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. Extend the system to monitor nearly any other measurement you need.

Continuous monitoring

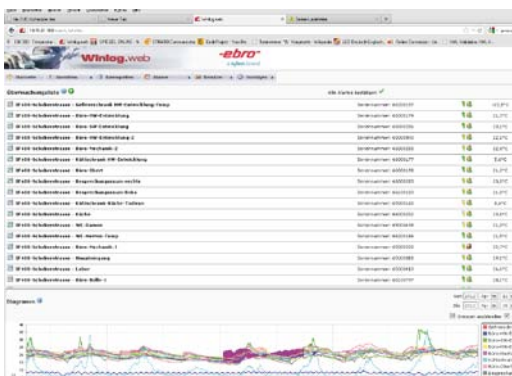of all areas where food, pharmaceutical and medical products are produced and stored.

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.

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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. Other measurements can be integrated using Modbus over IP.

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
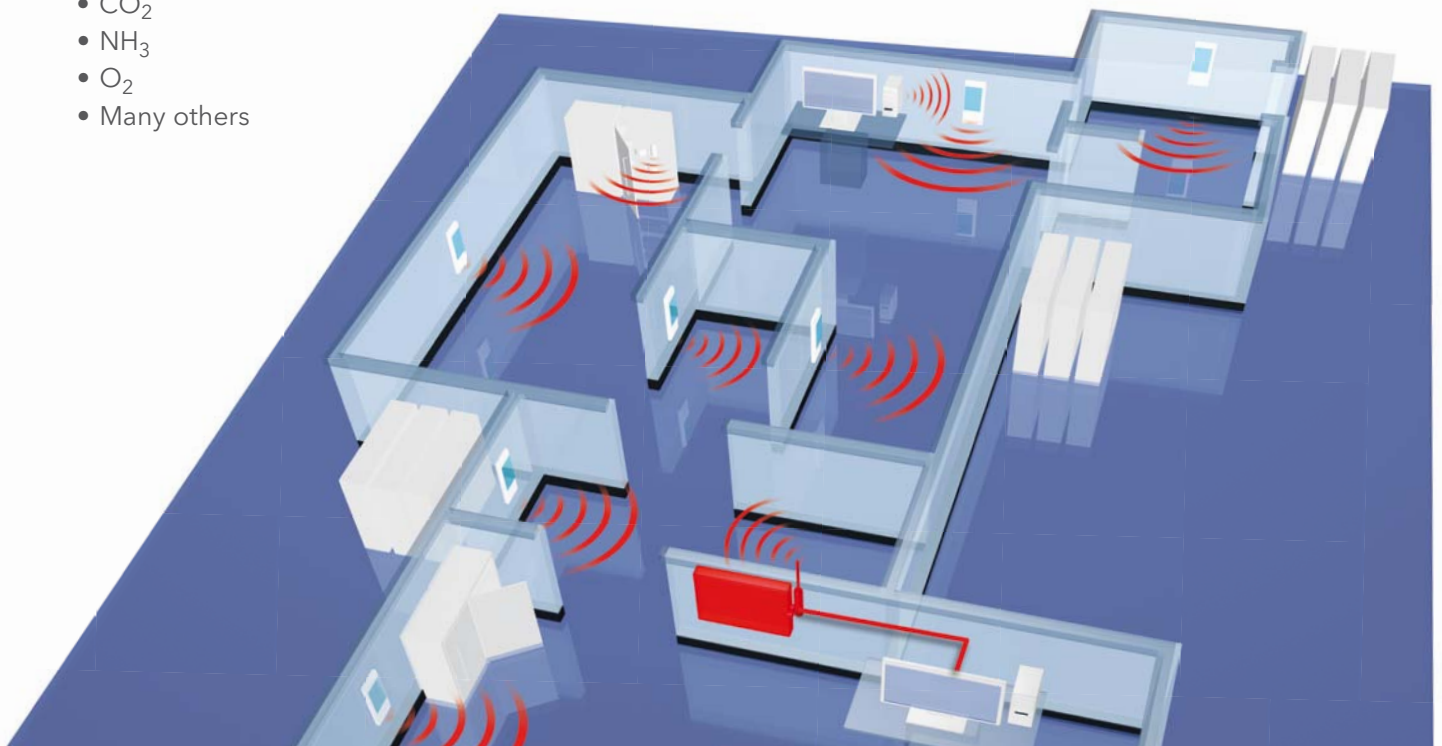- Very long battery lifetime
- Easy installation

