

# VIKING-PH510

Portable pH / Temp. Meter · mV / ORP Measurement · Touch Screen Operation

**VIKING-PH510 Portable pH/Temp. (mV/ORP) Meter** is a professional portable electrochemistry meter for high-precision pH, mV, ORP and temperature measurement. The instrument combines a 4.3" color touchscreen, advanced calibration management, electrode diagnostics, USB connectivity, GLP-ready data handling and IP65 protection in a compact portable format.

PORTABLE PH METER    4.3" TOUCHSCREEN    PH / MV / ORP    TEMPERATURE    ±0.002 PH

8-POINT CALIBRATION    ATC / MTC    USB 2.0    GLP-READY    IP65

Document type: **Technical Specification Sheet**

Product family: **Portable Electrochemistry / Water Quality Meter**

Model: **VIKING-PH510**

Format: **A4 landscape · COLO.Science TechSpec v2.3**



VIKING-PH510 · portable pH / mV / ORP / temperature meter · main unit

MODEL  
**VIKING-PH510**

ADDRESS / HQ  
**Polje ob Sotli 4  
SI-3255, Slovenia**

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

# VIKING-PH510 · technical specification

Portable touchscreen meter for pH, mV, ORP and temperature measurement

- PH RANGE -2.000 TO 20.000
- MV ±2000.00
- TEMP. -10 TO 135°C
- 6 BUFFER GROUPS
- USER-DEFINED BUFFERS
- AUTO / TIMED / CONTINUOUS READ

— Designed for precise field and laboratory electrochemical measurements

## Product Overview

### Application profile

**Water quality:** suitable for drinking water, wastewater, environmental samples and routine water monitoring.

**Field and laboratory use:** portable format with protective case and carrying case for on-site and bench use.

**Industrial sampling:** supports pH, mV, ORP and temperature checks during process and quality control sampling.

**Education and research:** suitable for electrochemistry training, pH theory, ORP measurement and calibration practice.

### Design and handling advantage

**Touchscreen interface:** 4.3" color LCD touchscreen for parameter setup, calibration, measurement and data review.

**Portable protection:** silicone rubber protective case, wristbands and carrying case support practical mobile operation.

**Calibration control:** up to 8-point pH calibration with multiple standard buffer groups and user-defined buffers.

**Data traceability:** GLP-ready data logging with date and time for measurement and calibration record management.

### Key features

**High pH accuracy:** ±0.002 pH with selectable pH resolution down to 0.001 pH.

**mV / ORP measurement:** -2000.00 to +2000.00 mV range with EH ORP mode and relative calibration support.

**Temperature measurement:** -10 to 135°C range with ATC / MTC temperature compensation.

**Measurement modes:** Auto Read, Timed Read and Continuous Read with stable and locked reading prompts.

**Connectivity:** USB 2.0 interface for PC, flash drive or scanner connection.

**Protection:** IP65 protection rating and rechargeable Li battery for portable operation.

### Core technical summary

Parameter	Specification
Model	VIKING-PH510
Instrument type	Portable pH / Temp. meter with mV / ORP measurement
Display	4.3" color LCD touchscreen
pH range	-2.000 to 20.000 pH
pH accuracy	±0.002 pH
mV / ORP range	-2000.00 to +2000.00 mV
Temperature range	-10 to 135°C
Data logging	1000 data groups per parameter · GLP-ready
Protection	IP65

PH ACCURACY

±0.002 pH

CALIBRATION

Up to 8 points

DATA MEMORY

1000 groups / parameter

PROTECTION

IP65

**Measurement ranges and performance**

Parameter	Specification
pH range	-2.000 to 20.000 pH
pH resolution	0.1 / 0.01 / 0.001 pH
pH accuracy	±0.002 pH
pH calibration	Up to 8 points
Buffer groups	USA, NIST, DIN, GB, MERK, JIS + user-defined buffers
mV / ORP range	-2000.00 to +2000.00 mV
mV resolution	0.1 / 0.01 mV
mV accuracy	±0.1 mV or ±0.03% FS
ORP mode	EH ORP mode
Relative calibration	1-point relative calibration
Temperature range	-10 to 135°C
Temperature resolution	0.1°C
Temperature accuracy	±0.1°C
Temperature compensation	ATC / MTC

**Measurement and reading modes**

Function	Technical note
Auto Read	Fast / Medium / Slow reading stability options.
Timed Read	Timed reading mode for scheduled measurement intervals.
Continuous Read	Continuous measurement display for real-time monitoring.
Reading prompts	Reading / Stable / Locked prompts.
Endpoint capture	Auto-Hold function for stable endpoint capture.

