

Technical Data basic modul

Cable
4-cores round cable, polyethelene V2a-conductors with copper core, black cm-division with dm-marks and m-indications

Cable drum
impact-resistant, temperature stable synthetic material, with supporting frame made of aluminium

Power supply
rechargeable batteries 4x 2 V
operation period: 8...15 hours depending on cable length and configuration

Cable lengths: 50, 100, 200, 300, 500 m

Digital indication
alphanumerical 3 character LC-Display for indication of current value

Sensor body
non corrosive stainless steel V4a or PVC

Connectable Sensors:
- multiparameter sensor MPS-D3
- multiparameter sensor MPS-D8
- multiparameter sensor MPS-K16

Data Logger Function (Option)

Electronic System:
- internal power supply: 8V (4x2V Lead gel akku)
- external charger
- power consumption in power-down Mode: 140µA
- Flash-Controller M16C 16-Bit with integrated Watch-dog
- IC-Clock
- serial Flash-Memory with 1MB (approx. 70,000 measuring values)
- channels: maximal 32

Operation and indication:
- display (3 lines, 16 characters 3.65mm)
- keyboard with 3 keys

Interface:
- RS 232

Input /Output sensor connection:
- RS 485

Technical Data sensors

Parameter	Measuring ranges	Parameter	Measuring ranges
water level	0...200 m temperature: -5...50°C	nitrate	0.4...60,000mg/l temperature: 0...40°C pressure: 0...20 bar
temperature	-5...50°C pressure: 0...50 bar	chloride	1...35,000mg/l temperature: 0...50°C pressure: 0...20 bar
conductivity	0...200mS temperature: -5...50°C pressure: 0...50 bar	ammonium	0.2...18,000mg/l temperature: 0...40°C pressure: 0...1 bar
total dissolved solids (TDS)	0...200,000mg/l temperature: -5...50°C pressure: 0...50 bar	natrium	0.2...20,000mg/l temperature: 0...50°C pressure: 0...6 bar
salinity	0...70 temperature: -5...50°C pressure: 0...50 bar	calcium	0.5...40,000mg/l temperature: 0...40°C pressure: 0...1 bar
density	988...1,060 g/l temperature: -5...50°C pressure: 0...50 bar	fluoride	0.2...20,000mg/l temperature: 0...40°C pressure: 0...1 bar
oxygen (amperometric)	0...40mg/l temperature: 0...50°C pressure: 0...10 bar	potassium	0.4...39,000mg/l temperature: 0...40°C pressure: 0...1 bar
oxygen (optical)	0...25mg/l temperature: 0...50°C pressure: 0...10 bar	chlorophyll a (optical)	0.03...500µg/l Chl a temperature: -2...50°C pressure: 0...60 bar
oxygen saturation	0...400% saturation temperature: 0...50°C pressure: 0...10 bar	cyanobacteria (optical)	150...2,000,000 cells/ml temperature: -2...50°C pressure: 0...60 bar
pH	0...14 temperature: 0...50°C pressure: 0...20 bar	rhodamine WT (optical)	0.04...1,000ppb RWT temperature: -2...50°C pressure: 0...60 bar
redox (ORP)	-1,200mV...1,200mV temperature: 0...50°C pressure: 0...20 bar	turbidity (optical)	0...1,000NTU temperature: 0...50°C pressure: 0...10 bar with wiper 0...20 bar without wiper
ammonia	0.01...17000mg/l temperature: 0...50°C pressure: 0...5 bar	total suspended solids (TSS)	approx. 5 fold measuring range turbidity mg/l temperature: 0...50°C pressure: 0...10 bar with wiper 0...20 bar without wiper

For further information on Multiparameter Sensors please see separate brochure on Water Quality Monitoring.

The right is reserved to change or amend the foregoing technical specification without prior notice.



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represented by:



Water Quality Dipper Type KLL-Q-2

Multifunctional Water Quality Measurements in Groundwater or Lakes

KLL-Q-2

NEW:
with round cable
and integrated data logger for
automatic and manual data
recording

Measuring parameters

- Water level
- Temperature
- Conductivity
 - Total Dissolved Solids (TDS)
 - Salinity
 - Density
- Dissolved oxygen
 - oxygen saturation
- pH-Value
- Redoxpotential (ORP)
- Ammonia
- Nitrate
- Chloride
- Ammonium
- Sodium
- Calcium
- Fluoride
- Potassium
- Chlorophyll a
- Cyanobacteria
- Rhodamine WT
 - Total Suspended Solids (TSS)



Groundwater Monitoring



Adjusting the KLL-Q-2



Water Sampling in Lakes

B04_KLLQ25_e_S1-4_09.06.2008

www.seba.de

We are certified
ISO 9001:2000
Certificate No. 01110505
Quality is our standard

Quality Measuring with KLL-Q-2

The SEBA-KLL, type **KLL-Q-2** is a unique mobile field laboratory for measurements of water quality at groundwater or surface water measuring sites. Suitable for 50mm (2") diameter wells. The instrument has an extremely compact design, easy operation with fast and precise acquisition of many water quality parameters. The current measured values are clearly displayed.

Optionally, the instrument can be equipped with an integrated data logger with a storage capacity of up to 70,000 values for an automatic or manual data recording. By default, the **KLL-Q-2** is supplied with an acoustic signal device when the sensor touches the water surface. The new graduated round-cable with robust PE-covering (laser-printed, cm/dm/m) is fade proof and abrasion resistant.

KLL-Q-2 in Detail

Display

3-lines Display with background lighting for clear indication of current measuring values.



Keys

The instrument can be operated via 3 keys on the front. It is very user-friendly and menu-guided.

RS232 Interface

Comfortable calibration of Multiparameter sensors via operation Software SEBAConfig and your PC/Notebook.



SEBA-HDA

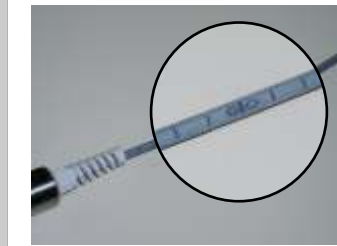
Your alternative to using a Notebook for programming, read-out of the stored files as well as for local visualisation of measuring data.

Data Logger

Full data logger functionality (optional) is possible for the automatic storage of up to 70,000 measured values. Instant logs can be obtained manually at the push of a button, suitable for quick assimilation of water quality profiles.

Cable

Due to the drum-combined supporting-frame the Multiparameter-probe can easily be lowered with our new improved laser-printed round-cable.



Transport-Container

The comfortable transport-container guarantees for a fast readiness as well as for a safe storage of the probes.

Multiparameter Sensor

Plug-in, maintenance-friendly high-quality-steel probe for connection to KLL-Q-2 or MPS-Checker. Individually configurable with different sensor-systems (e.g. pH, O₂, conductivity etc.)

For a detailed description of the Multiparameterprobe please see our Water Quality Monitoring brochure.

Measuring parameters

- Water level
- Temperature
- Conductivity
 - total dissolved solids(TDS)
 - salinity
 - water density
- Oxygen
 - Oxygen saturation
- pH-value
- Redox (ORP)
- Ammonia
- Nitrate
- Chloride
- Ammonium
- Sodium
- Calcium
- Fluoride
- Potassium
- Chlorophyll a
- Cyanobacteria
- Rhodamine WT
- Turbidity
 - total suspended solids(TSS)

