

## EBI 10 Wireless Temperature / Pressure Data Loggers

### General technical specifications: valid for all EBI 10 temperature / pressure data loggers

Operating temperature: radio operation	-30 °C ... +150 °C (-22 °F ... +302 °F)
Accuracy: Temperature	±0.5 °C (-85 °C ... -40 °C) ±0.2 °C (-40 °C ... 0 °C) ±0.1 °C (0 °C ... +140 °C) ±0.2 °C (+140 °C ... +250 °C) ±0.5 °C (+250 °C ... +400 °C)
Resolution: Temperature	0.01 °C
Accuracy: Pressure	±10 mbar (50 mbar ... 150 mbar) ±10 mbar (2050 mbar ... 2250 mbar) ±10 mbar (3000 mbar ... 3250 mbar) ±15 mbar (for the remaining measurement range)
Resolution: Pressure	1 mbar
Memory	Max. 100,000 measurements (total)
Sensor: Temperature	Pt 1000
Sensor: Pressure	Piezo resistive pressure sensor (temperature compensated)
Measurement mode	<ul style="list-style-type: none"> <li>• Endless measurement</li> <li>• Start / stop measurement</li> <li>• Measure upon start temperature</li> <li>• Measure until end of memory</li> <li>• Start immediately until end of memory</li> </ul>
Sampling rate	250 msec ... 24 h
Data transmission	Wireless, 2,4 GHz/IEEE 802.15.4
Storage temperature	-20 °C ... +150 °C (-4 °F ... +302 °F)
Battery	Lithium button cell, 3.6 V, replaceable
Dimensions (Ø x H)	48 mm x 24 mm**
Weight	Approximately 70 g **
Housing material	Stainless steel (V4A) / PEEK
Protection class	IP 68 (-30 °C ... +150 °C / -22 °F ... +302 °F) / NEMA 6P

\* Please find the exact technical data of each EBI 10 temperature/pressure data logger type on the next pages.

\*\* Dimensions and weight just refer to the EBI 10 housing

### EBI 10-TP230 Temperature / Pressure Data Logger Rigid metal probe



- 1 external temperature sensor, axial, Ø 2 mm
- 1 internal pressure sensor, piezo resistive

#### Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	2 x 33,333 measurement values

Type	Description	Part No.
EBI 10-TP230	L = 40 mm	1340-6154

## EBI 10-TP221 Temperature/Pressure Data Logger

### Bendable metal probe



For a suitable silicone protection box, please see page 18.

- 1 external temperature sensor, axial, bendable, Ø 1.5 mm
- 1 internal pressure sensor, piezo resistive

#### Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	2 x 33,333 measurement values

Type	Description	Part No.
EBI 10-TP221	L = 500 mm	1340-6153

## EBI 10-TP321 Temperature/Pressure Data Logger

### Bendable metal probes



For a suitable silicone protection box, please see page 18.

- 2 external temperature sensors, axial, bendable, Ø 1.5 mm
- 1 internal pressure sensor, piezo resistive

#### Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	3 x 25,000 measurement values

Type	Description	Part No.
EBI 10-TP321	L = 500 mm	1340-6161

## EBI 10-TP322 Temperature/Pressure Data Logger

### Bendable metal probes and Luer-Lock connection



- 2 external temperature sensors, axial, bendable, Ø 1.5 mm
- 1 internal pressure sensor, piezo resistive

#### Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	3 x 25,000 measurement values

Type	Description	Part No.
EBI 10-TP322	L = 500 mm	1340-6164

## EBI 10-TP421 Temperature/Pressure Data Logger

### Bendable metal probes



For a suitable silicone protection box, please see page 18.

