

CONiQ® Control

Application for static scales

- Intuitive touch controls
- Web-based user interface
- High legal-for-trade accuracy up to 6000d and 0.3 µV/d
- Multi-range/multi-interval scale, up to three ranges
- Service access for tablet or smartphone



reddot award 2019
winner interface design

CONiQ Control is an evaluation software specifically for the modular CONiQ Control system. It is specially designed for standard weighing applications, such as cargo scales (platform and roller table scale), crane scales, vehicle scales and hopper scales. Featuring intuitive handling technology, the design of the user interface was proudly awarded 'winner' for the reddot award.

Applications

The CONiQ Control's core purpose is weighing a load with strain gauge load cells. This can be applied to the below applications by selecting various modules.

These include for:

- Cargo scales
- Crane scales
- Truck scales
- Hopper scales

The internal PLC, according to IEC 61131-3 and optional programming bundle VBU6000, enables to operators to implement complex projects and user-specific visualizations on the controller.

Function

- Manual tare entry
- Tare determination by weighing the empty vessel
- Registration and printout of the weighing results
- Supports additional tasks
- Internal data storage for weighing results
- Compatible with the external legal-for-trade memory DISOSAVE

Award-winning user interface

Winner of the reddot award 2019 interface design

- Intuitive handling
- Short learning time
- Plain text error messages
- Three predefined user groups

Modular system

Configure your CONiQ Control appropriately for your application.

- No re-verification when replacing mainboard and I/O modules (except for calibrated weighing module)
- Connection of additional peripherals via USB
- Fieldbus interface



The main application for the CONiQ Control, **cargo scale** contains the functionality for legal-for-trade weighing of a load supported on a strain gauge load cell.

Operation or maintenance tasks are performed either via the installed touch display, an external keyboard connected via USB or an external browser. If required, enter the known tare of a weigh hopper or determine it by weighing the empty vessel. Together with the weighing result, save or print other specific information about the process in the desired format. All results are also available via the fieldbus interface, through which the controls can also be operated by, if required.

After a longer period without use, the weight is shown with large figures on the display. Touching the screen returns you to the control screen.

The following **software options** also allow effective control of:

Truck: Software for vehicle scales

The entrance is opened after zeroing the scale. The vehicle's registration number is entered in. Select the weighing mode for first weighing, second weight, control weighing or tare weighing.

After a first weighing, enter any required additional information and carry out the weighing. CONiQ Control will then process the entry with context-related suggested values.

The weighing result, with the additional information, is saved and printed if required.

Crane: Software for crane scales

Before performing the weighing, select the method to be used to determine the tare: manual input or measurement. After inputting additional information about the weighing process, you can start the weighing. The result, with the additional functions, is then saved and printed if required.

Hopper: Software for hopper scales

The application allows the setting of fixed (weight) thresholds or percentage limits related to the maximum fill level. The current fill level - liquid or bulk material - is then displayed as a percentage and in the selected measuring unit. The software is thus used for

quick and uncomplicated monitoring of the fill level of a hopper and allows two-point refill control to prevent overflow or unwanted draining.

Data of the weighing channel

| | |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Supply for strain gauge load cells | 5 VAC |
| Input signal | 0 - ±17 mV |
| Input resistance of the load cells | > 35 Ohm |
| Sensitivity in legal-for-trade applications | 0.3 µV/d |
| Scan rate | 129 per second |
| Increment of the display | 1, 2, 5 in the last digit |
| Units of weight | kg, g, t, lb, N, kN, It, st |
| Resolution of the legal-for-trade measured value²⁾ | Max, 6000 d Multi-range: 3x4000 d Multi-interval: 3x4000 d |
| Resolution of the non-legal-for-trade measured value | 16 million parts |
| Tare range | 0 ... 100 % ¹⁾ |
| Zero setting range | Can be set, max. 20% ¹⁾ |
| Automatic zero-setting | If required: 0.5 d per second |
| Weight value filtering | 0 – 10 s |
| Linearity error | < 0.025 ‰ ^{1) 2)} |
| Zero point drift TK0 | < 0.024 ‰ / 10 K ^{1) 2)} |
| Sensitivity drift TKc | < 0.03 ‰ / 10 K ^{1) 2)} |
| Combined error Fcomb | < 0.05 ‰ / 10 K ^{1) 2)} |
| Maximum cable length | 1000 m at wire cross section ≥ 0,5 mm ² Longer cable on request |

¹⁾ Of the final value

²⁾ Also note the restriction as a result of the load cell used

