



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, effort 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

- 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) ±0.2 °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

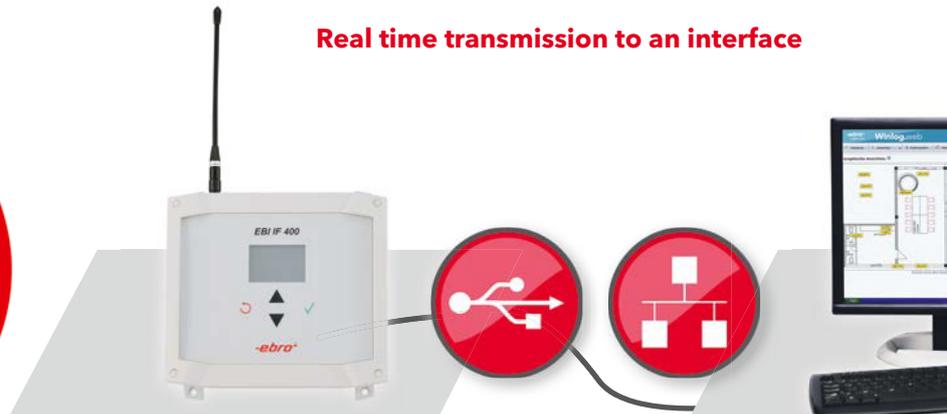
Functionality

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
- Long battery lifetime
- Easy installation

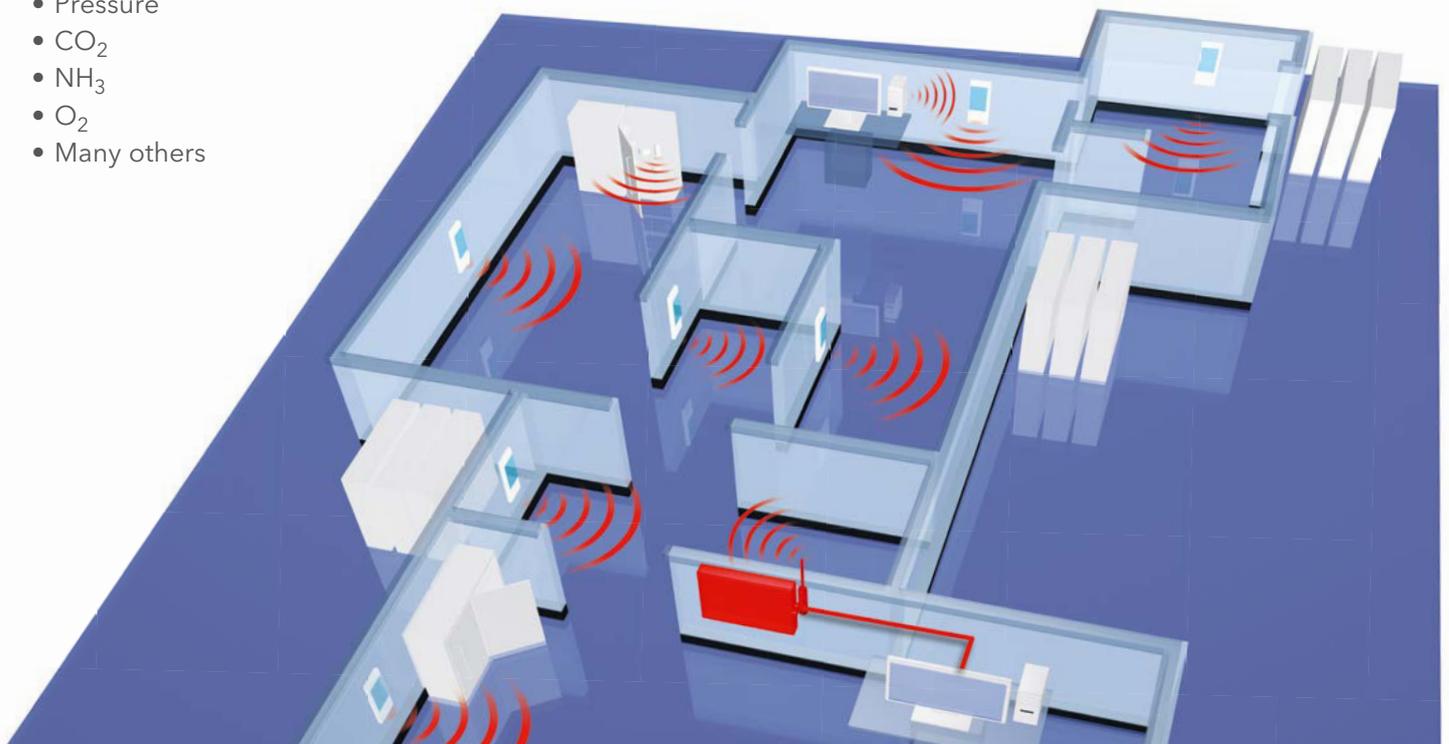
Base station: IF 400 interface

- 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 possible:

- Pressure
- CO₂
- NH₃
- O₂
- Many others



For more information please contact us:

