

DATA SHEET

KISTOCK WIRELESS DATALOGGER KP110-RF / KP111-RF

Pressure

Features

- 12 000 measurement points
- IP65 housing
- Visual alarm
- Possibility to turn off the Kistock
- Possibility to perform an autozero
- 2 configurable setpoint alarms
- Magnetic mounting
- Supplied with secured wall-mounting bracket

References

Part number	Internal sensor	Display	Nb of recording points	Parameter
KP110-IN-RF	Yes	No	12 000	Pressure
KP110-IO-RF	Yes	1 line		
KP111-IN-RF	Yes	No		
KP111-IO-RF	Yes	1 line		

Housing

Dimensions

116.5 x 74.4 x 39.8 mm

Weight

160 g

Display

1 line LCD screen

Screen dimensions : 45 x 17 mm

Control

2 keys : Select and OK

Connectors

Ø 6.2 mm ribbed connectors in nickel plated brassé

Material

Compatible with food industry environment / ABS housing / Sides and caps made of Elastomer

Protection

IP 65

PC communication

1 digital input

Lacquer protected circuit board

Meets RoHS standards

Battery power supply

Type lithium 3.6 V

Visual alarm

2 electroluminescent diodes (green and red)

Environment

Air and neutral gases

Technical features

	KP 110-RF	KP111-RF
Units displayed	Pa	
Resolution	1 Pa	
Measuring range	From - 1 000 to + 1 000 Pa	From - 10 000 to + 10 000 Pa
Internal sensor	Pressure	
Tolerated overpressure	68 974 Pa	
Setpoints alarms	2 setpoint alarms on each channel Possibility to send e-mail in case of alarm*	
Frequency of the measurement	From 1 s to 24 h	
Operating temperature	From + 5 ° to + 50 °C	
Storage temperature	From -40 to +85 °C	
Radio span (in free field)	300 m	
Frequency	868 MHz	
Battery life	With radio frequency: 1.5 years ¹ Without radio frequency: 3 years ²	
Data storage	In the kistock until downloading on PC	

*Thanks to the Kilog RF software

¹: 1.5 ans (on the basis of 1 measurement and 1 recording every 15 minutes at 20°C and a RF downloading every 6 hours)

²: 3 years (on the basis of 1 measurement every 15 minutes at 20°C)

Specifications

KP 110-RF

KP111-RF

Sensor type	Pressure	
Measuring range	From - 1 000 to + 1 000 Pa	From - 10 000 to + 10 000 Pa
Accuracy*	±0.5% of reading ±3 Pa	±0.5% of reading ±30 Pa

*All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

Recorder function



KISTOCK datalogger is supplied turned off to save battery life. To activate it :

- Press "OK" key for 5 s , green LED "On" blinks.

To turn it off:

- Press "Select" and "OK" keys at the same time for 5 s.

It is impossible to turn it off during a recording or a data download.



Activate or deactivate the keys during a measurement dataset :

- Press "Select" and "OK" at the same time for 5 s to deactivate both buttons : red led flashes twice quickly.
- Press "Select" and "OK" at the same time for 5 s to reactivate them : green led flashes twice quickly.

Perform an autozero during a measurement dataset

It is possible to reset the instrument during a measurement dataset.

Keys must be activated.

- Disconnect the pressure tube from the instrument.
- Press "OK" key.

The instrument is reset : "0" is displayed on the screen, this value is not recorded.

- Connect again the pressure tubes.

The instrument starts again the measurements dataset and values are recorded.

Perform an autozero during measurements (values are not recorded)

It is possible to reset the instrument when values are measured but not recorded.

Keys must be activated.

- Disconnect the pressure tube from the instrument.
- Press "Select" to display the measurement.
- Press "OK".

The instrument is reset : "0" is displayed on the screen.

Connect again the pressure tubes.

The instrument backs to measurements.

5 recording modes

KISTOCK can record in 5 different ways :

- "Immediate" mode records values according a predefined interval.
- "Minimum", "Maximum" and "Average" record automatically the calculation of minimum, maximum or average of measured values during an interval of recording.
- "Monitoring" mode allows to get an accurate history report during error events to help troubleshooting, without stopping the measurement logging. To proceed this way, you just have to define :
 - a record interval to be used whilst the readings are beyond the setpoints.
 - a record interval for the values measured during each reading beyond the setpoints.
- Furthermore, you can also let your KISTOCK record non-stop ("loop" recording option).

