Thermocouple temperature datalogger
KTT 300 KISTOCK

- *Measure up to 2 parameters*
- *Thermometer function*
- *Large LCD display*
- *2 external inputs*
- *Fast download of data (1,000 values/second)*
- *Up to 100,000 measurement points*
- *2 configurable setpoint alarms*
- *Small dimensions*
- *Magnetic mounting*
- *IP 43 housing and Elastomer protection pads*

Technical features

Units displayed.................................°C, °F
Resolution.......................................0.1°C, 0.1°F
External inputs................................2 miniature male connectors
Setpoint alarms...............................2 setpoint alarms on each channel
Frequency of measurement.............from 1s to 24h
Working temperature.......................from –20 to +70°C
Storage temperature........................from –40 to +85°C
Battery life.......................................5 years*
(*) on the basis of 1 measurement each 15 minutes at 20°C

Thermocouple probe (optional)
- Type of sensor ....Thermocouple type K (Class 1)
Measuring range.............................-200 to +1000°C
Accuracy**.......................................±1.1°C or ±0.4% of the value displayed

- Type of sensor..............................Thermocouple type J (Class 1)
Measuring range.............................-100 to +750°C
Accuracy**.......................................±0.8°C or ±0.4% of the value displayed

- Type of sensor..............................Thermocouple type T (Class 1)
Measuring range.............................-200 to +400°C
Accuracy**.......................................±0.5°C or ±0.4% of the value displayed
See technical datasheet « Measuring probes and cables for Class 300 KISTOCK dataloggers».

(**) In accordance with CEI 584-1 standard, the accuracy is expressed either by a deviation in Celsius (°C), or by a percentage of the temperature concerned. Only the bigger value is considered.

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

Dimensions

65 mm
33 mm
91 mm
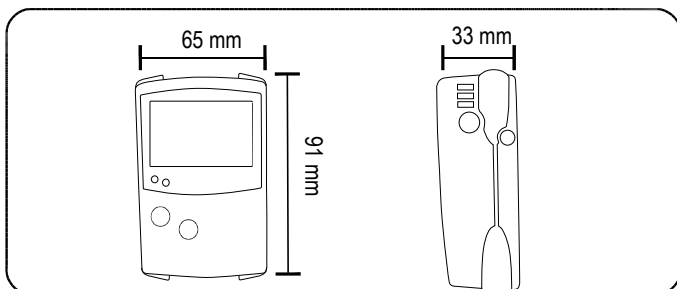
Features of housing

Dimensions....................91 x 65 x 33 mm
Weight...........................85g
Display...........................2-line LCD display
Screen dimensions: 45 x 28,5 mm
Control...........................2 keys (« SELECT » and « OK »)
Material..........................Compatible with food industry environment
Polycarbonate housing
Sides and caps made of Elastomer
Protection......................IP43
PC communication.........1 input for Jack connector (3.5 male)
Electronics....................Digital electronics
Lacquer protected circuit boards
Meets RoHS standards
Battery power supply.....Lithium 3.6V 1/2 AA
Visual alarm...................2 electroluminescent diodes (green and red)
Environment..................Air and neutral gases

Connections

External inputs
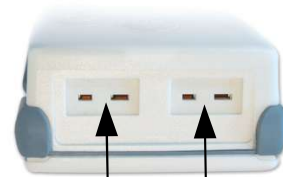
Connectors for thermocouple

PC connection inputs

Jack 3.5 connector
Input for KISTOCK-PC software

◼ *Display*
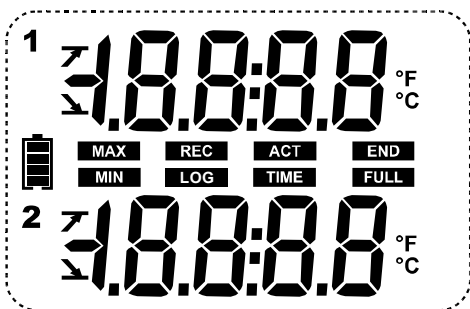
°C...............Temperature in degrees Celsius
°F...............Temperature en degrees Fahrenheit

OFF   *Auto switch-off (from 1 to 30 minutes)*

END	*Data set is finished*
REC	*One value is being recorded*
LOG	*Flashing: data set has not started yet* *Constant : data set is in progress*
FULL	*Slow Flashing: data set is taking 80-90% of storage capacity* *Fast Flashing : data set is taking 90-100% of storage capacity* *Constant: storage capacity filled up*
1 2 **2 3** **3 4**	*Channel no. which is measuring*
0	*Thermocouple type K*
1	*Thermocouple type T*
2	*Thermocouple type J*