**System, data and connectivity**

Parameter	Specification
Operating system	Intelligent OS with calibration, method, electrode and data management.
Display	4.3" color LCD touchscreen with high-contrast display.
Electrode diagnostics	Slope and offset information, reminders and slope limit support.
Data capacity	1000 data groups per parameter.
GLP support	GLP-ready logging with date and time.
Data functions	Review, compare, analyze and recalculate results.
Electrode input	BNC / Q9 connector.
Temperature input	4-pin aviation connector.
Data interface	USB 2.0 for PC, flash drive or scanner.
Power supply	Rechargeable Li battery; AC adapter 100–240 V to 5 V DC.
Auto shutdown	Auto shutdown options available.
Protection rating	IP65.
Dimensions	90 × 255 × 40 mm.
Net weight	Approx. 500 g.

**Specification note**

**Electrode selection:** final configuration should match the sample matrix, required pH range, ORP requirement and temperature conditions.

**Calibration:** calibration buffer group should match the laboratory procedure and reporting standard.

**Field use:** carrying case, protective case and rechargeable battery support portable measurement workflows.

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

## Standard Delivery, Accessories and Visual Support



VIKING-PH510 · carrying case and accessories

### Typical standard delivery

**3-in-1 pH composite electrode:** supplied for routine pH and temperature measurement workflows.

**NIST pH buffers:** pH 4.01, 7.00 and 10.01, 50 mL each.

**Electrode holder:** support accessory for stable electrode handling.

**Protective case:** silicone rubber protective case with wristbands.

**Touch pen:** accessory for touchscreen operation.

**Carrying case:** protective storage and transport case for field and laboratory use.

### Product image references



Main unit · 4.3" touchscreen portable meter



Carrying case · accessories and standard kit

### Video demonstration note

Product video is available through the provided SharePoint / Stream link. For direct embedding inside this technical specification page, use a public SharePoint embed code or upload the MP4 file to WordPress Media Library and replace the link with a standard HTML5 video player.

[Open VIKING-PH510 product video](#)

## Selection and Use Notes

### For water quality

**Routine pH:** select appropriate buffers and electrode maintenance procedure.

**ORP:** confirm ORP electrode and reporting method where redox potential is required.

### For field work

**Protection:** use carrying case, wristband and protective case during transport and field sampling.

**Power:** confirm battery charging before extended on-site measurement sessions.

### For GLP workflows

**Traceability:** use date/time logging and review stored readings for measurement records.

**Calibration:** document buffer group, calibration points and electrode condition.

MANUFACTURER AND SUPPORT

## COLO Lab Experts

Polje ob Sotli 4, SI-3255, Slovenia

**Selection guidance:** Send the sample type, required pH range, temperature range, ORP requirement, field/laboratory use case and preferred electrode configuration. COLO.Science can help confirm the correct VIKING-PH510 configuration and accessory set for your measurement workflow.

QUICK CONTACT

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

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

 **+386 64 222 724**

 [VIKING-PH510 product page](#)

COLO.SCIENCE · VIKING-PH510 PORTABLE PH / MV / ORP METER SUPPORT

## Need help selecting the correct portable pH meter configuration?

Send the sample matrix, required measurement parameters, calibration standard, electrode type and expected field or laboratory use. COLO.Science can help confirm whether VIKING-PH510 is the correct configuration for your water quality, environmental or QA/QC workflow.

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**Official configuration and manufacturer-confirmed specification notice:**

This technical specification is provided for orientation, product selection and general information only. It does not represent the final binding technical specification, delivered configuration, accessory set, procurement requirement or acceptance criterion for a specific unit. The final official technical specification is only the specification confirmed by the manufacturer and issued for the exact configuration through an official COLO.Science quotation, proforma invoice, contract document, order confirmation or manufacturer-approved technical offer. Any values, options, accessories or configurations shown in this document must be verified for the specific delivery and should not be used as an exclusion or elimination criterion in procurement procedures without written manufacturer confirmation.