

# VIKING-M310

## Portable pH / Conductivity / ISE / DO Multi-parameter Water Analyzer

**VIKING-M310 Portable Multi-parameter Water Analyzer** is a field-ready electrochemistry instrument for **pH, mV, pX, ISE, conductivity, resistivity, TDS, salinity, dissolved oxygen and temperature**. The instrument combines a 4.3" touchscreen, IP65 portable housing, GLP-oriented data memory, USB output and automatic or manual temperature compensation for laboratory, plant and field water quality workflows.

PORTABLE ANALYZER

PH / MV

PX / ISE

EC CONDUCTIVITY

TDS / SALINITY

RESISTIVITY

DO OXYGEN

TEMPERATURE

4.3" TOUCHSCREEN

GLP 1000 GROUPS

USB

IP65

Document type: **Technical Specification Sheet**

Product family: **Portable Electrochemistry / Water Quality Multi-parameter Analyzer**

Model: **VIKING-M310** · SKU: TBC

Product page: [colo.si/product/viking-m310-portable-multi-parameter-meter/](https://colo.si/product/viking-m310-portable-multi-parameter-meter/)

Format: **A4 landscape** · **COLO.Science TechSpec v2.4** with navigation links



VIKING-M310 · portable pH / EC / ISE / DO water analyzer · main unit

MODEL / SKU

**VIKING-M310**  
TBC

ADDRESS / HQ

**Polje ob Sotli 4**  
**SI-3255, Slovenia**

CONTACT

**sales@colo.si**  
**+386 64 222 724**

PRODUCT PAGE

REQUEST QUOTE

COLO.SCIENCE HOME

WATER QUALITY KNOWLEDGE

# VIKING-M310 · technical specification

Portable multi-parameter analyzer for pH, mV, pX, ISE, EC, TDS, salinity, resistivity, DO and temperature

PH -2.00 TO 20.00

ISE 1.000E-9 TO 9.999E+9

EC 0.000 MS/CM TO 1000 MS/CM

DO 0.00 TO 50.00 MG/L

— Compact field workflow for water quality laboratories and on-site testing

## Product Overview

### Application profile

**Water quality:** designed for pH, conductivity, TDS, salinity, ISE, dissolved oxygen and temperature checks in water and process samples.

**Field and laboratory use:** portable IP65 unit with 4.3" touchscreen, rechargeable battery and carrying case workflow.

**Multi-parameter testing:** combines electrochemical and dissolved oxygen measurement functions in one compact instrument.

**Routine QA/QC:** suitable for environmental monitoring, plant checks, aquaculture, wastewater control and routine laboratory measurements.

### Key features

**Parameters:** pH, mV, pX, ISE, conductivity, resistivity, TDS, salinity, dissolved oxygen and temperature.

**pH performance:** -2.00 to 20.00 pH range, 0.1 / 0.01 pH resolution and  $\pm 0.01$  pH accuracy.

**Conductivity performance:** 0.000  $\mu$ S/cm to 1000 mS/cm range with  $\pm 1.0\%$  FS accuracy.

**DO workflow:** polarographic DO electrode, concentration and saturation display, auto barometric compensation and manual salinity correction.

**Portable protection:** IP65 housing for field work and daily mobile use.

### Design and handling advantage

**Touchscreen workflow:** 4.3" LCD touchscreen with backlight for direct method and calibration navigation.

**Reading modes:** Auto-Read Fast / Medium / Slow, Timed Read and Continuous Read modes.

**Traceability:** GLP-oriented memory for up to 1000 groups per parameter.

**Connectivity:** USB output for PC or printer workflows.

### Core technical summary

Parameter	Specification
Model	VIKING-M310
SKU	TBC
Instrument type	Portable pH / conductivity / ISE / DO multi-parameter water analyzer
Measured parameters	pH, mV, pX, ISE, EC, resistivity, TDS, salinity, DO concentration, DO saturation, temperature
Display	4.3" LCD touchscreen with backlight
Data storage	1000 groups; GLP features supported
Inputs	pH BNC Q9; DO+Temp 4-pin; Conductivity+Temp 5-pin aviation
Protection	IP65 portable unit

PH ACCURACY

$\pm 0.01$  pH

EC RANGE

0.000  $\mu$ S/cm–1000 mS/cm

DO RANGE

0.00–50.00 mg/L

PROTECTION

IP65

**pH / mV / pX / ISE Specifications**

**pH, mV and pX measurement**

Parameter	Range / resolution / accuracy	Calibration / notes
pH range	-2.00 to 20.00 pH	Up to 5-point calibration
pH resolution	0.1 / 0.01 pH	Selectable according to workflow
pH accuracy	±0.01 pH	Electrode diagnostics: slope and offset
pH standards	NIST, GB, USA, DIN	Automatic buffer recognition
mV range	-2000.0 to 2000.0 mV	For ORP and millivolt measurement
mV resolution	0.1 mV	Relative mV workflows depending on method
mV accuracy	±0.3 mV or ±0.1%	According to instrument specification
pX range	-2.00 to 20.00 pX	Up to 5-point calibration
pX resolution	0.1 / 0.01 pX	For ion-selective workflows
pX accuracy	±0.01 pX	Method-dependent performance

**Reading and temperature workflow**

Function	Technical note
Reading modes	Auto-Read Fast / Medium / Slow, Timed Read and Continuous Read.
Compensation	ATC / MTC supported for stable routine measurements.
Conductivity TC	Temperature compensation types: none, linear or pure water.
Data handling	GLP-oriented storage for 1000 groups with USB output for PC / printer.

