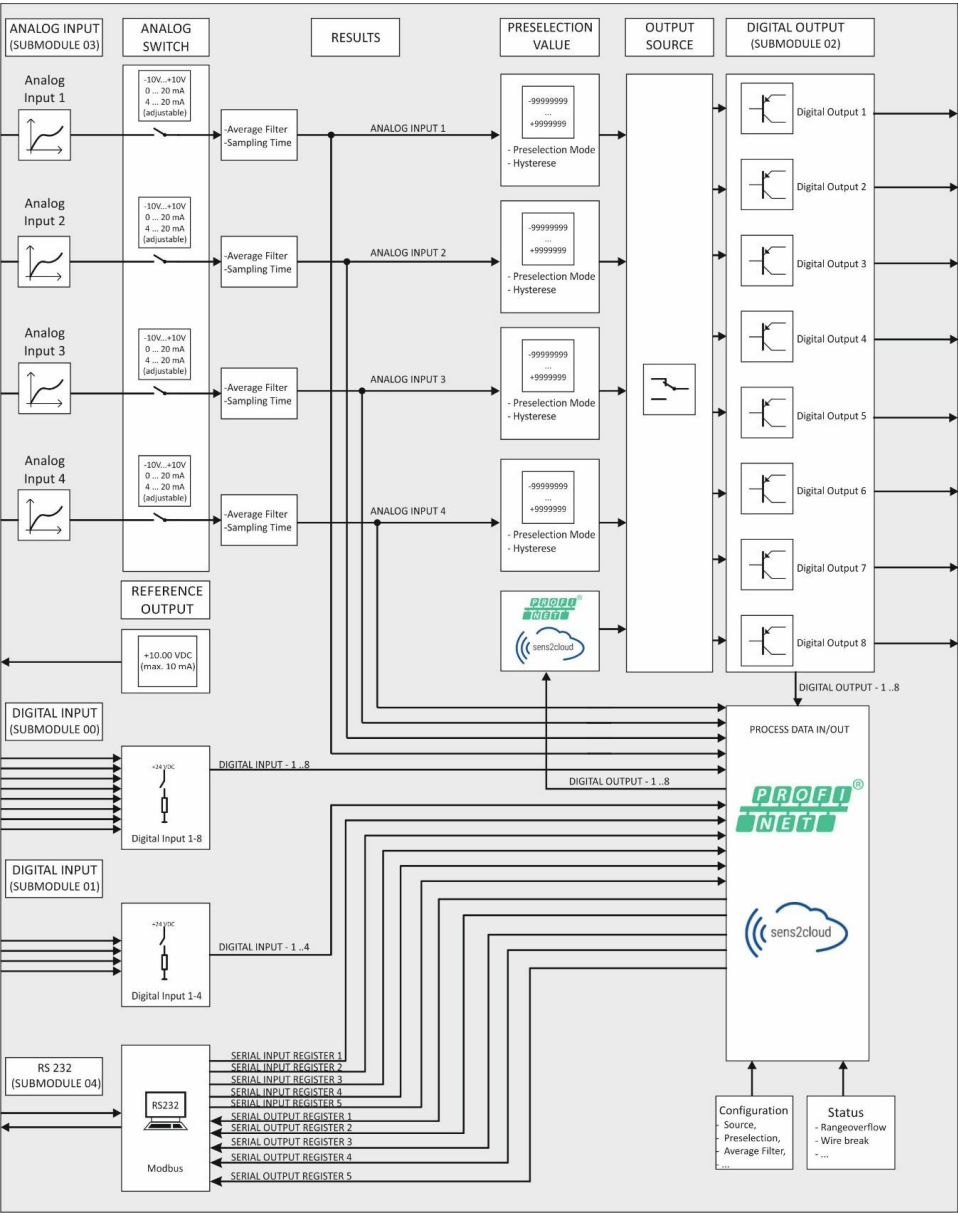
- 4 analog inputs
- 12 digital inputs
- 8 digital outputs
- Modbus Interface (Gateway)
- Bus connector for additional extension modules:

