







**USER MANUAL** 

TRACKLOG DATA LOGGERS

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Before using the device, please read carefully this user manual. It provides important information about the device operating, maintenance and reprocessing.

#### 1.1 Precautions for use

- The devices are developed, produced and sold exclusively to trained and qualified experts in the field of HVACR. Appropriate training is necessary in order to guarantee a riskless use of this instrument. Kimo, a member of Sauermann, is not responsible for any possible accident during its use.
- Please always use the device in accordance with its intended use and within parameters described in the technical features in order not to compromise the protection ensured by the devices.
- During the device installation, the whole system safety including the device is on the system assembler responsibility.
- Only the accessories supplied with the device or available in option must be used.
- Do not use the device if it is damaged or if it operates abnormally. Inspect the device before every use. In case of doubt, please contact the after-sales service.
- Any use unspecified by the manufacturer can compromise the device protection.

#### 1.2 Warning

- The device must not be expose to rain or used in moist environments.
- Do not use the device close to explosive gases, vapour or dust.
- Do not use this device on systems containing chemical leak sealing. Leak sealing could break into the device and lead to permanent damages.
- Do not perform contact measurements on non-insulated or undervoltage parts.
- Do not store the device with solvents. Do not use desiccants.
- The device does not contain internal part repairable by the user. Do not open the device, except for the batteries replacement. Only have maintenance with Kimo, a member of Sauermann.
- This device allows to plug different inputs including electrical and mechanical ones. A particular attention must be paid in order to avoid any electric shock. Do not use the device if you are not able to identify electrical failures.
- This device can pose a risk for wearers of pacemakers. Respect a distance of at least 10 cm between the device and the wearer.

#### 1.3 Environmental protection

• Send back the device at the end of its duration of use in an electrical and electronic components separate collection centre life (according to local regulations) or send it back for a waste collection assured in the respect of the environment.

#### 1.4 Symbols used

For your safety and in order to avoid any damage of the device, please follow the procedure described in this user manual and read carefully the notes preceded by the following symbol:

The following symbol will also be used in this user manual: Please read carefully the information notes indicated after this symbol.



## 1.5 Logos

On the back of the device, several logos are present:



✓ Do not throw your electronic device with domestic waste. Please send it back at the end of its duration of use. Once returned, required waste collection will be assured in the respect of the environment in accordance with European guidelines relating to WEEE. Batteries that have reached end-of-life will have to be properly disposed and only in suitable containers.

**C E** This marking ensures that the product complies with the requirements of the European related directives.



This symbol indicates that the precautions for use must be respected during the device use. Read the user manual before any use.

## 2 DEVICE PRESENTATION

#### 2.1 Use

The **TrackLog** data loggers allow the measurement of several parameters:

- KT TrackLog: internal measurement of temperature with two universal inputs for probe
- KCC TrackLog: internal measurement of temperature, humidity, atmospheric pressure and CO2
- KP TrackLog: internal measurement of differential pressure
- KTT TrackLog: model with four thermocouple inputs

Communication between device and PC is carried out with a USB cable with a micro-USB female connector. This communication type allows the devices complete configuration and update.

The radio LoRa<sup>®</sup> communication is carried out between the Gateway and the TrackLog. It allows communication with smartphones and tablets running with Android & iOS via the mobile application and with computers via the web application. This communication type allows a partial configuration of devices and the data download.



The low-energy wireless connection allows to communicate with smartphones and tablets with Android and IOS. This communication type allows the devices complete configuration and the data download.

#### 2.2 Applications

The TrackLog Data Loggers range is ideal for different parameters monitoring (temperature, hygrometry, atmospheric pressure, differential pressure,  $CO_2,...$ ). TrackLog devices ensure the traceability in the food industry environment as well as they validate the proper functioning of industrial installations. According to the protection index (see details on page 11), the device is adapted for an external or internal use.





## 2.3 References

Device Dicplay		Internal sensors		External sensors		Darameters	Number of
reference	reference		Туре	Number Type		Falameters	recording points
KT TrackLog		1	Temperature	2	Inputs for interchangeable probes*	Temperature, hygrometry	
KCC TrackLog	Yes	4	Temperature, hygrometry, atmospheric pressure, CO <sub>2</sub>	-		Temperature, hygrometry, atmospheric pressure, CO <sub>2</sub>	20,000
KP TrackLog		1	Differential pressure			Differential pressure	
KTT TrackLog			-	4	Inputs for thermocouple probes	Temperature	

\* Input which allows to plug different compatible SMART PLUG probes: see optional probes page 12.

