



# EBI 25 Wireless System

MONITORING OF TEMPERATURE, HUMIDITY, AND MANY OTHER MEASUREMENTS

**-ebro-**  
a xylem brand

# Online Monitoring of Temperature, Humidity and Many Other Measurements

The EBI 25 system for wireless monitoring of temperature, humidity and other measurements assures that perishable goods are produced and stored at the right conditions at all times. Other measurements can be integrated using Mod-bus over IP.



## Continuous monitoring

of all areas where food, pharmaceutical and medical products are produced and stored.

## Avoid loss of goods

with the continuous monitoring of all crucial temperature points - 24 hours on 365 days a year.



## Quick intervention before it is too late

with a very wide and flexible alarm management (notification via email or acoustical).



## Automatic documentation

through automatic recording, storage, and reporting of the measured data. Problems can easily be traced and audit reports can be generated instantly.



## Worldwide access to the measurement data

via internet - at any time, any place and any PC with internet and network access. Security is ensured using a login and password.

## Easy handling

saves time, efforts and energy.

# Applications

## Food sector

- Continuous monitoring of cooling equipment, cool rooms and deep-freeze rooms
- Monitoring of room temperatures and humidity values in a store

## Pharmaceutical / medical sector

- Continuous monitoring of temperature sensitive goods like blood plasma or medicine
- Temperature and humidity monitoring and other measurements in cooling chambers, clean rooms and incubators

# Benefits

## Food sector

- Compliance with the HACCP guidelines
- All devices according to DIN EN 12830
- Up to date reports always ready for food inspectors



## Pharmaceutical / medical sector

- GAMP and GxP compliance
- FDA 21 CFR Part 11 functionality
- Up to date reports generated on-demand for audits and inspections



# Technical Data

Type	EBI 25-T	EBI 25-TE	EBI 25-TX	EBI 25-TH
Probes	Internal	External	External for very deep temperatures	Internal: temperature External: humidity
Measurement range: temperature	-30 °C ... +60 °C	-40 °C ... +85 °C	-200 °C ... +199.9 °C	-30 °C ... +60 °C
Measurement range: humidity				0% rH ... 100% rH
Accuracy: temperature	±0.5 °C (-20 °C ... +40 °C) ±0.8 °C for the remaining measurement range	±0.5 °C (-20 °C ... +40 °C) ±0.8 °C (-30 °C ... -20 °C and +40 °C ... +60 °C) ±1.5 °C (-40 °C ... -30 °C and +60 °C ... +85 °C)	±2.0 °C (-200 °C ... +100 °C) ±0.5 °C (-100 °C ... -20 °C) ±0.4 °C (-20 °C ... +60 °C) ±0.5 °C (+60 °C ... +199.9 °C)	±0.5 °C (-20 °C ... +40 °C) ±0.8 °C for the remaining measurement range
Accuracy: humidity				±3 %
Resolution: temperature	0.1 °C	0.1 °C	0.1 °C	0.1 °C
Resolution: humidity				0.1% rH
Memory capacity	288 measurements	288 measurements	288 measurements	576 measurements (288 measurements per channel )
Sensor	NTC	NTC	Pt 1000	NTC
Protection class	IP 67	IP 67	IP 67	IP 20

## General technical data

Measurement interval	1 min. to 24 hours, adjustable
Radio frequency	868 MHz
Battery	3.6 V lithium (user replaceable)
Battery lifetime	Up to 2 years, depending on transmission rate
Storage temperature	-40 °C ... +70 °C

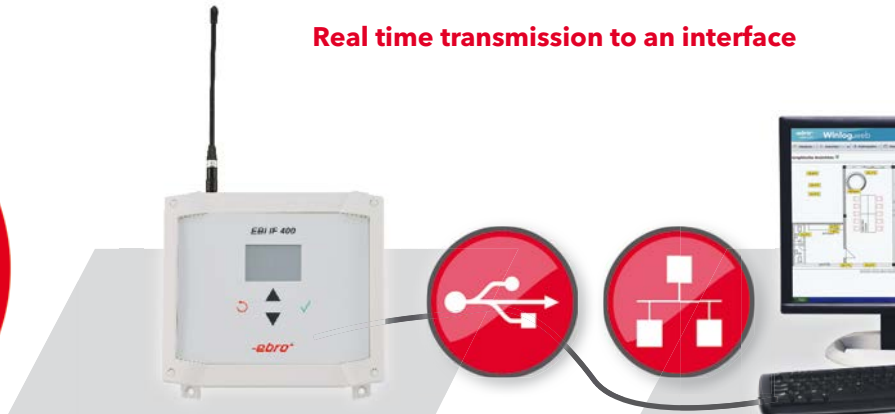
# Functionality

The innovative EBI 25 system monitors wirelessly, transmits the data in real time to an interface (base station) and from there to the desired server or PC.