Frequencies

Impulses

SSI signals

Function diagram EM222



sens2cloud

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- Cloud: Hosted in the EU for maximum security and availability
- Data is securely protected against unauthorized access by two-factor authentication
- Company and user profiles and their authorizations freely adjustable - CI also taken into account
- Analysis of data through customizable dashboards
- Parameterization of the devices
- Management and parameterization of all registered devices
- API interface for easy integration into existing third-party applications

sens2cloud Dashboard – Manage Companies

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The screenshot displays the sens2cloud dashboard interface. On the left is a sidebar menu with the motrona logo at the top, followed by 'Dashboard', 'Devices' (with a dropdown for 'Exhibition Device' containing 'EG220' and 'EM220'), 'Users', 'API Settings', 'Manage companies' (highlighted in blue), and 'motrona Exhibition' (with a dropdown). Below the menu are 'TOPOLOGY' links for 'Upload Device Topology' and 'Download Device Topology', language toggles for 'EN' and 'DE', and a user profile for 'Admin'. The main content area is titled 'motrona GmbH' and includes an 'Edit' button. It contains three sections: 'Company Details' with fields for 'COMPANY NAME' (motrona GmbH), 'LOCATION' (Germany), 'BRAND COLOR' (#2196F3), and 'MEMBERS' (6); 'Company Image' showing a placeholder 'M' for 'motrona GmbH' with the note 'No image configured'; and a 'Danger Zone' with a 'Delete company' warning and a red 'Delete' button.

sens2cloud Dashboard – Device Management

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The screenshot shows the sens2cloud Dashboard – Device Management interface. On the left is a sidebar with a blue header containing the "MG" logo. The sidebar menu includes: Dashboard, Devices (with a dropdown arrow), Users, API Settings, Manage companies, and a selected item "motrona GmbH" (with a dropdown arrow). Below the menu are links for "Upload Device Topology" and "Download Device Topology", followed by language toggles "EN" and "DE". At the bottom of the sidebar is a user profile for "Admin" with a blue "AD" icon. The main content area is titled "Devices" and has a search bar and a "+ Add new device" button. It displays three device cards. The first card, "Entwicklung", shows "Last seen: 19m ago", "Offline" status, and "Acknowledged" status, with a "Connect" button. The second card, "Exhibition Device 2", shows "Last seen: 3s ago", "Online" status, and "Unacknowledged" status, with a "Connect" button. The third card, "TechmakersOffice01", shows "Last seen: 1d ago", "Offline" status, and "Acknowledged" status, with a "Connect" button.

sens2cloud Dashboard – Parameterization Menu

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MG

Dashboard

Devices

- Entwicklung
- EG222
- EM222
- EM222
- EM222

Exhibition Device 2

TechmakersOffice01

Users

API Settings

Manage companies

motrona GmbH

EN DE

Admin Admin

← Entwicklung / EG222

Digital Input Menu (16xDI) Digital Output Menu (4xDO) **Analog Input Menu (4xAI)** Serial Menu (1xSI)

Channel #	Analog Input	Characteristic	Configuration	Average Filter	Sampling Time (s)	Out of range	Wire break	Publish period
1	1.722 V / mA	Voltage	0..20mA	Off	0.010	no	no	1 Seconds
2	1.732 V / mA	Voltage	0..20mA	Off	0.010	no	no	1 Seconds
3	1.750 V / mA	Voltage	0..20mA	Off	0.010	no	no	1 Seconds
4	1.770 V / mA	Voltage	0..20mA	Off	0.010	no	no	1 Seconds

