

tempmate.®-B series

➔ Self-Contained Mini Temperature and Humidity Data Loggers



+ robust and reliable

+ compact size

+ data export function



**LOGISTICS AND
TRANSPORT**



**PROCESS
MONITORING**



FOOD & PRODUCE

Independent Mini Temperature and Humidity Data Logger for Process Monitoring.

tempmate.®-B data loggers can be used to monitor temperature and humidity in a wide range of applications. From simple office environment monitoring, through process monitoring and monitoring temperature sensitive products in transit. The compact size offers unequalled opportunities.



tempmate.com



**IP 55
Protected**



**Temperature Range
-40°C to +140°C**



**EX
Protection**



**305
Stainless Steel
Body**



**EN 12830
Compliant**



**GDP
Compliant**



**FDA 21 CFR Part 11
Compliant**

tempmate.®-B series

If size matters.

Curious about your cold chain?
tempmate.®-B continuously monitors all relevant data.

The tempmate.®-B series are self contained single channel temperature data loggers with the ability to record up to 8,000 data points. Depending upon the model chosen, they will measure from -40°C to +140°C. They are very small (about the same size as a watch battery) which enables them to be inserted into small items and packages.




The tempmate.®-B4 loggers are 2-channel mini data loggers for temperature and humidity.



Your Benefits at a Glance

- ⊕ Compact size
- ⊕ Cost-effective
- ⊕ Calibration certificates optionally available
- ⊕ Robust and reliable
- ⊕ Wide range of accessories
- ⊕ Easy and intuitive operation
- ⊕ Free Software
- ⊕ Data export function

↑ Technical Specifications

	tempmate.®-B1	tempmate.®-B2	tempmate.®-B3	tempmate.®-B5	tempmate.®-B4
					
	1-channel data logger for temperature ¹⁾	1-channel data logger for temperature ¹⁾	1-channel data logger for temperature ²⁾	1-channel data logger for temperature ³⁾	2-channel data logger for temperature and humidity ⁴⁾
Temperature range	-40 °C to 85 °C	-40 °C to 85 °C	0 °C to 125 °C	15 °C to 140 °C	-20 °C to 85 °C
Accuracy	± 1°C at -30 °C to 70 °C otherwise ± 1.3°C	± 0.5°C at -10 °C to 65 °C	± 0.5°C at 20 °C to 75 °C	± 0.5°C at 80 °C to 140 °C ± 1°C at 15 °C to 80 °C	± 0.5°C at -10 °C to 70 °C ± 5 % RH ± 2 % RH (calibrated)
Power supply	Internal, permanently installed 3.0V lithium battery				
Battery life	10 years or 1 million samples	about 1 years at 80°C and about 5 years at 30°C (10 min sampling) see battery life calculator at our website www.imec.de			
Sampling	1 to 255 minutes	2 seconds to 24 hours			
Memory size	2048 readings	8192 measured values with 8 bits (4096 RH) or 4096 measured values for 11 bit (2048 RH)			
Resolution	0.5 °C (8 bits)	0.5 °C (8 bits) or 0.07 °C (11 bits) / 0.64 % RH (8 bits) or 0.04 % RH (11 bits)			
Response time	approximately 90 seconds (in the air)				
Dimensions	Ø 17 mm × 6 mm				
Weight	4 g				
Housing Material	305 stainless steel				
Protection class	IP55- splash proof; housing for higher protection classes are available				
Ex-fitness	Meets UL # 913 (4th Edit), Intrinsically Safe Apparatus, approval under Entity Concept for use in Class I, Division 1, Group A, B, C and D Locations				
PC Connection	USB interface				
Time, max. deviation	± 2 minutes per month				
Recording modes	Ring buffer or stop when full				
Start time delay	max. 45 days at 1 minute measurement frequency	max. 12 months at 1 minute measurement frequency			
Start with Alarm	no	possible			

1) Also available with a 3-point calibration at the factory.

2) Also available with a 3-point calibration at the factory. Then with a higher accuracy of ± 0.2°C in the range from 80°C to 125°C.

3) Will always come with a 3-point calibration at the factory.

4) The tempmate-B4 is also available with a factory calibration. Then with a higher accuracy of ± 2% RH.