#### 2.4 Device description





The selected values to display during the configuration with the application will scroll on the screen every 3 seconds.

The display can be activated or deactivated via the KILOG software.

At extreme temperatures, the display can become hardly readable and its display speed can slow down at temperatures below 0°C. This has no incidence on the measurement accuracy.

### 2.6 Keys



**OK key:** allows to start or stop the dataset or change of scrolling group. This key also allows to join LoRa<sup>®</sup> network. See page 14.

Selection key: allows to scroll values in the groups scroll. See page 14.

## 2.7 LEDs

#### 2.7.1 Alarm LED

If the red "Alarm" LED has been activated, it has the following states:

- Always OFF: no setpoint alarms has been exceeded.
- Flashing quickly (5 seconds): a threshold is currently exceeded on at least one channel.

## 2.7.2 Operating LED

If the green "ON" LED has been activated, it flashes every 10 seconds during the recording period.

## 2.8 Connections

The communication between the device and the computer is carried out via an USB cable and with the female micro-USB connector.

**KT TrackLog:** 2 mini-DIN connections

**KP and KP TrackLog:** 2 pressure connections

KCC TrackLog











## 2.9 Dimensions (mm)

## 2.9.1 Devices





## 3.1 Devices features

	KT TrackLog	KTT TrackLog		
Units displayed <sup>(1)</sup>	°C, °F, °Ctd, °Ftd, % RH	°C, °F		
Resolution	0.01°C, 0.01°F, 0.01% RH	0.1°C, 0.1°F		
External input	Micro-USB female connector			
Input for probe	2 inputs for interchangeable probes <sup>(2)</sup>	4 inputs for thermocouple probes (K, J, T, N, S)		
Internal sensor	Temperature	-		
Type of sensor	NTC	Thermocouple		
Measuring range	Measuring range of the internal sensor <sup>(3)</sup> : From -40 to +70°C	K: from -200 to +1300°C J: from -100 to +750°C T: from -200 to +400°C N: from -200 to +1300°C S: from 0 to 1760°C		
Accuracies <sup>(4)</sup>	±0.4°C from 0 to 50°C ±0.8°C below 0°C or above 50°C	$\begin{array}{c} \pm 0.4 \ \mbox{C} \ IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII$		
Setpoints alarm	2 setpoint alarms on each channel			
Frequency of measurement	t From 1 minute to 24 hours			
Operating temperature <sup>(5)</sup>	<sup>(5)</sup> From -40 to +70°C From -20 to +			
Storage temperature	From -	20 to +50°C		
Battery life	3 years <sup>(6)</sup>			
European directives	2011/65EU RoHS II; 2012/19/EU WEEE; 2014/30/EU EMC; 2014/35/EU			

<sup>(1)</sup> Some units are available only with some optional probes.

<sup>(2)</sup> Input which allows to plug different compatible probes see optional probes on page 12.

<sup>(3)</sup> Other measuring ranges are available according to the connected probe: see optional probes on page 12.

<sup>(5)</sup> At temperatures below 0°C, the display can become hardly readable and its display speed can slow down. This has no incidence on the measurement accuracy.

<sup>(6)</sup> Non-contractual value. Based on 1 measurement each 15 minutes at 25 °C. A correct operation of the device and the storage conditions must be respected.

<sup>&</sup>lt;sup>(4)</sup> All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurement carried out in the same conditions, or carried out with calibration compensation. The accuracies of the selected probe must be added to to the device accuracies.

	KCC TrackLog		
Units displayed	°C, °F, %RH, hPa, ppm		
Resolution	0.01°C, 0.01°F, 1 ppm, 0.01% RH, 1 hPa		
External input	Micro-USB female connector		
Internal sensor	Hygrometry, temperature, atmospheric pressure, CO <sub>2</sub>		
	Temperature: CTN		
Type of concor	Hygrometry: capacitive		
Type of sensor	Atmospheric pressure: piezoresistive		
	CO <sub>2</sub> : NDIR		
	Temperature: from -40 to 60°C		
Turne of concor	Hygrometry: from 0 to 100% RH		
Type of sensor	Atmospheric pressure: from 800 to 1100 hPa		
	CO <sub>2</sub> : from 0 to 5,000 ppm		
	Temperature: ±0.2°C		
	Hygrometry <sup>(2)</sup> : $\pm 1.5\%$ RH (from 10 to 80% RH and from 10 to 50°C <sup>(3)</sup> ) Hysteresis: 0.8% RH at 25°C		
	Atmospheric pressure: ±3 hPa		
	$CO_2$ : ±50 ppm ±3% of the reading (at 25°C). Temperature dependence: ±1 ppm $CO_2/°C$		
Setpoints alarm	2 setpoint alarms on each channel		
Frequency of measurement	From 1 minute to 24 hours		
Operating temperature <sup>(4)</sup>	From -40 to +60°C <sup>(5)</sup>		
Storage temperature	From -20 to +50°C		
Battery life	1 year <sup>(6)</sup>		
European directives	2011/65EU RoHS II; 2012/19/EU WEEE; 2014/30/EU EMC; 2014/35/EU		