Clear Save

sens2cloud Dashboard Creator

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MG

Dashboard

Devices

Entwicklung

EG222

EM222

EM222

EM222

Exhibition Device 2

TechmakersOffice01

Users

API Settings

Manage companies

MG motrona GmbH

EN DE

AD Admin

Admin

← Dashboard / Add chart

Title

Test

Chart type

Line

Device

Entwicklung

Module

EG222

Submodule

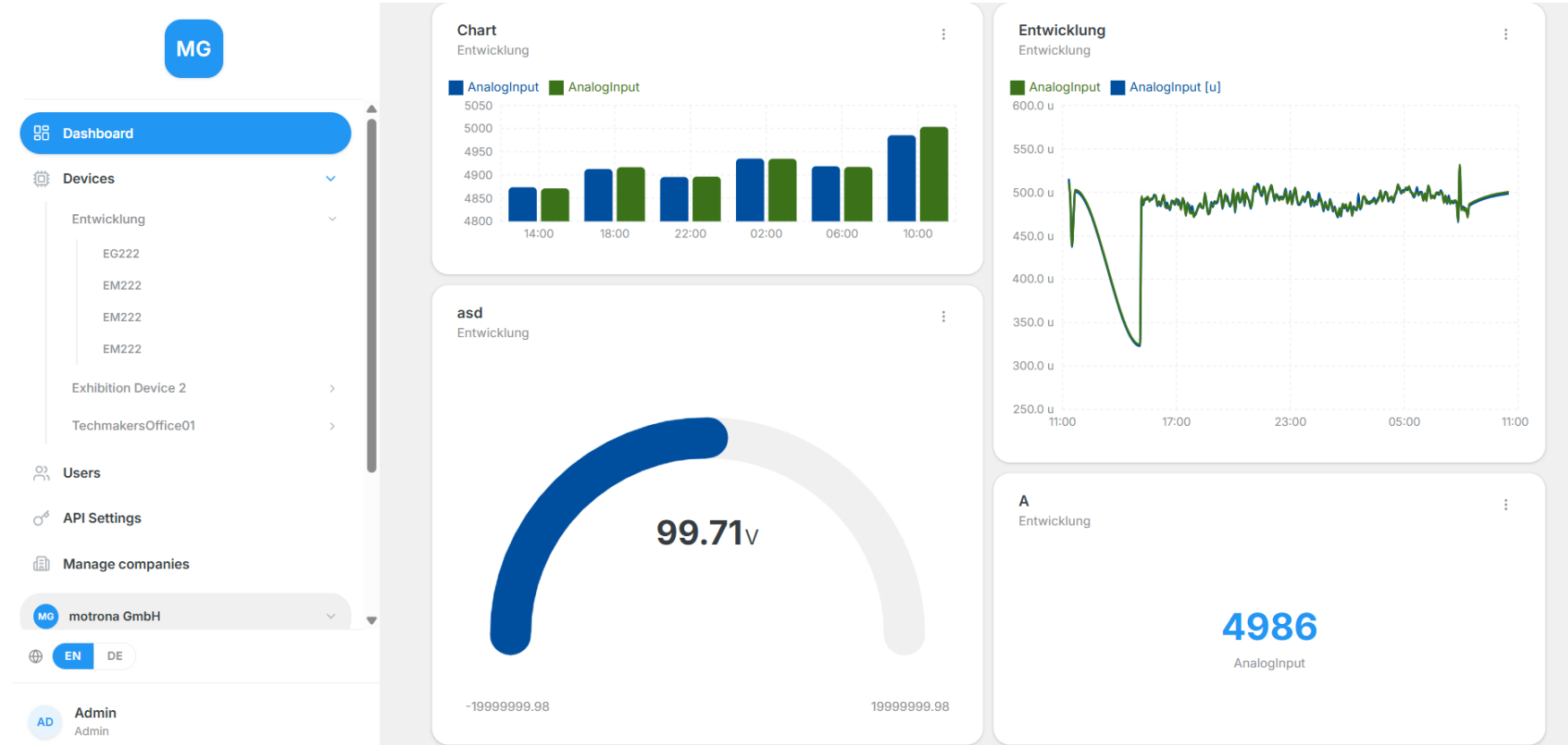
Digital Input Menu (16xDI)

Channel 1 : Input State - [Off/On]

Module

sens2cloud Dashboard

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Applications

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- Mechanical engineering
- Automation technology
- Conveyor technology
- Robotics
- Cranes

THANK YOU
for your kind attention.