+49 841 95478-0

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

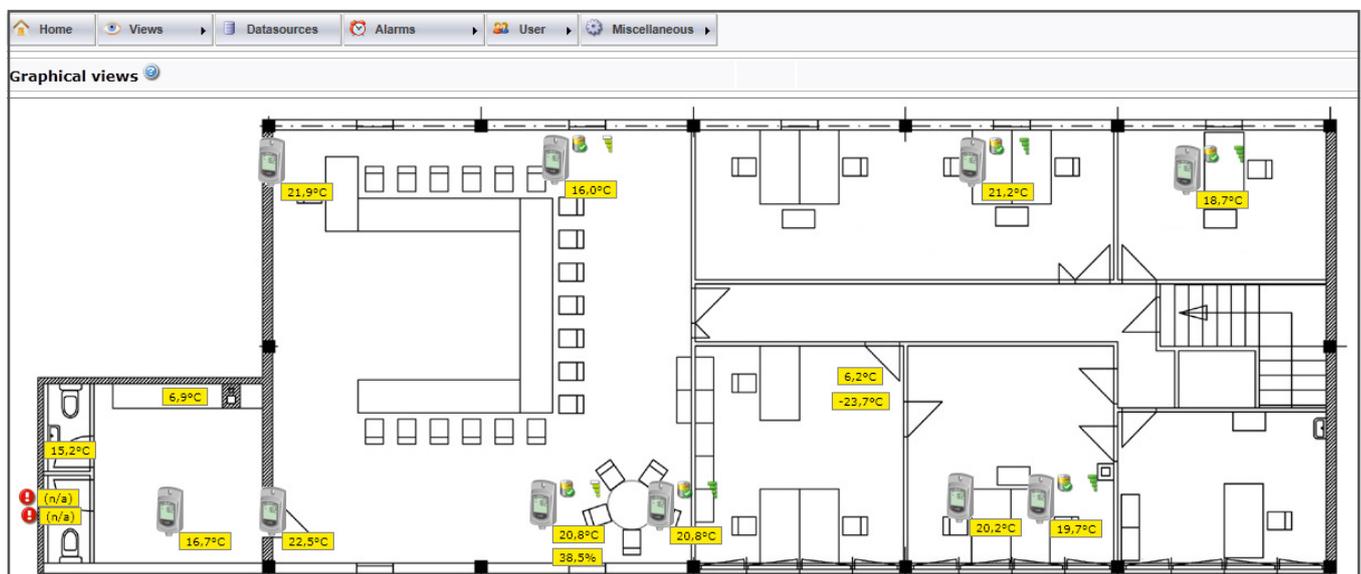
- Single PC solution: The basic version for easy measurement data evaluation on a single PC- no network required.
- Flexible alarm management: graphic and email alarm notifications upon user defined conditions
- Connection to the IF 400 via USB
- FDA 21 CFR Part 11 data security functionality

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





Types of filters

There are two different filters for the EBI 25-TH:



The PTFE-filter AH 100 provides little protection from mechanical strain but seals the probe from dust – protection class IP 60. In dusty environments, unprotected humidity probes, or probes protected by sintered filters, can quickly be covered by dust. This massively affects the humidity measurement, or prohibits it entirely. It won't happen with the PTFE filter.



The stainless steel sintered filter AH 300 increases the protection class to IP 40. The stainless steel massively increases the mechanical protection, e.g. from crushing the filter. Nothing will happen to your probe! In addition, the stainless steel is highly resistant to corrosion even in high temperature applications.

Accessories for the EBI 25 system



AL 250 – Protection Box for EBI 25 TE and TX



EBI 2 AB-2 – Alarmbox to connect to interface IF 400



AL 251 – orange Flash Light and buzzer combination



EBI IF 400 – Interface including antenna



AG 152 – Wall mount for EBI 25



AL 116 – external antenna for the interface EBI IF 400 interface for more power, optional

How to order:

Type	Description	Part No.
EBI 25-T	Wireless temperature logger (with internal sensor)	1340-6200
EBI 25-TE	Wireless temperature logger (with external probe)	1340-6201
EBI 25-TX	Temperature data logger (with probe TPX 25-3)	1340-6204
EBI 25-TX	Temperature data logger (without probe)	1340-0025
TPX 25-3	Pt 1000 probe for EBI 25-TX, 3 m	1341-0025
TPX 25-5	Pt 1000 probe for EBI 25-TX, 5 m	1341-0026
TPX 25-7,5	Pt 1000 probe for EBI 25-TX, 7,5 m	1341-0027
TPX 25-10	Pt 1000 probe for EBI 25-TX, 10 m	1341-0028
EBI 25-TH	Wireless temperature / humidity logger	1340-6202
AH 100	PTFE filter for EBI 25-TH	1340-5627
AH 300	Stainless steel sintered filter for EBI 25-TH	1340-5625
AL 250	Protection Box for EBI 25 TE and TX	1248-0250
EBI 2 AB-2	Alarm box to connect with interface IF 400	1613-1301
AL 251	Orange Flash Light and Buzzer combination	1340-6233
EBI IF 400	Interface incl. antenna	1340-6210
AG 152	Wall mount for EBI 25	1340-6215
AL 116	External Antenna	1340-6211
Winlog.web	Web based Evaluation Software – Server solution	1340-2390

-ebro-[®]

 /ebrogmbh

 /ebro.ingolstadt

xylem
Let's Solve Water

Xylem Analytics Germany Sales GmbH & Co. KG, ebro
Peringerstr. 10
85055 Ingolstadt, Germany
Tel +49 841 95478-0
Fax +49 841 95478-80
ebro@xyleminc.com
www.xylemanalytics.com