## Wireless measurement



## Real time transmission to an interface



### EBI 25 series data loggers

- Precise measurement of temperature and humidity (depends on logger type)
- Very large range of up to 500 m in a free field
- Very long battery lifetime
- Easy installation

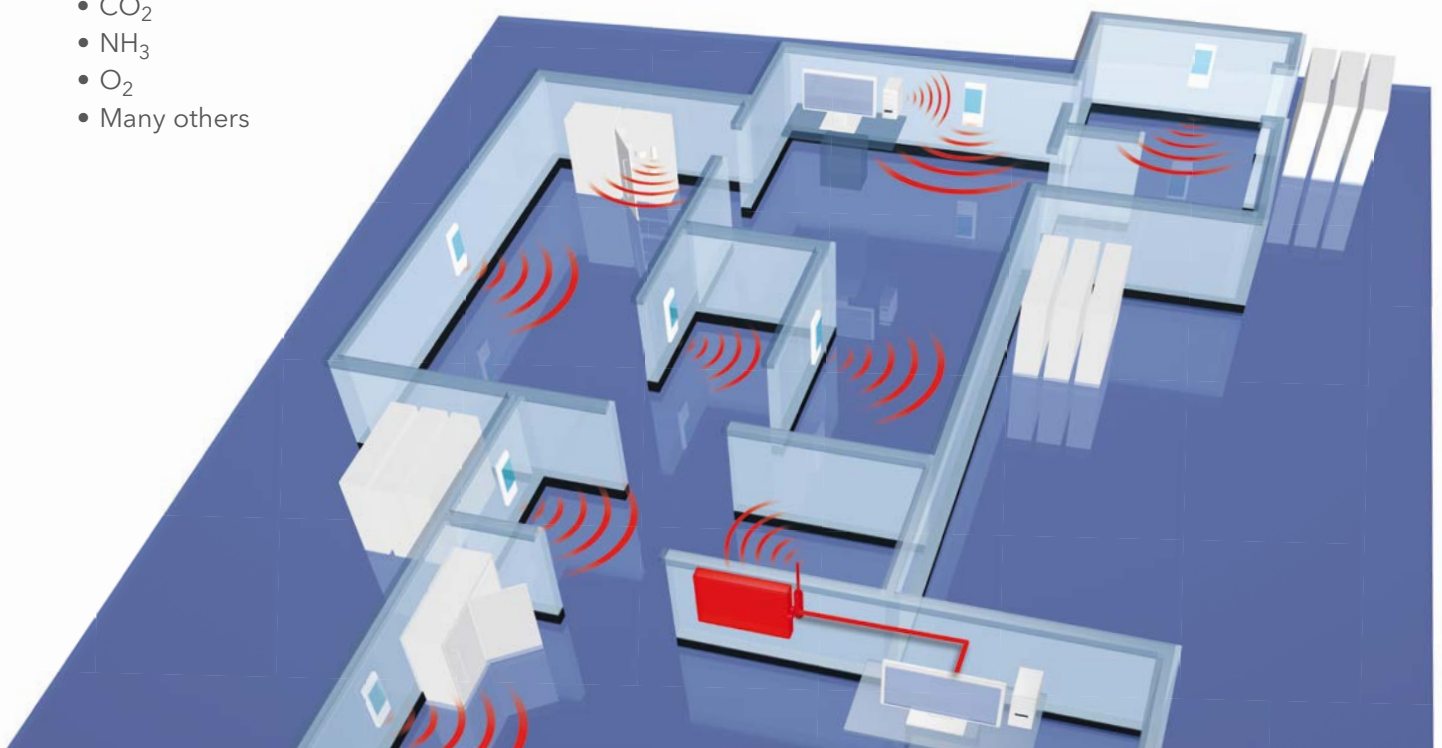
### Base station: IF 400 interface

- Collects and stores the data of all connected EBI 25 data loggers
- Connection of up to 50 loggers per interface possible
- Stores up to 576 measurements per logger
- Direct connection of any number of interfaces to a PC or the network
- Audible alarm (with optional alarm box)

### USB cable / Ethernet

Embedding of other measurements:

- Pressure
- CO<sub>2</sub>
- NH<sub>3</sub>
- O<sub>2</sub>
- Many others



For more information please contact us:

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As soon as a temperature, humidity or any other measurement has exceeded a user defined limit, an alarm is immediately sent via email.