<sup>(1)</sup> All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurement carried out in the same conditions, or carried out with calibration compensation.

<sup>(2)</sup> Accuracy in <sup>'</sup>Hr is linked to the temperature: typical ±2% RH below 10°C and above 50°C. Time drift: < 0.5% RH per year in normal conditions of use (from 5 to 60°C and from 20 to 80% RH, apart from indoor pollutants).

<sup>(3)</sup> The sensor has a better performance when it is used in normal recommended temperature and hygrometry ranges, i.e. respectively 5°C to 60°C and from 20% RH to 80% RH. A prolonged exposure in conditions beyond the normal ranges, especially in conditions of high humidity, can temporally cause an RH measurement drift (offset) (i.e. +3% RH after 60 hours continuous at >80% RH). After returning to normal temperature and humidity ranges, the sensor will by itself progressively come back to its original calibration state. A prolonged exposure to extreme conditions can accelerate its ageing.

<sup>(4)</sup> At temperatures below 0°C, the display can become hardly readable and its display speed can slow down. This has no incidence on the measurement accuracy.

<sup>(5)</sup> Except for the CO₂ parameter: 0 to 60°C.

<sup>(6)</sup> Non-contractual value. Based on 1 measurement each 15 minutes at 25 °C. A correct operation of the device and the storage conditions must be respected.

	KP TrackLog			
Units displayed	Pa			
Measuring range	±1,000 Pa			
Resolution	1 Pa			
Accuracies <sup>(1)</sup>	$\pm 0.5\%$ of the reading $\pm 3 \text{ Pa}^{(2)}$			
Tolerated overpressure	21,000 Pa			
External input	Micro-USB female connector			
Inputs for probe	2 pressure connections			
Internal sensor	Differential pressure			
Setpoints alarm	2 setpoint alarms on each channel			
Frequency of measurement	From 1 minute to 24 hours			
Operating temperature	From 5 to +50°C			
Storage temperature	From -20 to 50°C			
Battery life	3 years <sup>(3)</sup>			
European directives	2011/65EU RoHS II; 2012/19/EU WEEE; 2014/30/EU EMC; 2014/35/EU			

(1) Provided that an autozero at 0 Pa has been carried out (the device must be disconnected) at the temperature at which the measurement will be performed (±5°C). <sup>(2)</sup> All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurement carried out in the same conditions, or carried out with calibration compensation.

<sup>(3)</sup> Non-contractual value. Based on 1 measurement each 15 minutes at 25 °C. A correct operation of the device and the storage conditions must be respected.

#### 3.2 Housing features

LoRa <sup>®</sup> frequency	868 Mhz
Dimensions	110.2 x 79 x 35.4 mm
weight	KT TrackLog, KCC TrackLog, KP TrackLog: 206 g KTT TrackLog: 200 g.
Display	2 lines LCD screen. Screen size: 49.5 x 45 mm 2 indication LEDS (red and green)
Control	1 OK key 1 Selection key
Material	Compatible with food industry environment ABS housing
Protection	IP 65: KT TrackLog IP 65: KP TrackLog <sup>(1)</sup> IP 54: KTT TrackLog <sup>(2)</sup> IP 40: KCC TrackLog
PC communication	Micro-USB female connector USB cable
Battery power supply	2 lithium AA 3.6 V batteries – 2600 mAh <sup>(3)</sup>
Environmental conditions of use	Air and neutral gases Hygrometry: in non-condensing conditions (<80% RH) Maximum altitude: 2000 m

(1) With the pressure connectors plugged.

<sup>(2)</sup> With all the thermocouple probes plugged.
 <sup>(3)</sup> When replaced, please use the same high performance batteries type SAFT LS 14500 (Li-SOCl<sub>2</sub>) 3.6 V – 2600 mAh.

