



# HOOC LoRa



Over the years, your technical infrastructure has taken on a life of its own and disruptions are almost a daily occurrence? Then, ...

## IT'S TIME TO TRY SOMETHING NEW.

**Test our HOOC LoRa solution. Thanks to its actuators and sensors, it will allow you to send small data packages over long distances – regardless of the type and age of your technical infrastructure.**

Contact your distributor and choose your personal HOOC LoRa (gateway, actuators and sensors). Once the package arrived, connect the gateway to the internet, install the actuator and the sensors to your system and get it started. Due to its «low power / wide area» network, you can now transfer your data at low power over long distances. What makes LoRa so unique is the fact that it offers you a high deep indoor coverage. This means that in enclosed, isolated or large-area spaces (basements, cellars or cities) where other fieldbus protocols with their necessary wiring and cabling can be costly or difficult to install, the radio technology LoRa won't let you down. So whether you use it in the fields of smart factory, smart farming or smart city – HOOC LoRa offers you a suitable alternative to fair prices.

### DID YOU KNOW?

- ... that you can even automatically inform the technical service in case of system failure (together with HOOC Alert)?
- ... you can customize our app with your own company branding?
- ... that we also offer integrated solutions (HOOC Embedded) and customized products (HOOC Customize)?



### WHAT'S IN FOR YOU

HOOC LoRa offers you ...

- a cost-effective transmission of sensor data
- a simple plug&play solution
- a first-level support provided by your distributor
- a wide range of sensors and actuators from renowned manufacturers
- simple and efficient retrofit of your older installations



### A THING OF THE PAST

No more ...

- annoying malfunctions and unnoticed system failures
- recurring technical problems (cold shower water in residential buildings, unheated school rooms, etc.)
- expensive water damage in basements, garages or parking lots
- unnecessary costs due to inefficient plant management
- long travel distances for on-site monitoring



### A MUST-HAVE

HOOC LoRa is a real game-changer for ...

- Schools and administrations
- Hotels and resorts
- Smart city, smart farming and smart factory

Let's get down to the nitty-gritty of ...

# THE TECHNOLOGY BEHIND HOOC LORA



## SENSORS AND ACTUATORS

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- pre-configured sensors and actuators
- battery-powered options
- other actuators/sensors on request
- easy registration of LoRa devices in the HOOC ManagementPortal



## LORAWAN NETWORK

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- a LoRaWAN network provided by HOOC (and operated by its customers)
- a minimization of interference and more data transfer efficiency
- a low power consumption thanks to spread spectrum techniques
- a penetration of buildings down to basements and control rooms (deep indoor coverage)



## GATEWAYS

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- Connect F: Specific gateway for LoRaWAN radio coverage
- Connect F: Packet forwarder for all HOOC LoRa sensors
- Connect F: Internet connection via LAN or WLAN interface
- Connect M: Mobile network



## INTERFACES

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- integrated HOOC REST API for real-time access to data points
- customer specific API interfaces
- connection to external systems
- protocol converter (Modbus TCP/KNX) for transmission of measured values to local control systems



## DATA MANAGEMENT

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- trend data display on the HOOC ClientApp
- data management via the HOOC ManagementPortal
- radio field measurement on the packet monitor (propagation factor, reception power, etc.).
- data storage for up to two years



## SMART USER MANAGEMENT

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- individual user registration and access authorization
- access log for optimal tracking and tracing
- the possibility of blocking or releasing higher hierarchy levels



## RETROFITTING

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- connecting old installations with sensors/actuators via LoRa technology
- data exchange between KNX, Modbus, LoRa and local controls thanks to protocol converter
- efficiency increase in data transfer thanks to low-power wide area network



## COMPATIBILITY WITH OTHER SOLUTIONS

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- HOOC Alert for smart alarming in case of malfunctions
- HOOC Control and DataCollect for intelligent system monitoring
- HOOC Access for remote access (VPN)



## THE HOOC LORA MECHANISM

**LoRaWan radio connection:** The user (technical manager, end customer, etc.) logs in with the HOOC Client-App or the HOOC ManagementPortal. Over the HOOC Cloud and by means of the HOOC gateway, he will then be able to monitor and check his systems (heating, air conditioning, etc.). All the plant values, user access and system data can be stored for 3 up to 24 months. Thus, LoRaWAN represents an interesting alternative radio technology for remote control as well as a helpful service tool for the exchange among professionals.

## Sensors

# MEASUREMENTS

### INDOOR CLIMAT MEASUREMENT

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- ERS
- ERS-CO<sub>2</sub>
- EMS

### MOTION DETECTION

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- ERS
- ERS-CO<sub>2</sub>

### CO<sub>2</sub> MEASUREMENT

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- ERS-CO<sub>2</sub>

### DOOR AND WINDOW MONITORING

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- EMS



#### ERS

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The ERS is a battery-powered sensor with a motion detector as well as an integrated antenna for measuring the indoor climate (temperature, humidity, brightness, etc.).



#### EMS

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The EMS is an approx. 50 mm small battery-operated sensor which, in addition to measuring the indoor climate, can detect water leaks and can also be used for door or window monitoring.

### WATER LEAK DETECTION

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- EMS

### MEASUREMENT OF OUTDOOR INSTALLATIONS

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- ELT2-HP-ST

### POWER CONSUMPTION MEASUREMENT

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- LW12-MET

### INTERFERENCE AND DRY CONTACT

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- ELT2-HP-ST



#### ERS-CO<sub>2</sub>

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The ERS-CO<sub>2</sub> has the same functionalities as a standard ERS sensor, but with an additional integrated CO<sub>2</sub> measurement.



#### ELT2-HP-ST

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The ELT2-HP-ST is housed in an IP67 enclosure and is specifically designed for outdoor use. It has an integrated temperature and humidity sensor as well as a connector for an additional temperature sensor and a digital input.

## The actuators

# REMOTE I/O

### RELAY SWITCH OUTPUTS

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- LW13-MIO
- LW13-IO
- LW12-MET
- LW06-KIO

### 24 VAC INPUTS

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- LW13-MIO

### 230 VAC OUTPUTS

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- LW13-IO
- LW12-MET
- LW06-KIO



**LW13IO**

The LW13-IO has a galvanically isolated 230 VAC input and a relay switch output.



**LW12MET**

The LW12-MET has a galvanically isolated 230 VAC input and a relay switch output. The device also includes a sensor that can measure the power consumption of a 230 VAC consumer (up to 16 A).



**LW06KIO**

The LW06-KIO has four galvanically isolated 24 VAC inputs, one galvanically isolated 230 VAC input and two relay switch outputs.



**LW13MIO**

The LW13-MIO has sixteen galvanically isolated 24 VAC inputs and eight relay switch outputs.

## MORE INFOS

- For end customers:** Contact one of our distributors  
<https://www.hooc.ch/en-us/about-us/partners>
- For distributors:** Register under  
<https://disti-en.promo.hooc.ch>

Please find our latest videos, security features and product developments on our social media channels    

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