### **Portavo**

The new portable meters for use either with analog or Memosens sensors. With graphical color display, data logger, Li-ion battery and USB port.

Robust enclosure, protected against strong jets of water. Appealing design.

Extremely flat. Constructed for a firm grip.

#### **Applications**

Most versatile hazardous and safe-area applications, such as in industry, in the lab, for environmental protection, food processing, as well as water or waste-water treatment.

#### **The Facts**

- High-tensile polymer housing for rough industrial applications
- Integrated sensor quiver protects the sensor from drying out
- Integrated protective cover protects the display and also serves as benchtop stand
- The only portable device with Zone 0/1 ATEX approval
- Calimatic automatically recognizes the right buffer – safe and clearly guided calibration at the press of a button
- 10 buffer sets to choose from
- Simultaneous pH/mV and temperature display
- Automatic device test at power-on
- Sensoface sensor monitoring
- Temperature detection with automatic recognition of Pt 1000 / NTC 30 kohm
- 1000 operating hours on just 4 AA batteries
- Battery indicator
- Auto switch-off
- EMC design





Knick in every respect.

The new portables offer exceptional design and functionality

#### **The Housing**

Unique. Ergonomically optimized. Resistant to impact and chemicals. Waterproof (IP 67 / IP 66 protection)



#### **The Buttons**

Smooth membrane keypad. Hard-wearing. Easy to clean. No sticking or incrustation.



#### **The Display**

Large (15 mm digit height). Easy-to-read, white backlit QVGA graphical display. Anti-reflective mineral glass screen. Scratch-proof and resistant to chemicals.

Straightforward menu navigation with graphic icons and detailed operating instructions in plain text.



### M4Knick >

#### **The Quiver**

Integrated. Replaceable. Protects the sensor. Transparent. Easy to remove.



#### **The Cover**

Protects from dirt and damage. Highly flexible laminated joint. Can be completely flipped over to rear.



#### The Hook

Fold-out. For suspending.
Or positioning upright. Leaves both hands free to operate the sensor.





#### **The Data Logger**

The meter provides a data logger. Prior to use, it must be configured and then activated.

The following logging types can be selected:

- Manual logging by pressing the softkey
- Time-controlled logging at a fixed interval



**Data Logger** 

Back

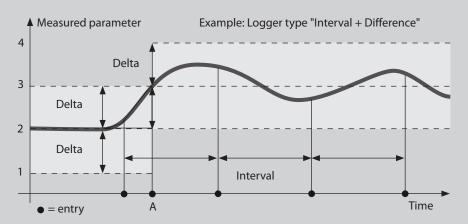
pH 6.71 - 40.0 °C 2012-04-06 18:32:28

Help

The data logger records up to 10,000 entries, which can be assigned to different measuring points (TAGs) and annotations.

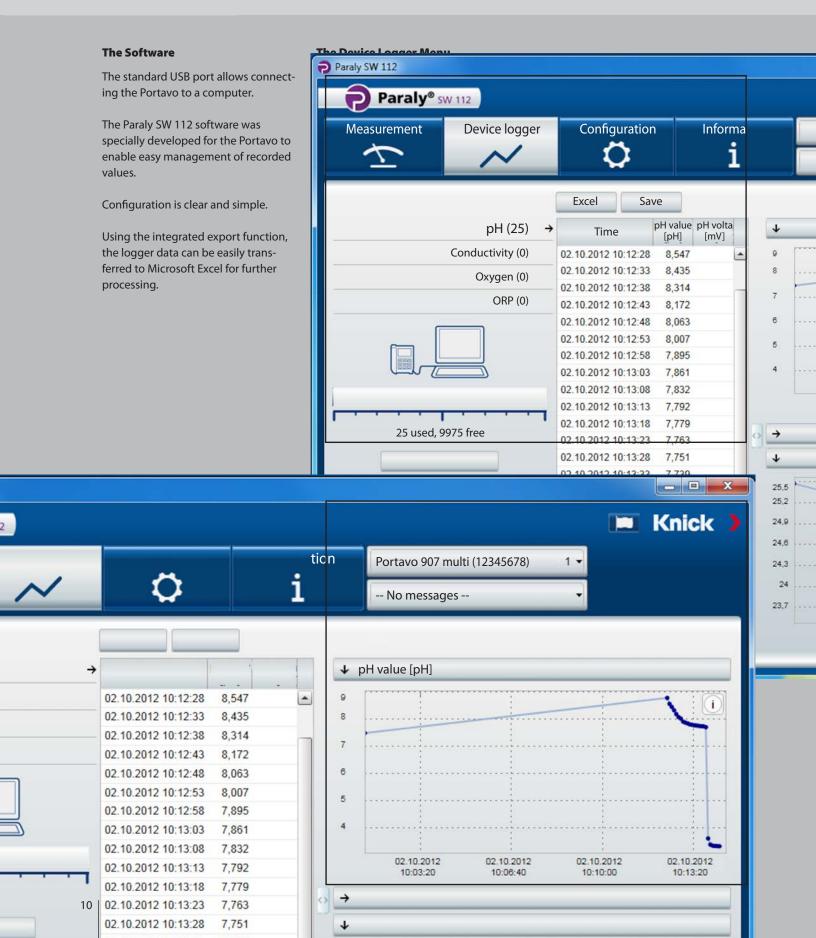
The following data will be recorded: meas. point, annotation, sensor ID, serial number of sensor (Memosens), primary value, temperature, time stamp, device status.

