



## SEBA Checker-2

Versatile water quality measurement in surface water

- Mobile, compact field laboratory for measuring water quality parameters (e.g. oxygen, pH, conductivity, redox potential, turbidity) in surface waters
- Spiral cable with stainless steel coupling for SEBA multi-parameter probes of the MPS-D3/D8/K16
- 3-line backlit LCD
- Integrated logger for manual and / or automatic storage of measured values (optional)



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 1,120,000 values for an automatic or manual data recording.



MPS-D3 MPS-D8 MPS-K16

## Data Logger

Full data logger functionality (optional) is possible for the automatic storage of up to 1,120,000 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.

## Software

<b>Operating software:</b>	SEBAConfig (Windows)
<b>Data readout:</b>	Interfacekabel RS232 - USB, Blue-Con (Bluetooth), RS232
<b>Evaluation software:</b>	DEMASvis
<b>Archiving Software:</b>	DEMASdb

## 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, O<sub>2</sub>, conductivity etc.) For a detailed description of possible configurations refer to our Water Quality Monitoring brochure.

### 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
- RhodamineWT
- Turbidity
  - total suspended solids(TSS)



## Technical data Checker-2

<b>Sensor:</b>	Multiparameter probe Type MPS-D3
	Multiparameter probe Type MPS-D8
	Multiparameter probe Type MPS-K16
<b>Measurement transducer:</b>	
<b>Housing:</b>	<b>Material:</b> Shock-resistant plastic
	<b>Dimension:</b> Ø 130mm, Length: 150mm
	<b>Protection class:</b> IP65
	<b>Keyboard:</b> 3 multifunction buttons
	<b>Display:</b> 3-line LCD (liquid crystal display) with backlight
	<b>Cable:</b> 2 m spiral cable made of PU with 5 pins. Circular connectors (RS485) for Checker-2 and stainless steel coupling for MPS-D3/8/K16
<b>Logger (Option):</b>	<b>Controller:</b> 16Bit Flash controller with integrated WatchDog RTC-IC Real-Time Clock
	<b>Memory capacity:</b> 16 MB (=1,120,000 readings)
	<b>Save interval:</b> Manually or cycle-controlled by 2min - 99 hours
	<b>Channels:</b> max. 32
	<b>Measurement routines:</b> Single value, average value, event clock, Delta mode
<b>Communications Interface:</b>	RS232
<b>Operation:</b>	Interfacekabel (USB/RS232), Bluetooth (Option)
<b>Outputs:</b>	RS485 (SHWP)
<b>Power supply:</b>	4 x 2V lead-acid batteries, rechargeable
<b>Connection:</b>	Spiral cable with stainless-steel coupling for MPS-D3/ 8/K16
<b>Operating temperature:</b>	-40°C - 65°C

# Technical data Sensors

Parameter:	Measuring ranges:
<b>Pressure</b>	0...200 mWs Temperature: -5...50°C
<b>Temperature</b>	-5...50°C Pressure: 0...500 mWs
<b>Conductivity</b>	0...200mS Temperature: -5...50°C Pressure: 0...500 mWs
<b>Total dissolved solids</b>	0...200.000mg/l Temperature: -5...50°C Pressure: 0...500 mWs
<b>Salinity</b>	0...70 Temperature: -5...50°C Pressure: 0...500 mWs
<b>Density</b>	988...1060 g/l Temperature: -5...50°C Pressure: 0...500 mWs
<b>Oxygen (amperometric)</b>	0-40mg/l Temperature: 0...50°C Pressure: 0...100mWs
<b>Oxygen (optical)</b>	0-25mg/l Temperature: 0...50°C Pressure: 0...100 mWs
<b>Oxygen saturation</b>	0..400% Sättigung Temperature: 0...50°C Pressure: 0...100 mWs
<b>pH</b>	0..14 Temperature: 0...50°C Pressure: 0...200 mWs
<b>Redox</b>	-1200mV...1200mV Temperature: 0...50°C Pressure: 0...200 mWs
<b>Ammonia</b>	0,01...17000mg/l Temperature: 0...50°C Pressure: 0...5 mWs
<b>Nitrate</b>	0,4...60000mg/l Temperature: 0...40°C Pressure: 0...200 mWs

Parameter:	Measuring ranges:
<b>Chloride</b>	1...35000mg/l Temperature: 0...50°C Pressure: 0...200 mWs
<b>Ammonium</b>	0,2...18000mg/l Temperature: 0...40°C Pressure: 0...10 mWs
<b>Natrium</b>	0,2..20000mg/l Temperature: 0...50°C Pressure: 0...60 mWs
<b>Calcium</b>	0,5...40000mg/l Temperature: 0...40°C Pressure: 0...10 mWs
<b>Fluoride</b>	0,2...20000mg/l Temperature: 0...40°C Pressure: 0...10 mWs
<b>Potassium</b>	0,4...39000mg/l Temperature: 0...40°C Pressure: 0...10 mWs
<b>Chlorophyll a (optical)</b>	0,03...500µg/l Chl a Temperature: -2...50°C Pressure: 0...600 mWs
<b>Cyanobacteria (optical)</b>	150...2000000 Zellen/ml Temperature: -2...50°C Pressure: 0...600 mWs
<b>Rhodamine WT (optical)</b>	0,04...1000ppb RWT Temperatur: -2...50°C Pressure: 0...600 mWs
<b>Turbidity (optical)</b>	0...1000NTU Temperature: 0...50°C Pressure: 0...100 bar with wiper 0...200 bar without wiper
<b>Total suspended solids</b>	approx. 5 fold measuring range turbidity mg/l Temperatur: 0...50°C Pressure: 0...100 bar with wiper 0...200 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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