## 3.3 Features of optional probes

All probes for **KT TrackLog** have an automatic recognition of of probes and the adjustment parameters storage make them 100% interchangeable.

Part number	Description	Measuring range			
External or ambient thermo-hygrometric probes					
KITHA-2	Interchangeable hygrometry and ambient temperature probe	Hygrometry: from 0 to 100% RH			
KITHP-130-2	Remote interchangeable hygrometry and temperature probe	Temperature: from -20 to +70°C			
KITHI-150	Remote interchangeable hygrometry and temperature probe	Hygrometry: from 0 to 100% RH Temperature: from -40 to +180°C			
General use or insertion Pt 100 temperature probes					
KIRGA-50 / KIRGA-150	IP65 immersion probe (50 or 150 mm)	From 40 to + 120%			
KIRAM-150	Ambient probe 150 mm	$-1000 - 4000 + 120^{\circ}C$			
KIRPA-150	Penetration probe IP65				
KIPI3-150-E IP68 penetration probe with handle					
KITI3-100-E IP68 penetration probe with T-handle					
KITBI3-100-E	IP68 penetration probe with corkscrew handle				
KIRV-320	Velcro probe	From -20 to +90°C			
KICA-320	Smart adapter for Pt100 probe	From -200 to +600°C according to the probe			
Thermocouple probes					
All the thermocouple ten	operature probes for the KTT Tracklog have a class	1 sensitive element as per IEC 584-1 2 and 3			

All the thermocouple temperature probes for the KTT TrackLog have a class 1 sensitive element as per IEC 584-1, 2 and 3 standards.

For more details about the available thermocouple probes, please see the "Thermocouple probes" datasheet.

# For more details, please see the "Measuring probes for KT TrackLog" and "Thermocouple probes" datasheets.

To connect a probe:

- > Open the mini-DIN connection cap on the bottom of the data logger.
- > Connect the probe in such a way the mark on the probe is in front of the user.



## 4.1 Connection to LoRa® network

TrackLog device is synchronised ex-factory for an automatic connection to LoRa® network via the Gateway. Connect the Gateway to the Ethernet network (see the procedure described below), and the device connects automatically to the Gateway.

However, if you encounter any difficulties to connect your TrackLog device to LoRa<sup>®</sup> network, please refer to the procedure described below.

## 4.1.1 Gateway

 Connect the gateway to the mains and connect the Ethernet jack.
 The LED flashes when it is connected to the electricity grid.
 The fixed LED is then connected to the LoRa<sup>®</sup> network. This operation can take a few minutes. Please, wait...
 Log in to <a href="https://tracklog.inair.cloud">https://tracklog.inair.cloud</a> to configure your TrackLog and launch a dataset.

## 4.1.2 Device

When starting a measurement dataset, or during the batteries replacement:

The **"Cloud"** icon flashes on the TrackLog display and **"Sync"** is displayed on screen. Then **"Sync"** disappears, the cloud becomes permanent and **OK** is displayed when TrackLog is successfully connected to LoRa<sup>®</sup> network.



**OK** disappears after 5 seconds.

If the **"Cloud"** icon keeps flashing and **"Sync Err"** is displayed, it is necessary to attempt to connect again to LoRa<sup>®</sup> network.

Press the TrackLog **OK** key.



If the connection to LoRa<sup>®</sup> network does not work, please check that the 1700 port is open in UDP on the Ethernet network on which the Gateway is plugged.

#### 4.2 Function of keys

Ø



**Selection key:** allows the scroll values in the scrolling group like described in the following tables.

Device state	Type of start/stop selected	Key used	Action generated	Illustration
	Start: by button	OK During 5 seconds	Start of dataset	Image: Constraint of the seconds
Waiting for start	Start: by PC, date/time Stop: indifferent	ОК	Inactive	
	Start: indifferent Stop: indifferent	0	Measurements scroll (group 1)*	
	Start: indifferent Stop: by button	OK During 5 seconds	Stop of the dataset	RC C 5 seconds
Dataset in progress	Start: indifferent Stop: indifferent	OK	Group change (groups 2 and 3)*	

\* Please see the summary table of the groups organisation page 17.



\* Please see the summary table of the groups organisation on the following page.

