

tempmate.®-GS

Real-Time Data Logger for Temperature, Humidity, Light, Impact and Location

Stay Online and Well-Informed to Avoid Unpleasant Surprises: Supply Chain Monitoring 4.0

Global Monitoring of all Data in Real Time

HQ-Sensors including Location and GSM Connectivity

Ready for immediate use, can be programmed via the Cloud



End-to-End Monitoring of the Entire Supply Chain

Thanks to the programmable flight mode, tempmate.®-GS can also be used for transportations by aircraft. Even though there is no GSM connection during the flight mode, data recording still remains active.

Global* GSM connectivity means that tracking and monitoring is possible in real time.



Simple Configuration
If preconfigured parameters do not meet your requirements, they can be adjusted with just a few clicks in the tempmate.®-Cloud.



All-In-One
A “carefree” solution without hidden additional costs: hardware, Cloud access, SIM chip (worldwide coverage*) and data package are all included in the price.



Wide Range of Application
With the help of various sensors and the high quality of components, the logger can not only measure the ambient variables with a high degree of accuracy but it also sends a notification if a package was opened or dropped, for example. You can rely on the device and be sure that your goods will be delivered in a perfect condition.



Check the status of your goods comfortably and reliably from any location with the help of tempmate.®-Cloud.



Real-Time Tracking

Thanks to GSM and cloud support, you can check the status of your goods at any time. With the help of highly sensitive sensors the alarm messages are sent immediately. Regardless of whether you wish to monitor temperature, humidity, impact or incidence of light.



Predictive Alert

With the help of intelligent settings of several alarm limit values, negative trends can be detected and eliminated in time before it is too late.



Available Worldwide*

The built-in SIM card provides with worldwide GSM connectivity, which is completely flexible, without a contract term and, moreover, data volume is included. Continuous live monitoring is guaranteed.

End-to-End Monitoring of the Entire Supply Chain

With tempmate.®-GS you can monitor your goods in real time directly after dispatch till the delivery and simultaneously to have a record of all relevant measurement data. This ensures that temperature and humidity limit values are observed. In case if light (e.g., if a package is opened) or impact (e.g., dropping of goods) will occur they will be also recorded and alarms will be sent in real time. Since the location is also traced via GSM, the actions can

be taken on time. Devices can be conveniently configured, managed and monitored in real time with the help of tempmate.®-Cloud.

* the complete list of covered countries is available on request.

Unique

The Latest Hardware and the Most Up-to-Date Technology



Always Up-to Date

Directly after starting it will be checked if a new firmware is available. In spite of how old the device is, the firmware will be always up-to-date.



Smart Power Management

Intelligent power management ensures a battery life time for 90 days with the standard settings, even with icy temperatures (up to -30°C) or with high heat (up to +70°C). Additionally, integrated batteries were optimised for transportation by air.



Available Worldwide*

The embedded Quad band modem guarantees worldwide* connectivity. In addition to measurement values of the data logger, a location will be recorded and transmitted with the help of the Cell ID.

Self-Calibrating Digital Sensor

Thanks to an embedded heating element, the hybrid sensor for temperature and humidity is able to create its own reference in order to calibrate itself. Therefore, subsequent calibration will be not necessary. As a result will be unprecedented and long-lasting accuracy!



NFC-Antenna

The embedded NFC-Chip offers future-oriented connection via a smart phone or NFC-reader (optional).



Smart Button

The smart button is pressure-sensitive and prevents from accidental starting/stopping.



Light-Sensor

Any change of light, for example, if the package was opened, will be detected. This prevents product piracy and ensures an alarm is emitted in the case of light-sensitive goods.



Location

With GSM localisation, the position of the device is always visible in Cloud.



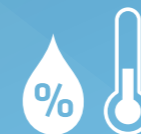
Status LEDs

The current device status can be also checked even without the Cloud with the help of three status LEDs (red, green and blue).



tempmate.®-HQ-Combi-Sensor

The core of tempmate.®-GS is combined temperature and humidity sensor, which guarantees maximum control and safety for sensitive goods.



Temperature and humidity

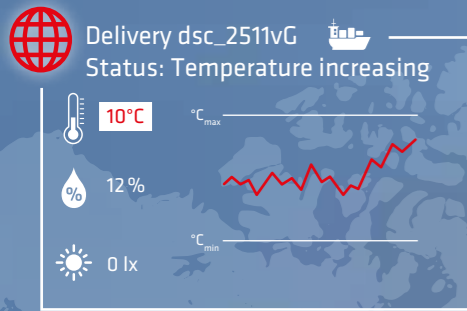
The external high-performance temperature/humidity sensor measures the ambient temperature with an accuracy of $\pm 0.2^{\circ}\text{C}$. The optimal air circulation around the sensor helps to ensure maximum accuracy and quick response times.



Impact

Damages can be traced back by using intelligent impact detection

* the complete list of covered countries is available on request.



Predictive Alert

An alarm works in real time if the set limits are exceeded. React in time and save the goods!



