



Supply Chain Visibility made easy, End-to-End

The Berlinger SmartMonitor® by Sensitech enables global, real-time end-to-end location tracking with validated, GxP-compliant temperature monitoring. Tailored for life sciences, the SmartMonitor solution proactively notifies logistics and partners, providing in-transit and stationary visibility and instant alerts, while speeding product release by automating data sent to the cloud. The SmartMonitor solution adds intelligent visibility to your shipments and sites. It enables validated, GxP-compliant shipment accept/ reject decisions. Built-in, rechargeable battery management simplifies device management. The solution provides crucial insights into what occurred during shipment and storing to support root cause analysis.

In-transit Monitoring with SmartMonitor SHIP L

Key Features and Benefits

- Modular, real-time in-transit monitoring with validated temperature, location, humidity, shock, light, tilt, and free-fall sensors.
- Product-level monitoring via parent-child intercommunication with gateway devices.
- Advanced global cellular connectivity (LTE Cat-M1/5G, NB-IoT, 2G fallback) ensure worldwide location visibility.
- Rechargeable non-lithium NiMH battery—safe for air and multimodal transport (no IATA Dangerous Goods label required).
- Automatically streams secure cGxP-compliant data to SmartView for seamless quality and product release workflows.
- With SmartSensor options, supports extended temperature monitoring down to -200°C .
- Fully compliant with FDA 21 CFR Part 11, GAMP5, and more.



SmartMonitor Family

Stationary



SmartMonitor SITE L

Modular Real-time Monitoring Device for Fridges and Freezers

In-transit



SmartMonitor SHIP L

Modular Real-time Monitoring Device for Shipments



SmartMonitor SHIP S

Modular Real-time as Child or Standalone Monitoring Device for Shipments

SmartMonitor SHIP L Specifications	
Recording Option	Reusable, Real-time Device
Certified Modes of Transport	Air, Ocean, Road, Rail (Airline approvals upon request)
Sensor Types	Temperature, Humidity, Light, Shock, Free fall, Tilt
Temperature Measurement Range	-30°C to +75°C (Other ranges, SmartSensor can be used)
Temperature Accuracy Range	±0.5°C in range -10°C to +45°C / ±1.0°C in ranges -40°C to -10°C and +45°C to +75°C
Humidity Measurement Range	0% to 100% RH
Humidity Accuracy Range	± 5% RH
Alarms	Up to 24 individually programmable alarm/warning rules, for temperature and humidity
Remote Device Configuration	Automatic
Temperature Accuracy Certification	A sampling lot acceptance test (Berlinger Standard Calibration) is performed and documented with a Certificate of Conformance per batch; Individual device calibration, including Certificate of Calibration, is available upon request
Temperature Sensor Sample Interval	5 to 240 minutes (5 minute increments)
Temperature Measurement Responsiveness	EN12830
Start Up Delay	0 minutes to 4 hours
Light Sensor Range	Light intensity treshold detection 0.1 to 1000 lux
Communication	Cellular LTE Cat M1 (4G/5G), NB-IoT, 2G, Bluetooth Low Energy (BLE)
Memory	120 days @ 10 minutes measurement interval (all sensors active)
Battery Type	Rechargeable, Non-Lithium, Nickel Metal Hydride (NiMH)
Shelf Life & Sustainability	<ul style="list-style-type: none"> 6 months. Recharge required if device is not started within this period. Reusable
Operating Life	3 years typical device lifetime (without refurbishment), Typical battery run time* 60 days without BLE / 25 days with BLE** (at 1 hour cloud sychronization interval)
Location	GPS/GLONASS/BeiDou/Galileo/QZSS and cell-based localization (available technology with best accuracy is automatically selected, accuracy of cell-based localization cannot be guaranteed due to dependencies on local cellular services)
Dimensions and Weight	127 x 73 x 20 mm, 180 g
Environmental Rating	IP65
Regulatory	CE (RED), FCC, IC 21 CFR Part 11, GAMP5, IEC 62368-1, RTCA DO-160, RoHS
Display Indicators	LCD screen icons: Ready to Start, Running, Stopped, Alarm status (OK (✓) and Alarm (✗)), Warning, Start-up Delay, Uploading to Cloud, Upload to Cloud Complete, Bluetooth En-/Disabled, USB, Cellular, Battery Status, Static or Scrolling Text to Support User
Secondary Download	USB-C read-out
Software Interfaces	SmartView Platform
Cold Chain PDF Report	PDF generated by cloud software, Manual read-out option USB-C read-out
Additional Features	Automatic flight mode, automatic start with SmartCharger MINI (available separately)

* Assumes reliable wireless connectivity and highest energy-consuming communication technology (i.e. shortest battery runtime).

** All sensors active; temperature and humidity recorded every 5 minutes. Runtime may vary with environmental conditions.