

ProLab 4000: and Cond on top...

ProLab 4000: High end pH/ION/Conductivity meter

pH, ISE and conductivity measuring on highest level

Equivalent to ProLab 3000 – added with another feature ...

The ProLab 4000 offers the high-quality measurement technology known with ProLab 3000 and is furthermore completed with conductivity measurement for highest standards: A measuring range from 0.000 $\mu\text{S}/\text{cm}$... 2000 mS/cm , TDS and salinity measurement as well as various functions for temperature compensation and setting of the cell constant form the standard for a measuring instrument of this performance class. ProLab 4000 offers even more ...

Special functions for determining the dependency of conductivity regarding temperature or concentration

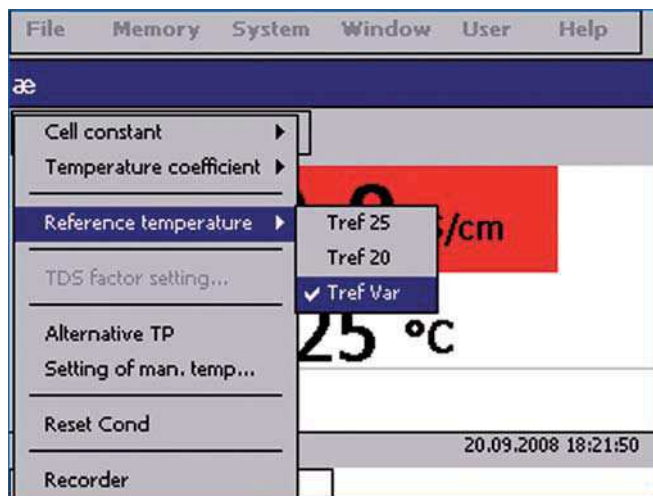
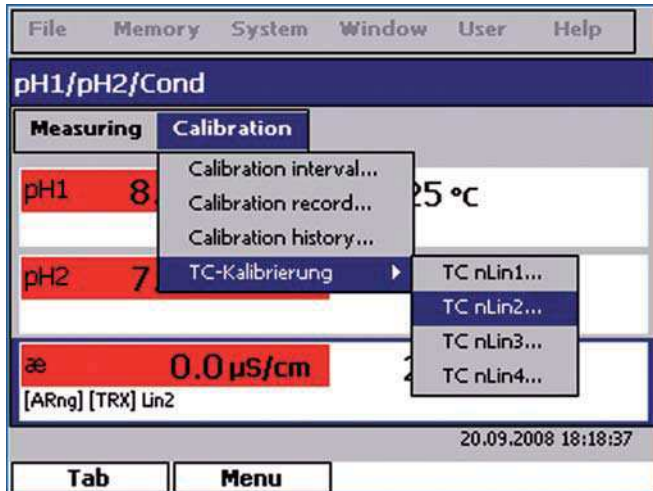
The conductivity of aqueous solutions is subject to temperature and concentration of dissolved substances. For comparing measurement values, which were determined at different temperatures, all values have to be recalculated onto the same reference temperature. Both common procedures linear and

non-linear (acc. to EN 27888) compensation should however only be applied with diluted measuring solutions, as otherwise the concentration dependency goes unnoticed. Furthermore, the measurement temperature range should lay within $\pm 10\text{K}$ of the reference temperature. The ProLab 4000 eliminates these restrictions thanks to special compensation procedures. These methods are featured for example by:

- Usage of two pre-programmed temperature coefficients for HCl, NaOH, NaCl and KCl for a temperature range of 0...40°C
- Possibility of entering literature values for two temperature coefficients for additional solutions.
- Determination of temperature coefficients by:
 - Setting the temperature range and intervals
 - Measurement of one or multiple solutions of known and even unknown concentrations (through equidistant dilution).

ProLab 4000 is therefore qualified for operation in science and for monitoring industrial processes. The instrument enables high precision conductivity measurements in a wide temperature and concentration range.





- ▶ **pH, mV, ISE measuring – same as ProLab 3000 ...**
- ▶ **Measuring conductivity on highest level:**
Determining the dependency of temperature and concentration through
 - **using a temperature coefficient**
(stored value or entry of own literature values)
 - **Self-determination of temperature coefficients** in various standards of known or unknown concentrations in a self-defined temperature range and span
- ▶ **Highest safety level with measurements and calibration through:**
 - **automized user identification**
with electronic ID card through transponder technology with password entry
 - **wireless sensor recognition**
ID electrodes and measuring instrument with automatic identification and data exchange
- ▶ **Operation via mouse or keyboard as at a PC**
familiar menu structures and clear menu navigation
- ▶ **Plug and play** by state-of-the-art technology
- ▶ **Scope of delivery, set**
 - Measuring instrument (incl. mouse)
 - Electrodes with integrated temperature sensor
 - Buffer- and conductivity test solutions
 - Stand
 - Universal power supply unit
 - Cover

Advantages
ProLab 4000