Two operation modes

- Autonomous mode: data download is made wireless through the Kilog RF software.
- Network mode: measurements are stored in the datalogger and sent to the computer at regular intervals (in case of alarm, the information is directly sent to the computer). So Kistock memory is used as buffer memory and is reset at each sending. In this mode, several Kistocks can be linked to a computer at the same time.

Three modes dataset start

Once your recording mode has been set, you can launch your dataset:

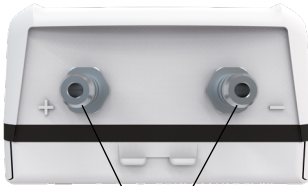
- With a delayed start (with predefined date and time)
- With the software
- With push-button

Six modes dataset stop

You can stop your dataset :

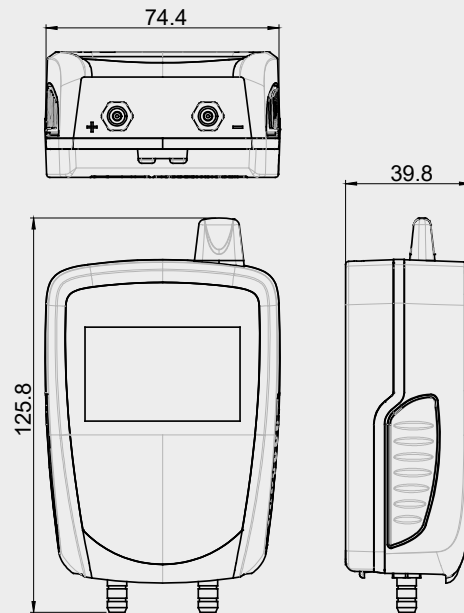
- As per a date and time (if it was started the same way)
- As per a period
- As per a predefined number of recording points
- Once the storage capacity is full
- With "Stop" option of the software
- By holding "OK" key for at least 5 s, if this function has been previously activated by the software.

External inputs



Ribbed connectors


Dimensions (mm)



Screen



Pa: pressure in Pascal

 Indicates the reception powerful of the datalogger

Software



Configuration and data processing software

The new KILOG RF software is specially designed for the KISTOCK-RF range. In addition to the standard functions of dataloggers configuration and data processing (average, minimum and maximum values...), it allows the creation of a wireless dataloggers network (up to 100 dataloggers) for a real-time monitoring.

Ref.: *KILOG-RF*

Software is compatible with the wired range.



Communication base with KILOG-RF software

This base allows to communicate by radio frequency with Kistock-RF (kistock by kistock data recovery, programming of Kistock-RF...). It must be continuously powered and connected to the PC for the use of kistock in network mode. It is equipped with a USB connection for PC, a jack connection for KNT310 data collector and a relay output. Supplied with main adapter, KILOG-RF software and USB cable.

Ref.: *BK-RF*

END DATASET is finished

REC One value is being recorded

LOG Flashing: dataset has not started yet
Constant: data set is in progress

FULL Slow flashing: dataset is taking 80-90% of storage capacity
Fast flashing: dataset is taking 90-100% of storage capacity
Constant: storage capacity filled up


1 Channel No. which is measuring

ACT Refresh of displayed measurements

TIME Display of measurement and recording intervals

 Low battery indicator

MIN Displayed values correspond to maximum and minimum values of the channels

MAX  Alarm action type: rising or falling action

Accessories



Data collector

KNT data collector allows you to collect measurements from one or several KISTOCK directly on-site (up to 500,000 values stored). Data can be displayed and printed from the KNT or download to your PC.

Ref. KNT 310



Alarm relay that can switched from KILOG-RF software via BK-RF base. Supplied with main adapter.

Ref : KAL-RF



Device to extend radio signal to kistocks (300 m). Supplied with main adapter.

Ref : KPR-RF



Autonomous instrument to check communication. It allows to check signal reception for positioning of dataloggers, extender and alarm box

Ref : KTC-RF

Lace

Ref. KDC

Supplied with

Secured wall-mounting bracket

KIMO has designed a new proprietary anti-theft system with no padlock. Your system cannot be unlock or damaged : your installation is fully secured.



Calibration

KISTOCK dataloggers can be supplied with calibration certificate as an option.

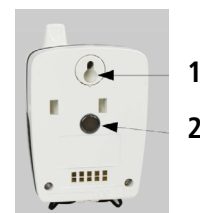
Warranty period

KISTOCK dataloggers have 1-year guarantee for any manufacturing defect (return to our After-Sales Service required).

Mounting

KISTOCK can be mounted in different ways ; you can also move it or install it very easily.

- Magnetic mounting or wallmounting (see photos)
- Secured mounting (optional, see supplied with)



1. Wallmount and lace eyelet
2. Magnetic mounting