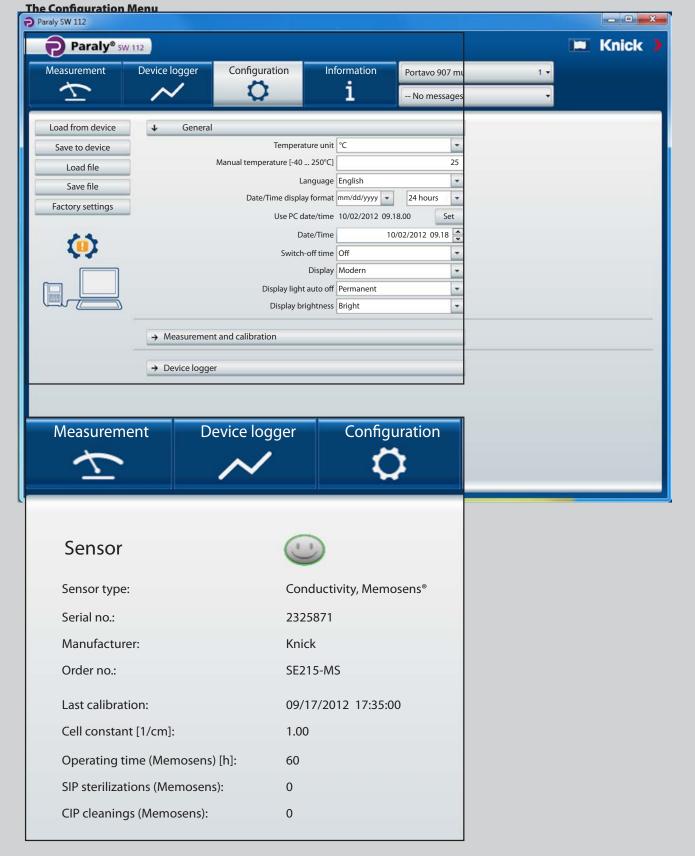
The Paraly SW 112 software allows convenient management of the data logger. It is always the currently selected process variable which is recorded.



Combined time- and difference-controlled logger: provides high resolution when the measured value changes, saves data volume when the value is constant







#### Memosens

The concept of using digital Memosens sensors is globally unique.

#### Memosens – The Benchmark for Digital Sensors

The Memosens inductive sensor connector system transfers both energy and data without contact between electrochemical sensors and analyzers. The integrated intelligence allows saving and evaluating sensor-related data directly in the pH/ORP, conductivity or oxygen sensor.



#### Memosens - Reliable and Safe

With its perfect galvanic isolation the Memosens prevents interferences, allowing straightforward and safe measurements even with most difficult potentials. The sensors can be easily handled under adverse conditions – you can even connect them under water.

#### Memosens – Optimal Solution for Every Industry Sector

Its outstanding features place the Memosens technology in an excellent position to face the individual challenges of analytical measuring tasks in a wide range of industries such as chemistry, petrochemistry, energy production, pharmaceutical and food industry and water/wastewater treatment. Memosens is suitable for use in Zone 0 hazardous areas.



#### **Memosens - Time is Money**

The considerably less time required for maintaining the digital Memosens sensors on site reduces process downtimes. Together with the other benefits, such as the longer sensor lives, this results in a quick amortization of the investment.



Maintenance work when using Memosens sensors



Maintenance work when using conventional sensors

#### Memosens – Benefits at a Glance

Its outstanding features make the Memosens technology the ideal solution for individual challenges of analytical measuring tasks in all industry sectors.

#### **Contactless:**

- Maximum availability
- · Perfect galvanic isolation
- Completely insensitive to ambient conditions
- humidity
- dirt
- corrosion
- interference potentials

#### **Reliable:**

- Plug & Measure
- Simple and safe plugging with bayonet coupling
- Easy handling even under harsh conditions
- Longer sensor service life due to predictive servicing
- Interoperability

#### Digital:

- Predictive maintenance
- Not influenced by long or unsuitable cables
- Optimal process management with intelligent diagnostics
- Sensor operating time
- Sensor wear
- Remaining lifetime (dynamically calculated)
- Max. temperature
- Adaptive calibration timer
- Calibration and adjustment data
- SIP counter