CONTACT

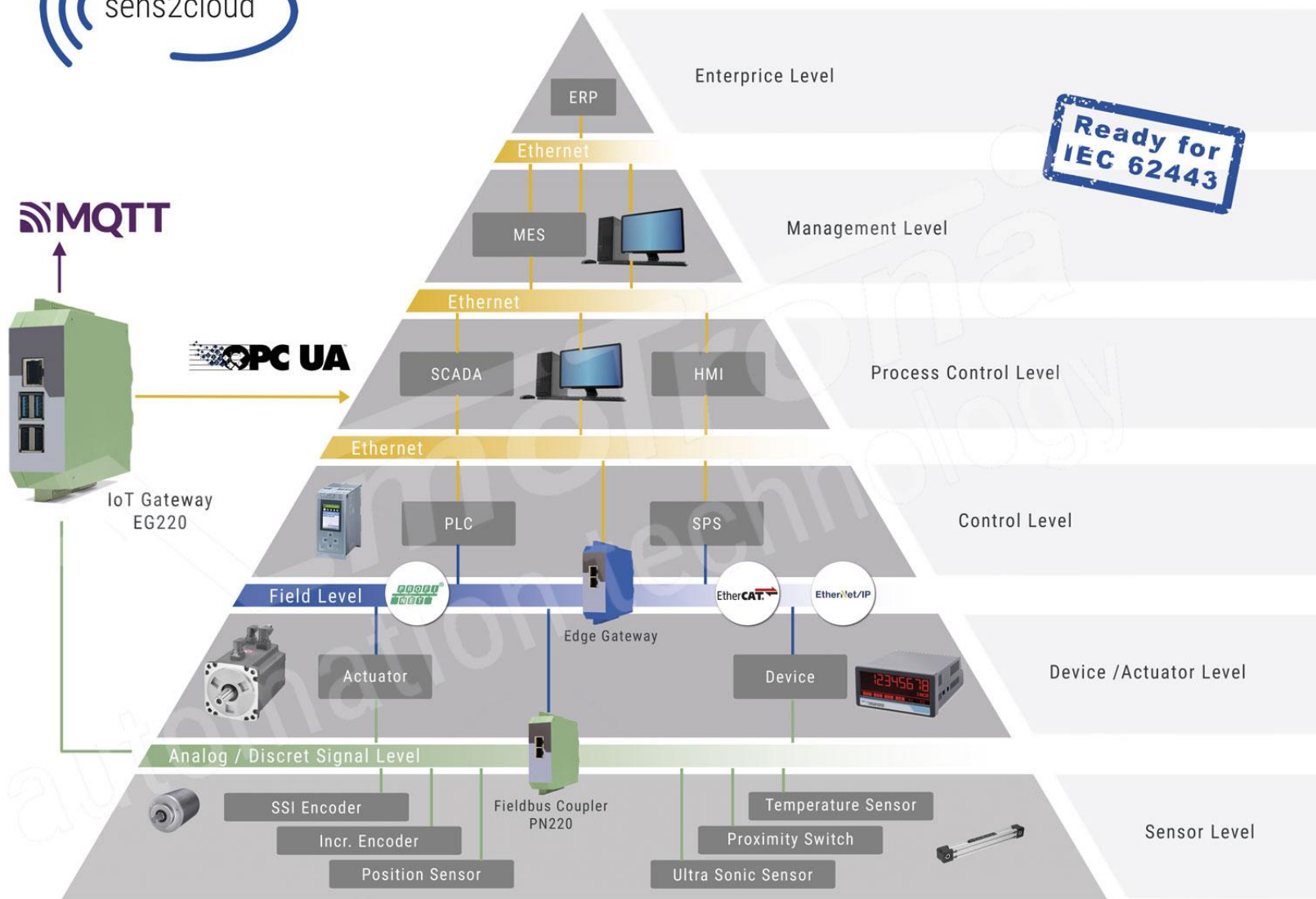


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Cranes

EG222 for processing crane sensors:

- Load cells
- Pressure transducers
- Force sensors
- Strain sensors
- Inclination sensors
- Rotary encoders
- Draw-wire transducers
- Distance measuring systems

