

VIKING-M310FA Portable Multi-parameter Water Analyzer

Product Details	
Product Number	PRO6094



Technical Specification:

Overview

VIKING-M310 by **COLO.Science** measures pH, ion-selective electrodes (ISE), and conductivity (EC) with temperature. It also supports mV and pX and calculates resistivity, TDS, and salinity. In short, it is fast, precise, and easy to use. **Moreover**, the 3.5" LCD accelerates setup and routine work. **Therefore**, teams complete standard tests faster and more consistently. **In addition**, the IP65 housing enables reliable field operation.

General Features

- Multi-reading: auto-read, timed-read, continuous-read.
- Automatic/Manual temperature compensation (ATC/MTC).
- Auto-hold endpoint lock; clear prompts: Reading / Stable / Locked.
- Up to **500 data sets per parameter** (GLP-compliant).
- USB communication; auto power-off; factory reset.
- IP65 waterproof portable design for field/outdoor measurements.

Measurement Modules

pH / mV / pX / ISE

pH: 1–5 point calibration with Standard Recognition; buffer groups NIST, DIN, GB; electrode diagnostics (slope & offset). **ISE:** 1–5 points; units from µg/L to ppb and pX; modes Direct, Standard Addition, Sample Addition and GRAN; built-in methods for F⁻, Cl⁻, Br⁻, I⁻, NO₃⁻, BF₄⁻, NH₄⁺, K⁺, Na⁺, Ca²⁺, Cu²⁺, Pb²⁺, Ag⁺; user-defined method supported.

Conductivity / TDS / Salinity / Resistivity

1–3 point calibration with Standard Recognition (84 µS/cm, 1413 µS/cm, 12.88 mS/cm). Set cell constant, temperature coefficient, and TDS factor. Temperature compensation types: none, linear, or pure water.

Applications

Designed for water quality labs, environmental monitoring, industrial process control, and on-site inspections. **As a result**, routine testing becomes faster and less error-prone.

Included in the Kit

- E-301-QC 3-in-1 pH composite electrode
- DJS-1VTC EC electrode
- NIST pH buffers 4.01 / 7.00 / 10.01 (50 mL each)
- 1413 µS/cm EC standard solution (50 mL)
- Electrode holder, silicone rubber case, wristbands
- Carrying case

Specifications

Model & Parameters

Parameter	Details
Model	VIKING-M310 — pH/EC/ISE/Temp (mV, pX, Resistivity, TDS, Salinity)

pH / mV / pX / ISE

Parameter	Details
pH	Range: -2.00 to 20.00 pH; Resolution: 0.1 / 0.01 pH; Accuracy: ±0.01 pH; Calibration: up to 5 points; Buffer groups: NIST, GB, USA, DIN; Slope limit & recognition: Yes.
mV	Range: -2000.0 to 2000.0 mV; Resolution: 0.1 mV; Accuracy: ±0.3 mV or ±0.1%.
pX	Range: -2.00 to 20.00 pX; Resolution: 0.1 / 0.01 pX; Accuracy: ±0.01 pX; Calibration: up to 5 points.
ISE	Range: 1.000e-9 to 9.999e+9; Units: mol/L, mmol/L, g/L, mg/L, µg/L, ppm, ppb; Resolution: up to 4 significant digits; Accuracy: ±0.5%; Calibration: up to 5 points.

Conductivity / Resistivity / TDS / Salinity

Parameter	Details
Conductivity (EC)	Range: 0.000 µS/cm to 500 mS/cm; Resolution: min 0.001 µS/cm (varies by range); Accuracy: ±1.0% FS; Reference temp.: 20 / 25 °C; Calibration: up to 3 points; Standards: 84 µS/cm, 1413 µS/cm, 12.88 mS/cm; Temp. compensation: none / linear / pure water; Settable: cell constant, temp. coefficient, TDS factor.
Resistivity	Range: 5.00 Ω·cm to 20.00 MΩ·cm; Resolution: min 0.01 Ω·cm; Accuracy: ±1.0% FS.
TDS	Range: 0.00 ppm to 300 ppt; Resolution: min 0.01 ppm (varies by range); Accuracy: ±1.0% FS.
Salinity	Range: 0.0 to 80.0 ppt; Resolution: 0.1 ppt; Accuracy: ±2 ppt.

Temperature & Measurement

Parameter	Details
Temperature	Range: -5 to 110 °C (23 to 230 °F); Units: °C / °F; Resolution: 0.1; Accuracy: ±0.2 °C.
Measurement modes	Auto-Read (Fast / Medium / Slow), Timed, Continuous; Prompts: Reading / Stable / Locked.
Compensation	ATC / MTC.

I/O & General

Parameter	Details
Data & GLP	Storage: up to 500 results per parameter; GLP features: Yes.
Inputs	pH electrode: BNC (Q9); Conductivity + temp probe: 5-pin aviation.
Outputs	USB (PC / printer).
Display	3.5" LCD; Backlight: Yes; Auto shutdown: 300 / 600 / 1200 / 1800 / 3600 s or Off; Date & Time: Yes.
Protection	IP65.
Power	Rechargeable Li battery; AC adapter 100–240 V in, DC 5 V out.
Dimensions / Weight	80 × 225 × 35 mm; 400 g (0.88 lb).
Carton	490 × 410 × 220 mm; Gross weight: 5.5 kg.

Specifications subject to change without notice.

Why VIKING-M310

- All-in-one portability: pH / ISE / EC / Temp.
- GLP traceability with up to 500 data sets per parameter.
- Rugged IP65 design for field work.
- Fast workflows: auto-read, auto-hold, smart calibration.

Therefore, routine water tests are completed faster and more reliably.

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Accessories: