

## smartPoint

### Experience the power of control



SmartPoint devices are the ears and eyes in the SmartLine wireless network. The SmartPoint T/W combines both an internal and an external temperature sensor (cable length ca. 1 m). As a result, the SmartPoint T/W is well-suited to measure the core temperature of the product, or measure the temperature in radio-unfriendly environments.

### Key Features SmartPoint T/W (Temperature/External sensor)

- **High data security on a worldwide permitted communication frequency**  
IEEE 802.15.4 PHY compliant 2.4 GHz Radio, Standardised and license free, worldwide.
- **One device - two sensors**  
The SmartPoint T/W combines an internal and external temperature sensor. SmartView also gives you the opportunity to access and analyse your data 24 hours a day, 7 days a week. All-in-one: on one platform, from one provider.
- **Robust**  
The SmartPoint T/W is extremely robust and easy to install.
- **Automated logging & flushing**  
With its 2 MB internal data storage, the SmartPoint T/W 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	Lithium Thionyl Chloride
	Cells	2	2	2	2
	Maximum shelflife*	up to 6 months	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	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	± 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	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	on request	on request	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	2405- 2480 MHz, 16 Channels, 5 dBm
	Typical radio range (LOS)	20-50 m	20-50 m	20-50 m	20-50 m
	Network detection latency	max. 30min	max. 30min	max. 30min	max. 30min
MEASUREMENTS	Measurement interval (temperature, humidity)	15 min	15 min	15 min	15 min
	Events (Reed contacts)	yes	yes	yes	yes
	Log Points	8192	8192	8192	8192
	Effective log contents	>64 days	>36 days	>36 days	>64 days
	Flush rate (1 day data)	32 min	56 min	56 min	32 min
COMPLIANCES					
EUROPE	CE (RED)	yes	yes	yes	yes
NORTH AMERICA	FCC, IC	yes	yes	yes	yes
OTHER	DO160G sec 21. cat H	yes	yes	yes	yes
	EN12830 Type D transportation	yes	yes	yes	yes
	EN 62311 (RF exposure in human/animal health context)	yes	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)



**Berlinger & Co. AG Switzerland** +41 71 982 88 11  
**Berlinger USA LLC** +1 508 366 0084  
[info@berlinger.com](mailto:info@berlinger.com) • [www.berlinger.com](http://www.berlinger.com)



### 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.

