

## VIKING-PH500T

**Benchtop pH / ORP Meter · 7.0" Touch LCD · Pure Water TRIS Kit**

Advanced benchtop pH/ORP meter for precise measurements, especially in pure water applications with included **TRIS kit**. Features a **7.0" color touchscreen** (optional 4.3" LCD), **multi-point calibration (up to 6 points)**, **Auto-Read / Timed / Continuous modes**, **ATC/MTC** temperature compensation, **GLP data management** and **1000 data sets** storage per parameter.

PH / MV / ORP / °C

7.0" TOUCH LCD

6-POINT CALIBRATION

NIST/DIN/USA/MERK/JIS/GB

TRIS PURE WATER KIT

IP54

Document type: **Technical Specification Sheet**

Format: **Landscape (Word/Outlook-ready)**



### INSTRUMENT

**VIKING-PH500T · COLO.Science**

### ADDRESS (HQ)

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

### CONTACT

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# VIKING-PH500T · benchtop pH/ORP meter technical specification sheet

PH -2.0 → 16.0   MV 0 → 2000   ORP MODE   TEMP -5 → 105°C   0.001 PH RESOLUTION   IP54   — Pure water specialist / Advanced pH/ORP workflows



## general & performance specifications

instrument identity	
model	VIKING-PH500T
product number (SKU)	PRO5980
brand / line	COLO.Science · COLO Lab Experts
instrument type	Benchtop pH / ORP / Temperature meter with pure water kit
intended use	High-accuracy pH, ORP and temperature measurements, specifically optimized for pure water samples, as well as research, QC, education and environmental labs.
pH measurement	
pH range	-2.0 to 16.0 pH
resolution	selectable 0.1 / 0.01 / 0.001 pH
accuracy	±0.01 pH
calibration points	up to 6 (1-6 points)

<b>buffer groups</b>	DIN, NIST, USA, MERK, JIS, GB (customizable)
<b>standard recognition</b>	automatic, with user-defined buffers possible
<b>electrode diagnostics</b>	slope & offset display, calibration reminder
<b>mV / ORP measurement</b>	
<b>mV range</b>	0 to 2000 mV
<b>resolution</b>	1 mV
<b>accuracy</b>	±1 mV
<b>ORP mode</b>	EH ORP Mode (relative mV), 1 custom point calibration
<b>temperature measurement</b>	
<b>temperature range</b>	-5 to 105 °C (23 to 221 °F)
<b>unit</b>	°C, °F
<b>resolution</b>	0.1 °
<b>accuracy</b>	±0.3 °C
<b>measurement workflow &amp; data</b>	
<b>reading modes</b>	Auto-Read (Fast/Medium/Slow), Timed, Continuous
<b>reading prompts</b>	Reading, Stable, Locked
<b>temperature compensation</b>	ATC, MTC

<b>data storage</b>	1000 data sets per parameter (GLP-compliant)
<b>data analysis</b>	review, compare, recalc
<b>log management</b>	Yes
<b>reset</b>	factory reset
<b>inputs, display &amp; protection</b>	
<b>pH electrode input</b>	BNC (Q9)
<b>temperature probe input</b>	4-pin aviation connector
<b>display</b>	7.0" color high-contrast LCD touchscreen (optional 4.3" segmented LCD), backlight
<b>auto shutdown</b>	1-60 min programmable, or off
<b>IP rating</b>	IP54
<b>outputs</b>	USB (flash memory, PC, scanner), RS-232 (printer, auto-sampler)
<b>power &amp; physical</b>	
<b>power</b>	AC Adapter, 100–240 V AC input, DC 24 V output
<b>dimensions</b>	227 × 147 × 70 mm
<b>weight</b>	630 g (2.09 lb)

## key instrument features

<b>7.0" color TFT touchscreen</b>	Intuitive operation, backlight, clear graphics. (Optional 4.3" segmented LCD).
<b>Multi-point calibration (1-6)</b>	Extensive buffer groups (DIN, NIST, USA, MERK, JIS, GB) + custom; slope & offset display.
<b>Flexible reading modes</b>	Auto-Read, Continuous, Timed with stability criteria.
<b>GLP data management</b>	1000 sets per parameter with logging, review, export via USB.
<b>Electrode diagnostics</b>	Calibration reminder, slope & offset display.
<b>Pure Water Kit (TRIS)</b>	Included premium glass electrode for accurate pure water pH measurement.
<b>USB &amp; RS-232</b>	Connect to PC, printer, scanner, or flash drive for data export.
<b>IP54</b>	Splash protection for wet-bench use.

## typical laboratory applications

pure water pH measurement (pharmaceutical, power, microelectronics)
high-precision pH measurement in research & QC
ORP / redox monitoring (environmental, industrial)

## included / typical delivery (reference)

- VIKING-PH500T benchtop pH meter
- TRIS kit pH Premium glass electrode for pure water
- T-818-Q temperature probe (4-pin aviation)
- NIST pH standard solutions: 4.01 / 7.00 / 10.01 (50 mL each)
- COLO-6 electrode stand
- Touch pen (for touchscreen)
- AC adapter (100–240 V input, 24 V output)
- USB cable

## options & notes

<b>buffers &amp; accessories</b>	Full range of NIST/DIN/USA/MERK/JIS/GB buffers, storage solutions, cleaning kits available.
<b>electrode selection</b>	Choose from COLO's wide portfolio for specific sample types (viscous, low ionic strength, organics). Pure water TRIS kit included.
<b>connectivity</b>	Optional data transfer software for PC connection (RS-232 / USB).
<b>display option</b>	Units can be ordered with 7.0" touch LCD or 4.3" segmented LCD.

titration preparation & buffer validation
pharmaceutical & biotech quality control
food & beverage (critical acidity checks)
education (advanced electrochemistry)



## practical operation notes

topic	recommendation	note
calibration	Use 3-6 points for critical work; monitor slope (95-105%)	Automatic buffer recognition; recalibrate daily for highest precision
temperature	Always use ATC probe for accurate pH; for MTC, measure sample temperature separately	ATC range: -5...105°C
pure water measurement	Use the included TRIS electrode and follow special procedures for low ionic strength samples	Ensures stability and accuracy in pure water
electrode care	Rinse with distilled water; store in 3 M KCl; clean periodically	Prevents drift and prolongs life
data export	Use USB flash drive for quick transfer; RS-232 for printer or PC	GLP-compliant reports

**reference PDF:** VIKING-PH500T.pdf

**application guidance:** workflow-based electrode & buffer selection

**maintenance:** electrode cleaning & periodic inspection

**procurement:** binding spec = quotation package



## Contact & Support

### HEADQUARTERS ADDRESS

**Polje ob Sotli 4**

**SI-3255, Slovenia**

**Application guidance:** tell us your sample type (especially for pure water), required accuracy, and throughput. We will propose the matching electrode configuration and accessories for your workflow.

### QUICK CONTACT

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

**PDF Tech Spec:** [VIKING-PH500T.pdf](#)

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Knowledge hub: [COLO.Science](#)

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### Manufacturer & configuration notice (important):

Specifications in this document are provided for general reference and may represent a typical configuration. COLO reserves the right to change technical specifications without notice.

For procurement and tender purposes, the **only valid and binding specification** is the official COLO quotation and the accompanying technical specification that is **engineering-approved**.