Base station: IF 400 interface

- Collects and stores the data of up to 50 connected EBI 25 data loggers
- Stores up to 576 measurements per logger
- Connects directly to a PC or the network
- Audible alarm (with optional alarm box)

USB cable / Ethernet

Embedding of other measurements:
- Pressure
- CO_2
- NH_3
- O_2
- Many others

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

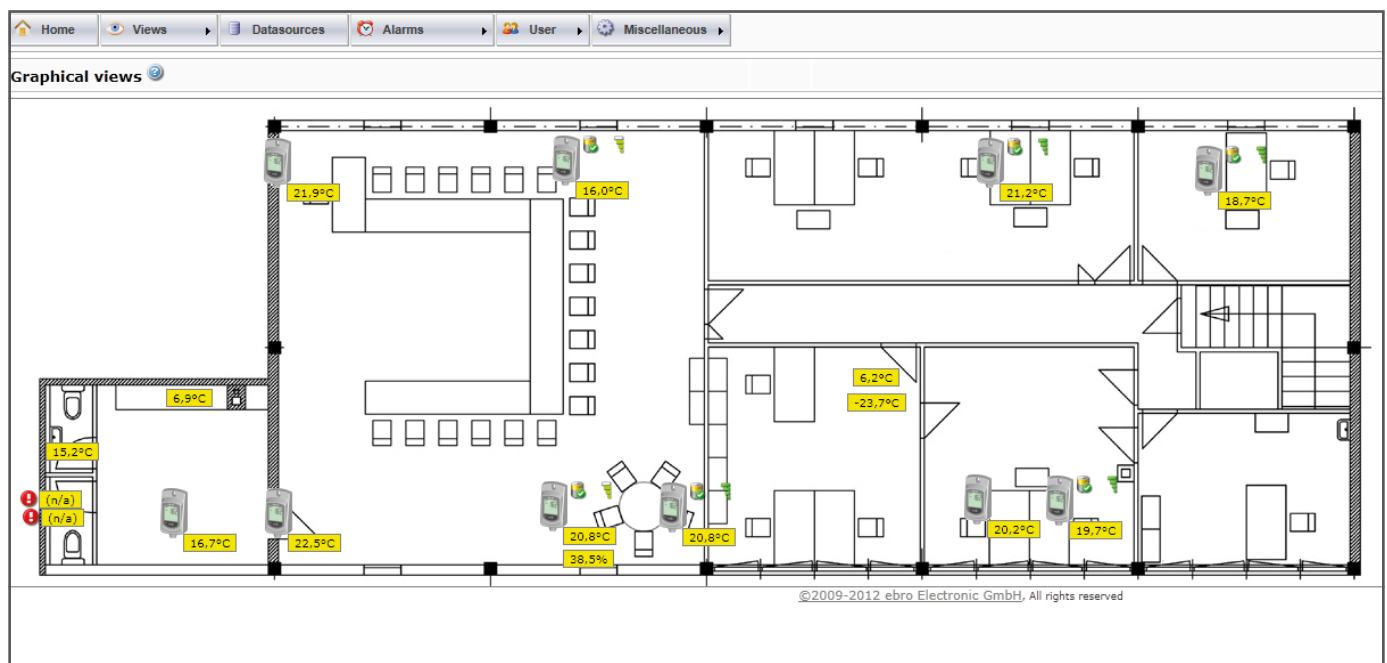## Winlog.wave:

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

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
- CFR 21 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

Applications

Benefits

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

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

- 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)	±0.2 °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	576 measurements	576 measurements	576 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

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