

## smartPoint



### Experience the power of control

SmartPoint devices are the ears and eyes in the SmartLine wireless network. These mobile sensors are attached to objects which are needed to be monitored closely, but can also be used for static monitoring purposes. The SmartPoint T/H is equipped with an accurate  $\pm 0.5$  degrees Celsius internal temperature sensor as well as with an integrated  $\pm 2\%$  RH accurate relative humidity sensor.

### Key Features SmartPoint T/H (Temperature and Humidity)

- **High data security on a worldwide permitted communication frequency**  
IEEE 802.15.4 PHY compliant 2.4 GHz Radio, Standardised and license free, worldwide.
- **Easy way to monitor temperature and humidity**  
With the SmartPoint T/H, you can measure temperature and humidity data, which you can then analyse in our SmartView software at any time. All-in-one: on one platform, from one provider
- **Robust**  
The SmartPoint T/H is extremely robust and easy to install.
- **Automated logging & flushing**  
With its 2 MB internal data storage, the SmartPoint T/H logs all sensor readings and automatically flushes its log in case of temporary connection loss, offering a high degree of reliability



High data security on a worldwide permitted communication frequency

Robust housing design









Customized set up and service packages for your cold chain



## Technical Specification

## SmartPoint

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	SmartPoint T 	SmartPoint T/H 	SmartPoint T/W 	SmartPoint T/ERS 
				
DESCRIPTION	Wireless temperature datalogger	Wireless temperature and humidity datalogger	Wireless temperature datalogger with external sensor	Wireless temperature datalogger with external reed sensor
TYPICAL APPLICATION AREA	Facility management / National and International Supply Chain / Storage conditions / Airfreight monitoring			
PHYSICAL SPECIFICATIONS				
SIZE (L X W X H)	68 x 65 x 16 mm	68 x 65 x 16 mm	68 x 65 x 16 mm	68 x 65 x 16 mm
WEIGHT	51 g	51 g	73 g	62 g
PROTECTION CLASS	IP55	IP55	IP55	IP55
EXTERNAL SENSOR CABLE LENGTH	-	-	1 m +/- 5 %	0.5 m +/- 5 %
STORAGE CONDITION Temperature	+10°C to +30°C	+10°C to +30°C	+10°C to +30°C	+10°C to +30°C
OPERATING CONDITION Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
TECHNICAL SPECIFICATION				
BATTERY	Type	Lithium Thionyl Chloride	Lithium Thionyl Chloride	Lithium Thionyl Chloride
	Cells	2	2	2
	Maximum shelflife*	up to 6 months	up to 6 months	up to 6 months
	Maximum lifetime*	up to 3 years	up to 3 years	up to 3 years
INTERNAL SENSORS	Temperature accuracy	± 1.0°C from -40°C to 0°C ± 0.5°C from 0°C to +65°C ± 1.0°C from +65°C to +85°C	± 1.0°C from -40°C to 0°C ± 0.5°C from 0°C to +65°C ± 1.0°C from +65°C to +85°C	± 1.0°C from -40°C to 0°C ± 0.5°C from 0°C to +65°C ± 1.0°C from +65°C to +85°C
	Reed contact	yes	yes	yes
	Relative air humidity accuracy	-	typical ±2.0 %RH	-
EXTERNAL SENSORS	Temperature accuracy	-	-	± 1.0°C from -40°C to -10°C ± 0.5°C from -10°C to +85°C
	Reed contact	-	-	yes
CALIBRATION	on request			
RADIO	Frequency	2405- 2480 MHz, 16 Channels, 5 dBm	2405- 2480 MHz, 16 Channels, 5 dBm	2405- 2480 MHz, 16 Channels, 5 dBm
	Typical radio range (LOS)	20-50 m	20-50 m	20-50 m
	Network detection latency	max. 30min	max. 30min	max. 30min
MEASUREMENTS	Measurement interval (temperature, humidity)	15 min	15 min	15 min
	Events (Reed contacts)	yes	yes	yes
	Log Points	8192	8192	8192
	Effective log contents	>64 days	>36 days	>36 days
	Flush rate (1 day data)	32 min	56 min	56 min
COMPLIANCES				
EUROPE	CE (RED)	yes	yes	yes
NORTH AMERICA	FCC, IC	yes	yes	yes
OTHER	DO160G sec 21. cat H	yes	yes	yes
	EN12830 Type D transportation	yes	yes	yes
	EN 62311 (RF exposure in human/animal health context)	yes	yes	yes

\* Extreme low or high temperature can impact the battery life

Warranty: 1 year from date of delivery, excl battery (see general Berlinger Terms & Conditions)

Subject to change. Please note that all information in this document is correct at the time of publication. Due to our policy of continuous product development, we reserve the right to change this information without prior notice. For more information download the whole user manual [www.berlinger.com/user-manuals](http://www.berlinger.com/user-manuals)



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### Quick facts

Berlinger SmartView is the leading 'sense and respond' solution for global cold chain management. Proven to deliver significant benefits to manufacturers, logistics service providers and wholesalers in the global pharmaceutical and food supply chain.

Berlinger SmartView provides an integrated real-time view on the condition and location of temperature-sensitive products. Data is collected in an open platform from a variety of sources, including advanced GPS/GPRS and wireless sensors.

With the application of user-defined business rules we enable pro-active intervention to respond to exceptional situations.

### Solution overview

The Berlinger SmartView platform is an integrated platform for the following cold chain applications:



#### Shipment monitoring:

Monitoring the condition and location of shipments during global and local transportation.



#### Facility monitoring:

Real-time remote monitoring of temperature-controlled storage facilities.



#### Vehicle monitoring:

Real-time tracking of transportation vehicles.



### Berlinger SmartView consists of the following application layers

**Cold Chain Analytics:** Berlinger SmartView creates a complete history of your shipments, which can be used for trade lane analysis and thermal mapping.

**Cold Chain Execution:** An advanced rules engine allows users to define business rules for exceptional situations. These rules create capabilities for pro-active intervention.

**Cold Chain Visibility:** Berlinger SmartView collects data from various sources. This includes real-time sensors with GPRS and wireless communication, and external sources such as flight traffic data.

### Benefits

The level of supply chain visibility created by Berlinger SmartView significantly reduces the number of exceptional situations and improves the ability to pro-actively respond to these situations.



**Improved product integrity** due to better supply chain control and pro-active response to exceptional situations.



**Improved process efficiency** due to integrated data and less time spent analyzing exceptional situations



**Improved customer service** due to better supply chain visibility and a reduction in exceptional situations



**Easy reporting and analysing** for continuous process improvements due to central and integrated view external sources such as flight traffic data.