### 4.2.1 Groups organisation

The table below summarises the groups organisation and measured values available during a measurement dataset:

ОК

Group 1	Group 2	Group 3 High alarm threshold in temperature Low alarm threshold in temperature	
Measured temperature*	Max. value in temperature Min. value in temperature		
Measured hygrometry*	Max. value in hygrometry Min. value in hygrometry	High alarm threshold in hygrometry Low alarm threshold in hygrometry	
Measured CO2*	Max. value in CO2 Min. value in CO2	High alarm threshold in CO2 Low alarm threshold in CO2	
Measured differential pressure*	Max. value in differential pressure Min. value in differential pressure	High alarm threshold in differential pressure Low alarm threshold in differential pressure	
Measured atmospheric pressure*	Max. value in atmospheric pressure Min. value in atmospheric pressure	High alarm threshold in atmospheric pressure Low alarm threshold in atmospheric pressure	
Parameter 1 of probe 1*	Max. value in Parameter 1 of probe 1 Min. value in Parameter 1 of probe 1	High alarm threshold in Parameter 1 of probe 1 Low alarm threshold in Parameter 1 of probe 1	
Parameter 2 of probe 1*	Max. value in Parameter 2 of probe 1 Min. value in Parameter 2 of probe 1	High alarm threshold in Parameter 2 of probe 1 Low alarm threshold in Parameter 2 of probe 1	
Parameter 1 of probe 2*	Max. value in Parameter 1 of probe 2 Min. value in Parameter 1 of probe 2	High alarm threshold in Parameter 1 of probe 2 Low alarm threshold in Parameter 1 of probe 2	
Parameter 2 of probe 2*	Max. value in Parameter 2 of probe 2 Min. value in Parameter 2 of probe 2	High alarm threshold in Parameter 2 of probe 2 Low alarm threshold in Parameter 2 of probe 2	

Press key to change of group.

Press very to scroll values in the group.

#### 4.2.2 Measurements scroll

According to the selected parameters during the configuration and according to the type of device, the measurement scroll is carried out like following:

Temperature \*  $\implies$  Hygrometry \*  $\implies$  CO<sub>2</sub> \*  $\implies$  Differential pressure \*  $\implies$  Atmospheric pressure \*  $\implies$  Parameter 1 probe 1 \*  $\implies$  Parameter 2 probe 1 \*  $\implies$  Parameter 1 probe 2 \*  $\implies$  Parameter 2 probe 2 \*

S

<sup>\*</sup> Parameters available according to the device and probe type.

#### Examples:

• KT TrackLog with a thermo-hygrometric probe (channel 1) and a temperature probe (channel 2):



The measurements scroll can be carried out by pressing the "Select" button of the data logger or wait about 3 seconds and the display scrolls automatically.

## 4.3 PC communication

Connecting the device to the PC allows to carry out a complete configuration of the Data Logger:

- 1. Plug the male USB connector of the cable to an USB connection on your computer\*.
- 2. Open the USB cap on the right side of the Data Logger.
- 3. Connect the male micro-USB connector of the cable to the female micro-USB connector of the device.



# 4.4 Data Logger configuration, data download and processing with the web and mobile applications

Please refer to the web & mobile applications user manual: sauermanngroup.com

# D The date and time updates automatically when a new configuration is loaded with the mobile Application.

\* The computer must be in compliance with the IEC60950 standard.

## 5 WIRELESS CONNECTION FUNCTION

TrackLog devices have the wireless connection function allowing to communicate with a smartphone or a tablet (Androïd or iOS) via the application.

The device is named **"TrackLog"** in the list of available devices of the tablet or smartphone.

The wireless connection function, always active, allows to carry out a complete configuration of the Data Logger and download the data recorded in the device.

## 6 DEVICE UPDATE

To carry out the device update:

- Plug the device in USB on the computer (see page 17). The device is displayed on the computer as a removable storage.
- Copy the supplied update file.
- Paste the update file on the device, on the storage root. Please wait 10 to 15 seconds without unplugging the device until the percentage is displayed.



The device can be unplugged once the update starts.

Please wait until the end of the update (100% is displayed) before using again the device.

## 7.1 Replace the batteries

With a 1 to 3 years battery life\*, the TrackLog device guarantees long-term measurement.



When replaced, please use the same high performance batteries SAFT LS 14500 (Li-SOCl<sub>2</sub>) 3.6 V - 2600 mA type.



Warning: in case of polarity non-compliance, an overheat can occur on the device, which will not damage the device, but can cause a risk of burning.



Do not throw the batteries with domestic waste. Dispose of used batteries at the recycling facility set up for this purpose or seek an approved body.