ACT	*Refresh of displayed measurements*
TIME	*Display of measurement and recording intervals*
🔋	*Status of battery life: 5 levels (4 blocks + empty battery) Flashes when only one block is remaining*
MIN **MAX**	*The values displayed correspond to maximum and minimum values of the channels*
⤵	*Alarm action type: rising or falling action*
DT	*Difference of temperature between 2 external probes*
UNIT	*Measurement unit selected*

bAt *flashing on the screen + flashing of LEDs : mean that battery must be changed*

Err *+ flashing of the green LED : detection of communication error* ⟶ *Press « Select » and « OK » keys to reset the instrument.*

Err *+ flashing of the red LED : detection measurement error* ⟶ *Press « Select » and « OK » keys to reset the instrument.*

◼ *Recorder functions*

5 recording modes

KISTOCK can record in 5 different ways :

« Immediate» mode => to record values according to a predefined interval
• « Minimum », « Maximum » and « Average »=> to record automatically the calculation of minimum, maximum or average of values measured during an interval
• « Monitoring »=> 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).

4 types of data set start

Once your recording mode has been set, you can launch your data set :
with a delayed start (with predefined date and time)
• with the software
• with push-button
• with « Online » option. In this case, your data sets are directly sent, saved and displayed on your PC in real time.

6 types of data set stop

You can stop your data set :
according to a date and time (if it was started the same way)
• according to a period
• according to 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.

◼ *Thermometer function*

Once « thermometer » function is activated, KISTOCK allows you to display information as below :
• difference of temperature between 2 external probes (« Delta T »),
• « Minimum »,
• « Maximum »
• or hold the temperature measured (« Hold »).

Measuring probes and cables

• Large choice of thermocouple probes general use, penetration, ambient, wire, Velcro, with handle...

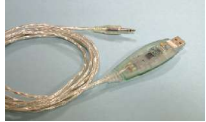*See technical datasheet « Measuring probes and cables for Class 300 KISTOCK dataloggers »)*

KILOG *software*

• Configuration and data processing software
KILOG software enables you to configure, save and process your data in a very simple way.
• <u>Software</u>...*Ref. KILOG*
• <u>Complete</u> set..
• 1 KILOG software + 1 USB inteface...........*Ref. KIC2*
•1 KILOG software + 2 USB interfaces........ *Ref. KIC12*

• KISTOCK-PC interface
This USB cable enables you to connect your KISTOCK to your PC.
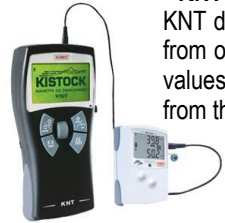*Ref. I-KIC2*

• KILOG CFR software
KILOG CFR software is the key tool for users who require traceability, in accordance with 21CFR-Part11 standards. Security and integrity of data are guaranteed: it is not possible to modify or tamper with the data.

• <u>Complete set</u> : KILOG CFR software + 1 interface... *Ref. KIC2 CFR*
KILOG CFR software + 2 interfaces...*Ref. KIC12 CFR*

Accessories

• KNT data collector
KNT data collector allows you to collect measurements from one or several KISTOCK directly on-site (500,000 values stored). Data can then be displayed and printed from the KNT or downloaded to your PC.
Ref. KNT 300

• Printer for KNT 300 data collector
Ref. ITP

• Secured wall-mounting bracket
KIMO has designed a new proprietary anti-theft system with no padlock. Your system cannot be unlocked or damaged: your installation is fully secured.
Ref. KAV

Once your KISTOCK is set on the mounting plate, insert the key to lock the mounting system.

To unlock: insert the key inside the metallic axis, and make ¼ turn.

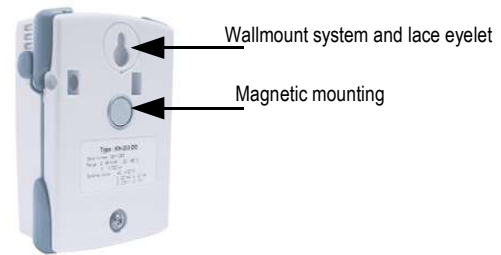*Remove the key to release the metallic axis. Your KISTOCK is now unlocked.*

• Lace *. Ref. KDC*

• Lithium ½ AA battery . *Ref. KBL*

Mounting

KISTOCK can be mounted in different ways; you can also move it or install it very easily.
• Magnetic mounting or wallmounting (see photo)
• Secured mounting (optional, see accessories)

Wallmount system and lace eyelet

Magnetic mounting

How to change the battery

With 5-year battery life (*), KISTOCK guarantee long-term measurements.
To change the battery:
• Remove the screw located at the back, with a screw driver.
• Remove the front part, along with the old battery.
• Insert the new battery observing the proper polarity.
• Replace the front.
• Tighten the screw.
• **Press « Select » and « OK » keys for 2 seconds to refresh battery level.**
(*) on the basis of 1 measurement each 15 minutes at 20°C

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).

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