### Evaluation on the PC



Connection for visual or audible alarm.



**Work place**

**Measurement management software:  
Winlog.web and Winlog.wave**

**Print**

**Email distribution**

### Winlog.wave:

Basic version for local PC usage

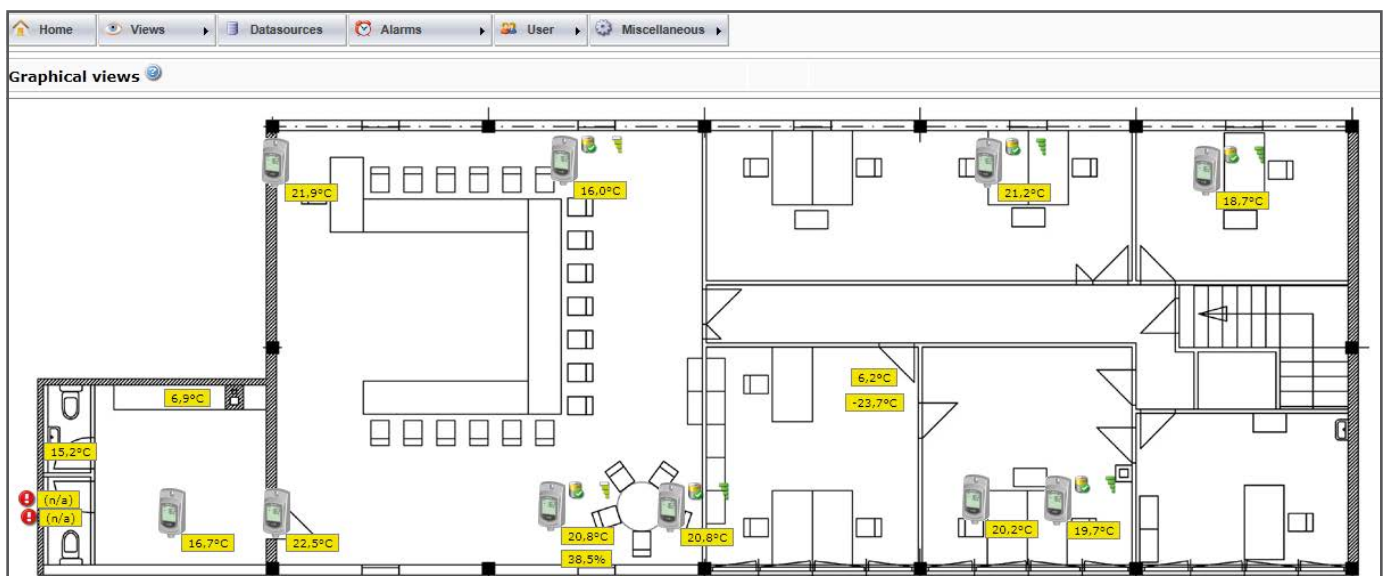
- Single PC solution: The basic version for easy measurement data evaluation on a single PC- no network required.
- Flexible alarm management: graphic and email alarm notifications upon user defined conditions
- Connection to the IF 400 via USB
- FDA 21 CFR Part 11 data security functionality

### Winlog.web:

Professional version internet and local network based use

- Web based client/server solution: the measurement data can be evaluated on all PCs and smartphones via the internet or connected to the local network
- Very flexible and wide alarm management: alarm notifications upon user defined conditions, alarm notification via email; visual and audible alarm via the graphical user interface
- Connection of the interface IF 400 via USB and Ethernet
- FDA 21 CFR Part 11 data security functionality
- Management of larger data sets
- IQ / OQ documentation available

Quick graphical overview of all measurement points including an image or floor plan view





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