**ISE concentration measurement**

Parameter	Specification	Notes
ISE range	1.000e-9 to 9.999e+9	Concentration measurement by selected ion method
ISE units	mol/L, mmol/L, g/L, mg/L, µg/L, ppm, ppb	Selectable concentration units
ISE accuracy	±0.5%	Method and electrode dependent
ISE calibration	Up to 5 points	Supports routine calibration curves
ISE methods	Direct, Standard Addition, Sample Addition, GRAN	Built-in ion measurement workflows



4.3" touchscreen display · method navigation, calibration and measurement control

**PH CALIBRATION**  
Up to 5 points

**ISE CALIBRATION**  
Up to 5 points

**READING MODES**  
Auto / Timed / Continuous

Technical values are provided for product selection and orientation. Final electrode type, calibration method, ISE method and accessory configuration should be confirmed through the official COLO.Science quotation or manufacturer-confirmed offer.

Conductivity / Resistivity / TDS / Salinity / DO / System Specifications

Conductivity-related parameters

Parameter	Range / resolution / accuracy	Calibration / notes
Conductivity	0.000 µS/cm to 1000 mS/cm	Up to 3-point calibration
EC accuracy	±1.0% FS	Full-scale accuracy
Reference temperature	20 / 25 °C	Selectable reference temperature
EC standards	84 µS/cm, 1413 µS/cm, 12.88 mS/cm	
Resistivity	5.00 Ω·cm to 20.00 MΩ·cm	Accuracy ±1.0% FS
TDS	0.00 ppm to 300 ppt	Resolution min. 0.01 mg/L; accuracy ±1.0% FS
Salinity	0.0 to 80.0 ppt	Resolution 0.1 ppt; accuracy ±2 ppt

System and physical data

Parameter	Specification
Display	4.3" LCD touchscreen with backlight
Auto shutdown	300–3600 s or Off
Date / time	Supported
Outputs	USB for PC / printer
Power	Rechargeable Li battery; AC 100–240 V input, DC 5 V output
Dimensions / weight	90 × 255 × 40 mm; 500 g (1.1 lb)
Carton	490 × 410 × 220 mm; gross weight 5.5 kg

Dissolved oxygen measurement

Parameter	Specification	Notes
Sensor type	Polarographic DO electrode	Delivered depending on selected configuration
DO concentration	0.00 to 50.00 mg/L	Resolution 0.01 mg/L
DO accuracy	±0.10 mg/L	Within specified concentration range
DO saturation	0.0 to 300.0%	Resolution 0.10%; accuracy ±2.0%
DO calibration	Air-saturated or zero oxygen	Routine DO workflow
Barometric compensation	Automatic	For DO measurement
Salinity correction	Manual	For sample-specific correction
Temperature	-5 to 110 °C / 23 to 230 °F	Resolution 0.1; accuracy ±0.2 °C



Connector types · pH BNC Q9, DO+Temp 4-pin and Cond.+Temp 5-pin aviation interfaces

## Standard Packing / Kit Configuration



Carrying case and standard packing for portable multi-parameter workflow

### Typical included items

**Electrodes:** 3-in-1 pH composite electrode, conductivity electrode and polarographic DO electrode.

**Standards:** NIST pH buffers 4.01, 7.00, 10.01, each 50 mL; 1413  $\mu\text{S}/\text{cm}$  EC standard solution, 50 mL.

**Accessories:** electrode holder, silicone rubber case, wrist straps and carrying case.

**Final scope:** delivered configuration should be confirmed in the official quotation before order confirmation.

### Why VIKING-M310

**All-in-one portability:** pH / EC / ISE / DO / temperature in one mobile instrument.

**GLP traceability:** 1000-group memory and documentation-oriented workflow.

**Field-ready design:** IP65 housing, rechargeable battery and carrying case.

**Fast routine workflow:** Auto-Read, Timed Read and Continuous Read modes.

### Configuration notice

Portable multi-parameter analyzers may be delivered in different configurations depending on selected pH, conductivity, ISE, ORP and dissolved oxygen electrodes, calibration standards, carrying case and accessories. The official quotation defines the final scope of supply.

COLO.SCIENCE TECHNICAL AND SALES SUPPORT

### Need a VIKING-M310 configuration?

Contact COLO.Science for product selection, electrode compatibility, dissolved oxygen workflow, calibration standards, accessories, documentation and quotation support.

CONTACT

[sales@colo.si](mailto:sales@colo.si)

[colo.si](http://colo.si)

Polje ob Sotli 4, SI-3255, Slovenia

+386 64 222 724

COLO.SCIENCE · WATER QUALITY / ELECTROCHEMISTRY

## Portable multi-parameter analyzer for pH, EC, ISE, DO and field water quality testing

Use this document for preliminary product selection. For tenders, formal procurement and confirmed technical comparison, request an official manufacturer-verified quotation and configuration confirmation.

[Open product page](#)

[Request quote](#)

[Water quality knowledge](#)

COLO.Science · Technical specification sheet · VIKING-M310 · Portable Multi-parameter Water Analyzer

**Disclaimer:** This technical specification sheet is prepared for informational and product-selection purposes. Technical characteristics, included accessories and configuration may vary by supplier confirmation, application requirements, manufacturer revision and official quotation. Only a manufacturer-confirmed offer or COLO.Science official quotation should be treated as the binding technical and commercial reference for procurement, tenders or contractual supply.