- 3 external temperature sensors, axial, bendable, Ø 1.5 mm
- 1 internal pressure sensor, piezo resistive

#### Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	4 x 20,000 measurement values

Type	Description	Part No.
EBI 10-TP421	L = 500 mm	1340-6162

## EBI 10-TP450/452 Temperature/Pressure Data Logger

### Flexible cable probes



- 3 external temperature sensors, axial, flexible or bendable, Ø 1.2 mm
- 1 internal pressure sensor, piezo resistive

#### Technical Data

Measurement range: temperature	-20 °C ... +150 °C (-4 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	4 x 20,000 measurement values

Type	Description	Part No.
EBI 10-TP450	L = 600 mm	1340-6142
EBI 10-TP452	L = 1200 mm	1340-6146

## EBI 10-TP460 Temperature/Pressure Data Logger

### Flexible cable probes



- 3 external temperature sensors, radial, flexible or bendable, Ø 1.2 mm
- 1 internal pressure sensor, piezo resistive

#### Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	4 x 20,000 measurement values

Type	Description	Part No.
EBI 10-TP460	L = 600 mm	1340-6148

## EBI 10-TP231 Temperature/Pressure Data Logger Luer-Lock connection



- 1 external temperature sensor, axial, Ø 2 mm
- 1 internal pressure sensor, piezo resistive

### Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... +4000 mbar
Data memory	2 x 33,333 measurement values

Type	Description	Part No.
EBI 10-TP231	L = 40 mm	1340-6155

## EBI 10-TP111 Temperature/Pressure Data Logger Luer-Lock connection



- 1 internal temperature sensor
- 1 internal pressure sensor, piezo resistive

### Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	2 x 33,333 measurement values

Type	Description	Part No.
EBI 10-TP111	Luer-Lock connection	1340-6156

## EBI 10-TP451/453 Temperature/Pressure Data Logger Luer-Lock connection



- 3 external temperature sensors, axial, flexible or bendable, Ø 1.2 mm
- 1 internal pressure sensor, piezo resistive

### Technical Data

Measurement range: temperature	-20 °C ... +150 °C (-4 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	4 x 20,000 measurement values

Type	Description	Part No.
EBI 10-TP451	L = 600 mm	1340-6143
EBI 10-TP453	L = 1200 mm	1340-6147

## EBI 10-TP200 Temperature/Pressure Data Logger Tube connection and M10x1 internal thread



- 1 external temperature sensor, axial, Ø 2 mm
- 1 internal pressure sensor, piezo resistive

### Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	2 x 33,333 measurement values

Type	Description	Part No.
EBI 10-TP200	Tube connection	1340-6152

## EBI 10 Wireless Temperature / Humidity Data Loggers

### EBI 10-TH100 Temperature/Humidity Data Logger in standard atmospheres



- 1 external temperature channel (Pt 1000)
- 1 humidity channel (capacitive)
- combined sensor replaceable

### Technical Data

Temperature measurement range	-40 °C ... +85 °C (-40 °F ... +185 °F)
Humidity measurement range	0 % rH... 100 % rH
Temperature accuracy	0.1 °C
Humidity accuracy	± 2 % rH, non-condensing at 25 °C (10 % rH ... 90 % rH)
Temperature resolution	0.01 °C
Humidity resolution	0.1 % rH
Data memory	100,000 measurements (50,000 per channels)
Measurement channels	1 external temperature channel (Pt 1000), 1 humidity channel (capacitive); combined sensor replaceable
Measurement mode	<ul style="list-style-type: none"> <li>• Endless measurement</li> <li>• Start / stop measurement</li> <li>• Start immediately until end of memory</li> </ul>
Storage temperatur	-20 °C ... +150 °C (-4 °F ... +302 °F)
Battery	Lithium battery, user replaceable
Dimensions (l x w x h)	46 x 48 x 70 mm
Housing material	Stainless steel (V4A), PEEK
Protection class	IP 52

Type	Description	Part No.
EBI 10-TH100	Temperature/humidity data logger	1340-6171
AH 100	PTFE filter for TFH 610 and TFH 620	1340-5627
AH 200	Bronze sintered filter for EBI 10-TH100	1340-5626
AH 300	Stainless steel sintered filter for EBI 10-TH100	1340-5625