KNT 310
Data recorder and data reader for KISTOCK dataloggers

KEY POINTS
- Compatible with wireless Kistocks, wired kistocks 2010 and previous ranges
- Possibility to record up to 50 datasets
- Possibility to view real-time measurements from a kistock datalogger

TECHNICAL FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage capacity</td>
<td>500 000 points or 50 data sets</td>
</tr>
<tr>
<td>Speed of data transfer</td>
<td>From kistock to data recorder: 400 values/second</td>
</tr>
<tr>
<td></td>
<td>From data recorder to PC: 1000 values/second</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>From 0 to 50°C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>From -20 to +80°C</td>
</tr>
<tr>
<td>Radio span (in free field)</td>
<td>300 m</td>
</tr>
<tr>
<td>Frequency</td>
<td>868 MHz</td>
</tr>
<tr>
<td>Data storage</td>
<td>In the data recorder until downloading on PC</td>
</tr>
</tbody>
</table>

FEATURES OF HOUSING

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>340 g</td>
</tr>
<tr>
<td>Display</td>
<td>Graphic display 128 x 128 pixels</td>
</tr>
<tr>
<td></td>
<td>Dimensions: 50 x 54 mm</td>
</tr>
<tr>
<td></td>
<td>Blue backlight</td>
</tr>
<tr>
<td>Keypad</td>
<td>Metal-coated</td>
</tr>
<tr>
<td></td>
<td>5 keys and 1 joystick</td>
</tr>
<tr>
<td>Conformity</td>
<td>Electromagnetical compatibility (as per NF EN 61326-1 standard)</td>
</tr>
<tr>
<td>Material</td>
<td>Compatible with food-industry environment</td>
</tr>
<tr>
<td></td>
<td>Shock-proof ABS housing</td>
</tr>
<tr>
<td>Protection</td>
<td>IP54</td>
</tr>
<tr>
<td>Power supply</td>
<td>4 alkaline batteries 1.5V LR6</td>
</tr>
<tr>
<td>Environment</td>
<td>Air and neutral gases</td>
</tr>
<tr>
<td>Auto shut-off</td>
<td>Adjustable from 0 to 120 mn</td>
</tr>
</tbody>
</table>

DIMENSIONS (mm)

- Top view: 80.8
- Front view: 161.9
- Side view: 57.4
• Data downloading from a wireless kistock to data recorder

Before downloading data stored from a kistock datalogger, this kistock has to registered in the data recorder.
See kilog RF user manual to register a datalogger in the data recorder.

➢ Turn on the data recorder.
➢ Go to “Kistock” with left and right arrows then press OK.
➢ Select “RF Connection” with up and down arrows then press OK (see fig.1).
A progress bar then the list of registered kistock are displayed.
➢ Select the Kistock to download with up and down arrows then press OK (see fig.2).
Connection screen then “Infos” screen are displayed. This last screen displays the kistock serial number, dataset name and number of dataset point.
From this screen :
➢ Select “Discharge” with left and right arrows then press OK.
Discharge screen with its progress bar is displayed.
When discharge is finished :
➢ Select “Display” then press OK to visualize main features of the dataset : type of Kistock, serial number, dataset name, dates of beginning and end, number of measurements and of registered channel with minimum and maximum values for each channel (see fig.3).
Or
➢ Select “New dataset” then press OK to launch a new dataset.

• Discharge date from a wired kistock to the data recorder

➢ Connect the data recorder and the kistock with the cable.
➢ Turn on the data recorder.
➢ Go to “Kistock” with left and right arrows then press OK.
➢ Select “Cable Connection » with up and down arrows then press OK (see fig.4).
A progress bar is displayed « Infos« screen. This last screen displays the kistock serial number, dataset name and number of dataset point.
From this screen :
➢ Select “Discharge“ with left and right arrows then press OK.
Discharge screen with its progress bar is displayed.
When discharge is finished :
➢ Select “Display“ then press OK to visualize main features of the dataset : type of Kistock, serial number, dataset name, dates of beginning and end, number of measurements and of registered channel with minimum and maximum values for each channel (see fig.5).
Or
➢ Select “New dataset“ then press OK to launch a new dataset.
• Discharge stored dataset from the data recorder to a computer
  > Connect the data recorder on the base.
  > Turn on the data recorder.
  > Launch Kilog RF software.
  > Select as communication support the data recorder.
  > Click on “Transmit data” button.
  > Tick the dataset to transmit.
  > Select an operator and/or a customer if necessary.
  > Click on “Next” button.
  > Select the dataset file destination that will be created.
  > Select the required option concerning the files management.
  > Click on “Finish” button.

• Delete dataset stored in the data recorder
  > Turn the data recorder.
  > Go to “Memory” with left and right arrows.
  The device asks to erase :
  > Go to YES with up and down arrows to erase all datasets
  or
  > Go to NO to cancel and back to main screen or press Esc.

• Visualize data from a kistock in real-time on the data recorder
  When a Kistock is registered in the data recorder, it is possible to visualize its
  measurements in real-time :
  > Go to “Kistock” with left and right arrows then press OK.
  > Select “RF connection” with up and down arrows then press OK.
  > Select the Kistock up and down arrows then press OK.
  > Select “Values” with left and right arrows.
  Data recorder displays values measured by the Kistock. (see fig.7).

• Set the device
  This part allows to adjust the following parameters of the data recorder :
  > Date/Time
  > Beep
  > Auto shut-off
  > Contrast
  > Backlight
  > Memory
  > Language

  > From main screen, go to “Params” then press OK.

Set date and time :
  > Go to “Date and time” line with up and down arrows then press OK.
  > Set date and time with arrows.
  > Press OK to validate.
Activate or deactivate beep:
- Go to “BEEP” line with up and down arrows then press **OK**.
- Select **ON** to activate or **OFF** to deactivate the beep of the keys.
- Press **OK** to validate.

Activate or deactivate auto shut-off of the data recorder:
- Go to “Extinction” line with up and down arrows then press **OK**.
- Select **OFF** to deactivate it or the time before automatic shut-off (15, 30, 45 min or 1h).
- Press **OK** to validate.

Set contrast:
- Go to “Contrast” line with up and down arrows then press **OK**.
- Set contrast between 0 and 9.
- Press **OK** to validate.

Set backlight:
- Go to “Backlight” line with up and down arrows then press **OK**.
- Set backlight between 1 and 9 or on Auto.
- Press **OK** to validate.

Delete datasets:
- See previous page.

Select the language of the device:
- Go to “Language” line with up and down arrows then press **OK**.
- Select language: French, English or another installed language.
- Press **OK** to validate.

• About data recorder:
- Turn on the device.
- Go to “Infos” with left and right arrows.
- Press **OK**.

*Data recorder serial number, number of stored datasets and firmware version are displayed.*