#### 7.1.1 Replace the batteries on KT, KP and KTT TrackLog

To replace batteries:

- Unscrew the unlosable screw on the battery hatch on the backside of the TrackLog with a cross-head screwdriver.
- > The battery hatch opens. Remove the old batteries.
- ➤ Insert the new batteries\*\* respecting the polarity.
- Replace the battery hatch.
- Screw it.



#### 7.1.2 Replace the batteries on KCC TrackLog

- > Unscrew the unlosable screw on the battery hatch on the backside of the TrackLog with a cross-head screwdriver.
- > The battery hatch opens. Remove the old batteries.
- Press simultaneously **OK** and **Select** keys of the device until the 2 LEDs light on. The LEDs light off after a few seconds.
- > Wait 1 minute before replacing the batteries.
- Insert the new batteries \*\* respecting the polarity.
  *"Test Bat"* is displayed.

When "Test bat" disappears, the device is operational again and will continue from the point of the disruption.

- Replace the battery hatch.
- Screw it.

<sup>\*</sup> Non-contractual value. Based on 1 measurement each 15 minutes at 25 °C. A correct operation of the device and the storage conditions must be respected. \*\* The device battery life is calculated, therefore we recommend to use new batteries.

## 7.2 Device cleaning

Please avoid any aggressive solvent.

Please protect the device and probes from any cleaning produce containing formalin, that may be used for cleaning rooms and ducts.

For hygrometry probes:



It is strongly discouraged to remove the protection cap from hygrometry probes, since the sensor inside is very fragile. Any contact can damage it. However, if the cap protection removal is required, please take the maximum precautions and **do not touch the sensor**.

To remove the protection cap, unscrew it.

During a prolonged use of the hygrometry probe, it is recommend to protect the remote probe with the CPH protection cap, available in option.

## 8 SAFETY LOCK WALL MOUNT WITH PADLOCK

- > Mount the safety lock support on the required place.
- 1. Present the Data Logger on the support starting with the inferior part.
- 2. Clip the Data Logger on the support by falling back the superior part.
- 3. Insert the padlock to ensure the safety lock function.



The padlock can be replaced by a fail-safe sealed

The data logger can be placed on the screw-mount without the safety lock function

> To remove the data logger from the support, proceed on reverse order.

A calibration certificate is available as option under paper format. We recommend to carry out a yearly checking.

## 10 KP TRACKLOG: PERFORM AN AUTO-ZERO

The device must be placed in a convenient location to perform the auto-zero.

It is possible to reset the device during a recording dataset:

- Unplug the pressure tubes of the device.
- > Press the **Selection**" key during 5 seconds to carry out the auto-zero.

The instrument resets. The screen displays "..."

Plug the pressure tubes.
 The device continues the measurements and the dataset recording.

It is possible to reset the device when values are measured but not recorded:

- > Unplug the pressure tubes of the device.
- > Press the **Selection**" key to display the measurement.
- > Press the **Selection**" key during 5 seconds to carry out the auto-zero.
  - The instrument resets. The screen displays "..."
- Plug the pressure tubes. The device continues the measurements.

## **11 ACCESSORIES**

Accessories	Part numbers	Illustrations
1 AA lithium 3.6 V battery	KBL-AA	
Safety lock wall mount with padlock	KAV-320	
Gateway	TrackLog Gateway	
Cloud subscription offer	See subscription sheet	-
Calibration certificate	Option	-
Thermocouple temperature probes*	See	-
Temperature and hygrometry ambient probes**	See specific data sheet	-
Protection caps for hygrometry probes	See specific data sheet	-
Wired extensions for probes** In polyurethane, 5 m length with male and female mini-DIN connectors Note: several extensions can be wired in order to obtain up to 25 m cable length	KRB-320	
<b>USB micro-USB cable</b> which allows to plug your device to your PC	СК-50	Ø

(i)

Only the accessories supplied with the device must be used.

## **12 TROUBLESHOOTING**

Problem	Probable cause and possible solution
No value is displayed, only the icons are present.	The display is configured on "OFF". Configure it on "ON" with the web or mobile application.
The display is completely off* and there is no communication with the computer.	The battery has to be replaced. See page 19.
The display indicates "" instead of the measured value.	The probe is disconnected. Plug it again to the data logger.
There is no LoRa <sup>®</sup> communication with the Data Logger.	Check that the gateway is connected on the Ethernet network and the 1700 port in UDP is open, then press OK key to attempt to connect again to the LoRa <sup>®</sup> network.

\* On KT and KTT TrackLog only.



BE CAREFUL! Material damages can happen, so please apply the precautionary measures indicated.