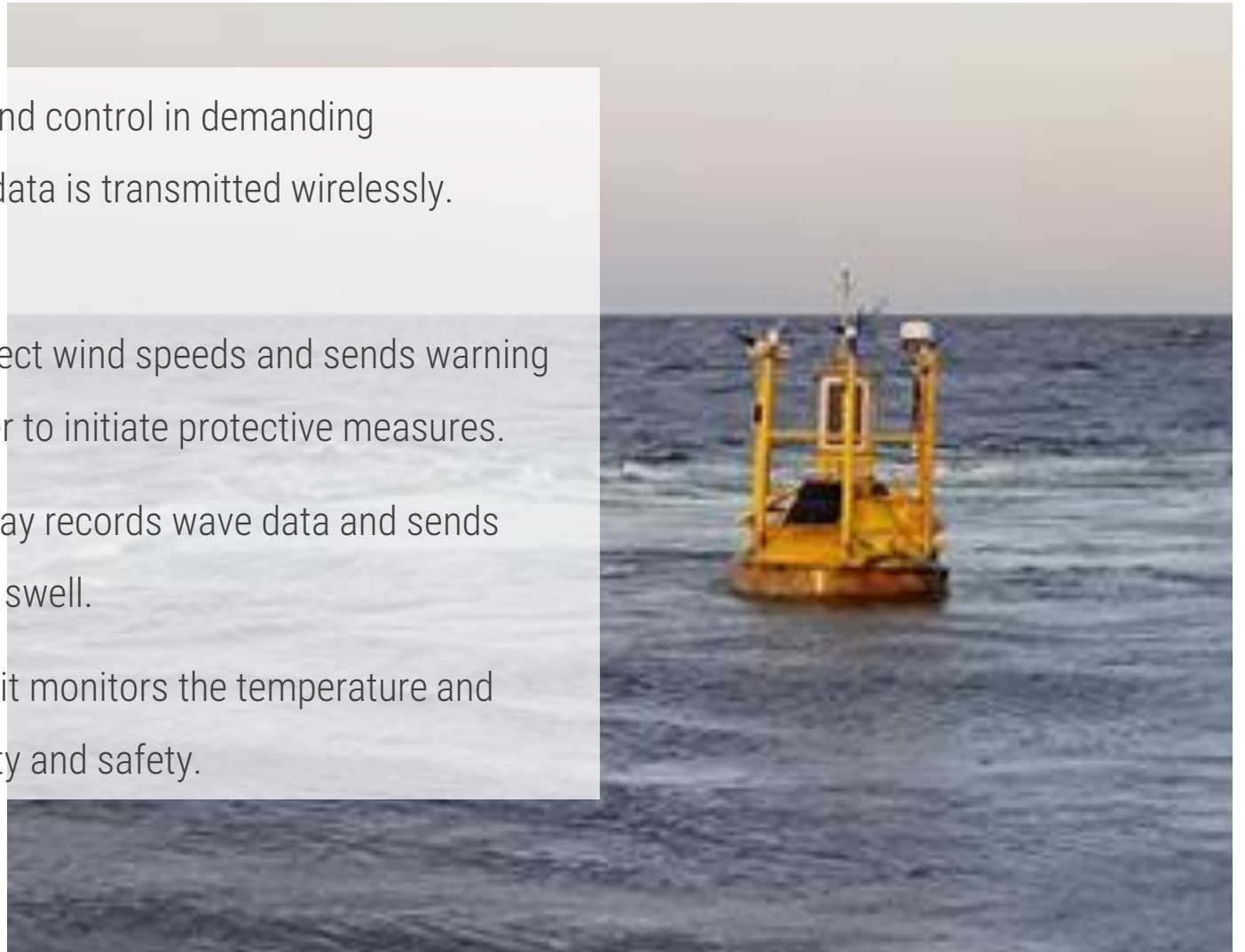


Demanding monitoring applications on the high seas

The robust EG222 Edge Gateway is ideal for monitoring and control in demanding environments. In conjunction with the GSM LTE module, data is transmitted wirelessly.

Applications can be found, for example, in:

- Storm warning: The EG222 uses anemometers to detect wind speeds and sends warning messages via GSM LTE in the event of danger in order to initiate protective measures.
- Wave monitoring: On coasts or in shipping, the gateway records wave data and sends automatic alarms for safety in the event of increased swell.
- Temperature measurement: In offshore installations, it monitors the temperature and notifies the user in case of deviations to ensure quality and safety.



Reliable remote control and monitoring of locks

The EG222 Edge Gateway ensures reliable monitoring and control of lock systems. It measures the water level as well as the position of the lock gates and sends the data wirelessly to the cloud via a GSM LTE module. Based on the information collected, the lock gates open and close automatically, which increases efficiency and safety, among other things.

