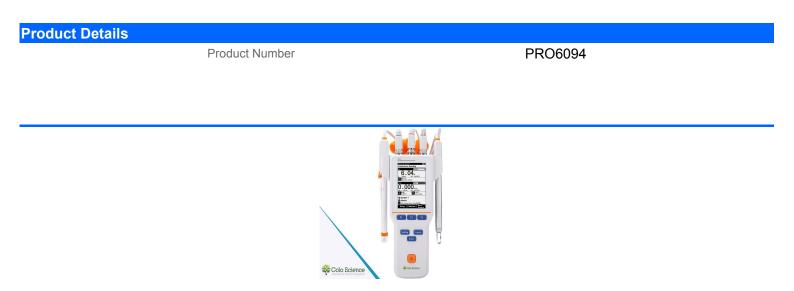
VIKING-M310FA Portable Multi-parameter Water Analyzer



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 μ g/L to ppb and pX; modes Direct, Standard Addition, Sample Addition and GRAN; built-in methods for F-, Cl-, Br-, I-, NO \square -, BF \square -, NH \square \square , K \square , Na \square , Ca² \square , Cu² \square , Pb² \square , Ag \square ; 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.

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

Range: 0.000 μS/cm to 500 mS/cm; Resolution: min 0.001 μS/cm (varies by range); Accuracy:

Conductivity (EC) ±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 M Ω ·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 $490 \times 410 \times 220$ 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.

© VIKING — Model M310. All rights reserved.

Accessories: