

## **Technical Data Sheet**

Pressure / Temperature / Humidity / Air Velocity / Airflow / Sound level

# KISTOCK WIRELESS DATALOGGER KT110-RF

Temperature/current/voltage/pulses





#### **KEY POINTS**

- 16 000 measurement points
- IP65
- Visual alarm
- Possibility to turn off the Kistock
- 2 configurable setpoint alarms
- Magnetic mounting
- Supplied with secured wall-mounting bracket

#### **REFERENCES**

Part numbers	Internal sensor	Display	External input number	Nb of recording points	Parameters
KT110-EN-RF		no	4	46,000	Temperature,
KT110-EO-RF	yes	2 lines	1	16 000	current, voltage, pulses

#### **TECHNICAL FEATURES**

Units displayed	°C, °F, mV, V, mA, A
Resolution	0.1 °C, 0.1 °F, 0.001 V, 1 mV, 0.1 A, 0.001 mA
External input	1 mini-Din connector
Internal input	Temperature, current, voltage, pulses
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 -40 to +70 °C
Storage temperature0	From -40 to +85 °C
Radio span (in free field)	300 m
Frequency	868 MHz
Battery life	3 years**
Data storage	In the kistock until downloading on PC

#### FEATURES OF HOUSING

#### **Dimensions**

116.5 x 74.4 x 39.8 mm

#### Weight

160 g

### **Display**

2 lines LCD screen

Screen dimensions: 45 x 28.5 mm

#### Control

2 keys : Select and OK

#### Material

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

#### **Protection**

IP 65

#### PC communication

1 digital input

#### **Digital electronics**

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 FOR PROBES, INTERNAL SENSOR AND CABLES

#### TEMPERATURE PROBE (optional)

Sensor type	NTC
Measuring range	From -40 to +120 °C (removed probe)
Accuracy*	±0.3 °C (-25 °C <t<+70 °c)<br="">±0.5 °C (beyond)</t<+70>

#### INTERNAL SENSOR

Sensor type	NTC
Measuring range	From -40 to +70 °C
	±0.4 °C (-20 °C <t<+70 °c)<br="">±0.8 °C (beyond)</t<+70>

#### CURRENT INPUT CABLE (optional)

Measuring range	0/4-20 mA
Accuracy*	±0.2 % of measuring ±1 µA

#### VOLTAGE INPUT CABLE (optional)

Measuring range	0-10 V
Accuracy*	±0.2 % of measuring ±1 mV

#### AMMETER CLAMPS (optional)

Measuring range	0-50 A / 0-100 A / 0-200 A / 0-600 A
Accuracy*	±1 to 2.5 % of reading value according the range

#### PULSES CABLE (optional)

Maximum voltage	5 V
Input type	TTL frequency count

\*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.



#### **During a measurement dataset:**

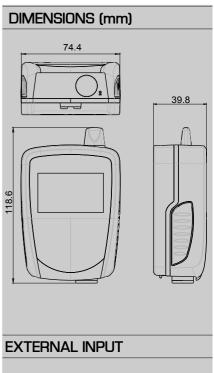
- Press « Select » et « OK » at the same time for 5 s to deactivate both buttons : red led flashes twice quickly.
- Press « Select » et « OK » at the same time for 5 s to reactivate them : green led flashes twice quickly.

#### Five 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).





#### **RECORDER FUNCTION (continuation)**

#### 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 5s, if this function has been previously activated by the software.

#### **SCREEN**



°C.. Temperature in degrees Celsius °F.. Temperature in degrees Fahrenheit V or mV Voltage expressed in V or mV A or mA Current expressed in A or mA

лШΥ

Indicates the reception powerful of the datalogger

END

REC

LOG

**FULL** 

12

DATASET is finished

One value is being recorded

Flashing: dataset has not started

Constant: data set is in progress

90% of storage capacity

100% of storage capacity

Channel No which is

measuring

Slow flashing: dataset is taking 80-

Fast flashing: dataset is taking 90-

Constant : storage capacity filled up

ACT

Refresh of displayed measurements

TIME

Display of measurement and

IIIVIE

recording intervals

Low battery indicator

MIN

Displayed values correspond to maximum and minimum values of the channels

7

Alarm action type: rising or falling action

### 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 programming and downloading wired Kistock and a relay output. Supplied with main adapter, KILOG-RF software and USB cable.

Ref.: BK-RF

#### **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* 

#### ACCESSORIES (continuation)



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

Ref: KTC-RF



• 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



Made of PVC HT, 5m long with male and female mini-Din connectors Ref. KRC 5

Note: you can connect several extensions together (maximum length 25m)

· 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.

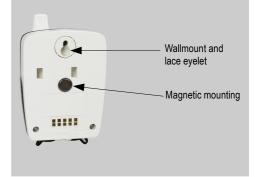
#### WARRANTY PERIOD

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)



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