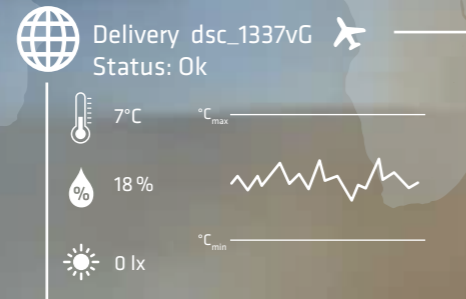
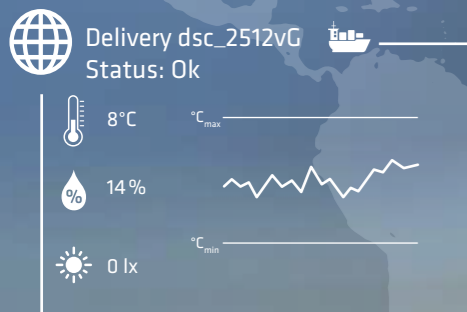
Real-Time Tracking

Worldwide* tracking in real time which is included in the all-in-one package. No contract term or additional costs – everything is included in the price of tempmate.®-GS.



Wide Range of Applications

tempmate.®-GS can be used regardless of whether you send your goods by air, sea or road. It does not matter if you want to monitor food, medications, sensitive electronics or works of art, tempmate.®-GS can be ideally adjusted to suit your requirements.



Simple Configuration

tempmate.®-GS is pre-programmed and ready for operation straight away. It can also be individually configured according to your requirements before the use.

tempmate.®-GS & tempmate.®-Cloud: Real-Time Supply Chain Monitoring 4.0

* the complete list of covered countries is available on request.

tempmate.®-GS offers real-time monitoring which is up-to-date with latest developments. The cutting-edge technology combined and approved quality of German engineering form the basis of this innovative and reliable device. We call it "Cold Chain

Monitoring 4.0". With tempmate.®-GS you are able to take actions in time and save your goods before it is too late! If necessary, a replacement of goods can be organised in a short time so that a delivery deadline will be met despite of a loss of goods. Lost or damaged ship-

ment can be located and culprits can be clearly defined. Therefore, warranty claims will be fulfilled. All relevant measurement data can be continuously recorded by using tempmate.®-Cloud. Recorded data can be easily shared with others via a link or an email. No

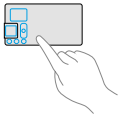
additional software is required, just a web browser with Internet access. Your data is securely protected against access from third parties and is saved in the Cloud. Databases are saved in multiply secured server centres in EU/DE. Data protection and data integrity

regulations are obeyed - we offer maximum security. You remain in complete control of costs as there are no additional "hidden" charges. You purchase your device for a fixed price. The Cloud, mobile data, alarms and all functions are included. It does not matter where

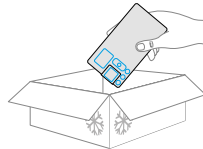
you want to send your shipment, you can be assured that tempmate.®-GS is ready for operation worldwide*.



Simple in use



01 Preconfigured and ready to use



02 Add active tempmate.[®]-GS to your shipment



03 Real-Time Monitoring via tempmate.[®]-Cloud



04 Check final Reports with all Details

Technical Specifications

Recording Options	Single Use	Protection Class	IP67
Temperature Range *1)	-30°C to +70°C	Dimensions	113/59/24 mm (l/w/h)
Temperature Accuracy	±0.2°C (-25°C/+60°C), others ±0.5°C	Weight	132g
Temperature Resolution	0.1°C	Certifications	CE, EN12830, EMC, RoHS
Data Storage Capacity	Max. 15,600 Records	Validation Certificate	Available as PDF in the Cloud
Humidity	0 to 100%rH / Accuracy [0..90%rH] < ±2.5%, [90%..100%] < ±3.5%	Software	tempmate. [®] -Cloud
Resolution Humidity	1 %	Report Generation	Readable in the Cloud
Ambient Light	0 to 16000lx / Accuracy < 10%	Password Protection	Cloud Password Protection
Resolution Ambient Light	1 lx	Connection Interface	GSM Quad Band
Shelf-Life / Battery	2 Years at -25°C to +35°C / 2 x CR17450	Location	GSM Localization
Recording Interval	10 min Standard	G Sensor	3-axis 6D-/4D- Orientation Detection / ±16 g / Accuracy: < ±2 %
Recording Duration	90 Days Standard	Alarm Configuration	Up to 6 thresholds, Alarm Delay Programmable
Startup Mode	Button	Programmable	Via Cloud
Stop Mode	Button	Alarm Type	Single / Cumulative
Start Delay	Possible 1 Minute to 48 Hours	Storage Temperature	-25 °C to +35 °C (Room Temperature Suggested)
Case Material	Polycarbonate		

*1) Ambient Light Sensor -25°C to +70°C



Real-Time Tracking



Protected IP 67



Temperature & Humidity



GDP Compliant



EN12830 conformable



Automatic Cloud Upload



German Quality



imec Messtechnik GmbH
Edisonstraße 25
74076 Heilbronn
Germany

T +49 7131 6354 0
F +49 7131 6354 100
info@imec-group.com
www.imec-group.com



Your sales partner