



SEBA Checker-2

Versatile water quality measurement in surface water

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
- Turbidity
 - Total Suspended Solids (TSS)



Checker-2
incl. Multiparameter Probe



Connecting the MPS



Application in river



Mobile water quality
measurement

Quality Measurements with SEBA Checker-2

The SEBA Multi-parameter system **Checker-2** has been developed as a mobile field laboratory especially for determination of water quality parameters in surface water.

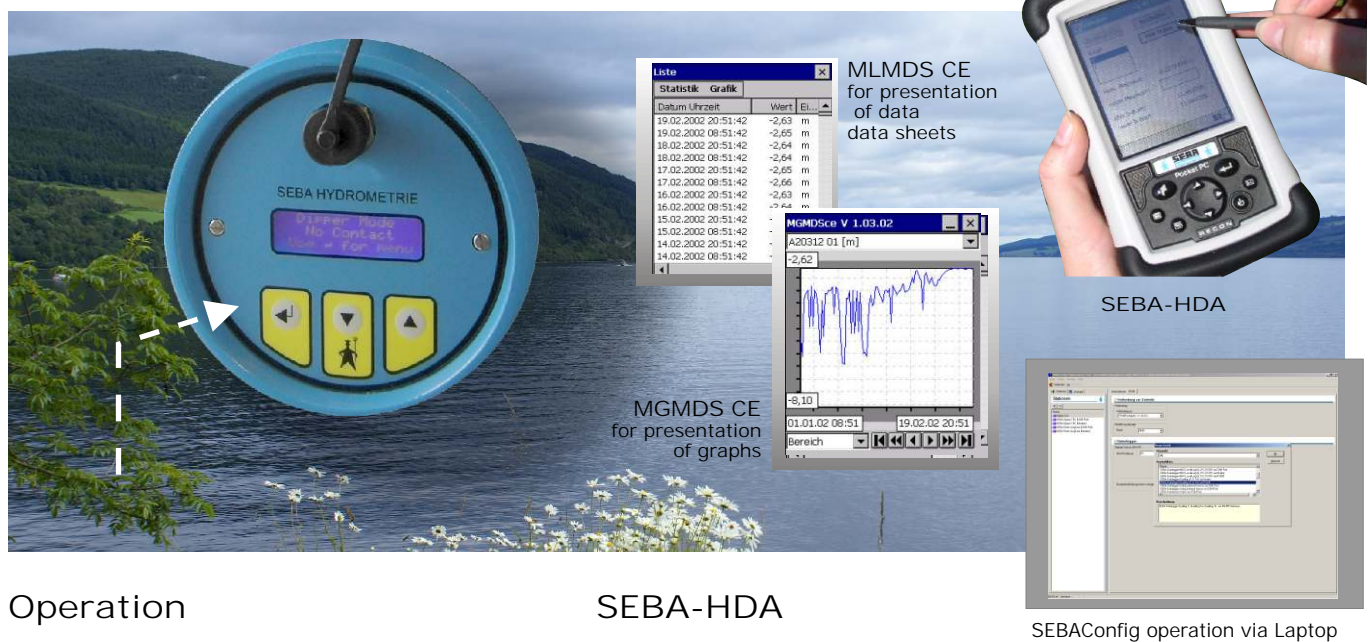
The **Checker-2** has an extremely compact design, easy operation with fast and precise acquisition of various water quality parameters. The current measured values are clearly displayed.

Optionally, the instrument can be equipped with an integrated data logger with a storage capacity of up to 280,000 values for an automatic or manual data recording.

Checker-2 in Detail

Display

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



MLMDS CE
for presentation
of data
sheets

MGMDSCe V 1.03.02

SEBA-HDA

SEBAConfig operation via Laptop

Operation

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

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 280,000 measured values. Instant logs can be obtained manually at the push of a button, suitable for quick assimilation of water quality profiles.

Read-out and setting of measuring frequency via RS 232-interface with SEBA-HDA or laptop.



RS 232 Interface & Charging

for operation of the data logger,
adjustment and calibration of the
multiparameter sensors.



Charging of the internal batteries
with included charger



Multiparameter Sensor

Double plug-in, maintenance-friendly
high-quality-steel probe
(MPS-D3, MPS-D8) or single plug-in
plastic probe MPS-K16 for connection to
Checker-2 or KLL-Q-2.

Individually configurable with various
sensors (e.g pH, O₂, conductivity etc.)

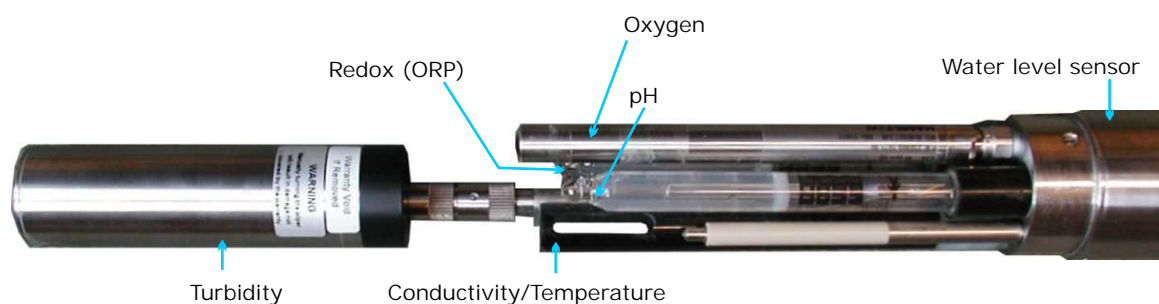
For a detailed description of possible
configurations refer to our Water Quality
Monitoring brochure.

RS 485

for connection of the MPS on
the backside of the instrument



- 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)



Technical Data basic module

Cable

robust, 2m long spiral cable made from polyurethan with copper core

Housing

impact-resistant, temperature stable synthetic material, (watertight)

protection class: IP65

Power Supply

rechargeable batteries 4x 2 V incl. external charger

operation period: up to 15 hours depending on

measuring mode and connected sensor

Digital indication

alphanumerical 3 line LC-Display for indication of current value

Operation and Display:

- Display (3 lines, 16 characters 3.65mm)
- 3 keys

Interfaces:

- RS 232 (communication & charging)
- RS 485 (sensor-interface)

Operating Temperature:

- working temperature: -15°C to +50°C
- storage temperature: -40°C to +80°C

Dimensions:

- height 150mm, with handle 225mm; Ø 130mm;
- range of spiral cable: 0,6...2m
- weight without probe: approx. 2,5 kg

Connectable Sensors:

- multiparameter sensor **MPS-D3** (V4a steel)
- multiparameter sensor **MPS-D8** (V4a steel)
- multiparameter sensor **MPS-K16** (plastic)

Sensor Body

non corrosive V4a steel or PVC

Data logger function (optional)

Electronics:

Power consumption in power-down Mode: 150µA

Flash-Controller: M16C 16-Bit with integrated Watch-dog

IC-Clock

Memory: serial Flash-Memory with 4MByte (approx. 280,000 measuring values)

Channels: max. 32

Measuring interval: user-selectable > 2 minutes (automatic storage) as well as manual storage possible

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	sodium	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...40,000 µg/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...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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