

# Data Loggers for



EBI 16  
Electronic Bowie Dick Test System

**Description:**

- Clear, reproducible measurement result
- High-resolution graphical cycle display
- Digital data recording and storage
- Easy to use and evaluate

**Applications:**

- Vacuum checks
- Steam penetration tests using an Electronic Bowie and Dick Test
- Comprehensive routine checks of steam sterilizers according to ISO 17665 and EN 285/EN 13060



EBI 100  
Precision Data Loggers

**Description:**

- Available in temperature and temperature/pressure versions with internal and external, flexible and rigid probes
- Temperature/pressure data loggers with various connection types

**Applications:**

- Routine control of sterilizers, washer-disinfectors and washer-disinfectors for endoscopes
- F-value and  $A_0$ -value calculation
- Process monitoring



# Routine Control



## Interfaces

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### Description:

- Read out up to four Logger simultaneous
- Compatible with different types of logger
- Optic status control

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### Applications:

- Programing and read out of data logger
  - Control of logger parameter
  - Service of logger e.g. battery exchange
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## EBI 16 Electronic Bowie Dick Test System

Together with the evaluation software Winlog.med the new EBI 16 data logger forms an easy to use and very reliable electronic measurement system. With it a comprehensive routine control of steam sterilizers can be performed using an Electronic Bowie Dick Test according to EN ISO 11140-4. In addition to the review of the steam penetration, the relevant sterilization parameters are controlled.

### Bowie Dick Test

The EBI 16 delivers clear results during daily checks of the air evacuation test and steam penetration test according to ISO 17665, EN ISO 11140-4 and DIN EN 285.

### Early warning system

The EBI 16 provides early identification of possible failures in steam-sterilizers. Even the smallest quantities of residual air that doesn't lead to a failed Bowie Dick Test yet are detected.

### Vacuum check

The EBI 16 allows a reasonable vacuum check also for sterilizers without pressure display according to DIN EN 285.

### Verification of sterilization parameters

The EBI 16 checks the sterilization parameters such as compensation time, hold time, sterilization temperature and sterilization time at +134 °C (+273 °F) for 3 minutes according to DIN EN 285.

### Calculation of lethality ( $F_0$ )

The EBI 16 monitors deviations between cycles by calculating total quantity of energy expended during sterilization process which is displayed by the  $F_0$  value.



## EBI 16 Bowie Dick Test Data Logger according to EN 285 / ISO 17665



- **Reliable:** clear, reproducible measurement results
- **Accurate:** high-resolution graphical cycle display
- **Secure:** digital data recording and storage
- **Easy:** to use and evaluate

### Technical Data

Measurement range	Temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
	Pressure	1 to 4000 mbar
Accuracy	Temperature	± 0.1 °C
	Pressure	± 15 mbar
Resolution	Temperature	0.01 °C
	Pressure	1 mbar (100 Pa)
Data memory		6,750 measurement values
Sampling rate		1 sec
Measurement mode		Start / stop measurement
Sensor		Pt 1000, piezoresistive pressure sensor
Interface		Wireless 2.4 GHz / IEEE 802.15.4
Operating temperature		0 to + 150 °C
Protection class		IP68/NEMA 6P
Battery		Lithium cell 3,6 V replaceable
Battery lifetime		Up to 2 Years
Dimension (D x H)		90 x 150 mm
Housing material		Stainless steel (V4A), PEEK
Weight		Approx. 500 g (incl. battery)
Calibration		Factory calibration

Type	Description	Part No.
EBI 16	Electronic Bowie and Dick Test	1340-6197

## EBI 16 Bowie and Dick Test Sets

With the EBI 16 starter sets you can start your Electronic Bowie Dick Test immediately according to the norms EN 285/ISO 17665.

*Please find complete routine control sets on page 49.*

### SL 1520 set contains:

- Bowie Dick Test EBI 16
- Winlog.med software
- EBI IF 150 Interface
- Aluminum carrying case



**SL 1520 set**  
for steam sterilizers



**SL 1620 set**  
for steam sterilizers, washer-disinfectors and washer-disinfectors for endoscopes

### SL 1620 set contains:

- Bowie Dick Test EBI 16
- EBI 100-TP231 temperature/pressure data logger (see p. 31)
- Winlog.med software
- EBI IF 150 interface
- Aluminum carrying case

Type	Description	Part No.
SL 1520 set	EBI 16 set for steam sterilizers	1340-6198
SL 1620 set	EBI 16 set for steam sterilizers and washer-disinfectors	1340-6573