

VIKING-M500 Benchtop Multi-parameter Analyzer

Product Details

Product Number

PRO6091



Technical Specification:

Features

General Features

- 7.0" high-contrast color **LCD touchscreen**.
- Intelligent OS: user, calibration, method and data management.
- Multi-reading modes: auto-read, timed-read, continuous-read.
- Automatic/Manual temperature compensation (ATC/MTC).
- **Data storage: 1000 sets** per parameter (GLP-compliant) with data analysis (review/compare/recalculate).
- USB or RS-232 communication.
- Factory reset to default options.
- IP54 water-resistant housing.

pH Functions

- 1–6 point calibration with standard recognition.
- Buffer groups: DIN, NIST, USA, MERK, JIS, GB; custom buffer group supported.
- Automatic electrode diagnostics (slope & offset display).

Ion (ISE) Functions

- 1–6 point calibration.
- Units: $\mu\text{g/L}$, mg/L , g/L , mmol/L , pX , ppm , etc.
- Modes: Direct Reading, Standard Addition, Sample Addition, GRAN.
- 10+ built-in methods (F^- , Cl^- , Br^- , I^- , NO_3^- , BF_4^- , NH_4^+ , K^+ , Na^+ , Ca^{2+} , Cu^{2+} , Pb^{2+} , Ag^+ , etc.) + user methods.

Conductivity (EC) Functions

- 1–5 point calibration with standard recognition.

- Settable: cell constant; reference temp. (5/10/15/18/20/25 °C); temp. coefficient; TDS factor.
- Temperature compensation types: none, linear, pure water.

Dissolved Oxygen (DO) Functions

- Calibration: air-saturated water or zero oxygen.
- Automatic barometric pressure compensation.
- Manual salinity factor correction.
- Selectable pressure units: kPa, mbar, Torr, Atm.

Included

- 3-in-1 pH composite electrode **PRO4153**
- EC electrode **PRO6154**
- Polarographic DO electrode **PRO6163**
- NIST pH standard solutions 4.01 / 7.00 / 10.01 (50 ml each)
- EC standard 1413 µS/cm (50 ml)
- **EHO-6** electrode stand; touch pen

Technical Specifications

Overview

Model VIKING-M500

Parameters pH / EC / ISE / DO / Temp. (mV / ORP / pX / Resistivity / TDS / Salinity / DO % Saturation)

pH

Range	-2.000 to 20.000 pH
Resolution	0.1, 0.01, 0.001 pH
Accuracy	±0.002 pH
Calibration points	Up to 6
Standard customization	Yes
Calibration reminder	Yes
Standard recognition	DIN, NIST, USA, MERK, JIS, GB
Slope limit	Yes

mV / ORP

Range	-2000.00 to 2000.00 mV
Resolution	0.1, 0.01 mV
Accuracy	±0.1 mV or ±0.03% of reading (whichever is greater)
EH ORP mode	Yes
ORP calibration	1 custom point (relative mV)

pX

Range	-2.000 to 20.000 pX
Resolution	0.1, 0.01, 0.001 pX
Accuracy	±0.002 pX

Calibration points Up to 6

ISE (Ion-Selective)

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	±0.3%

Calibration points Up to 6

Conductivity / Resistivity / TDS / Salinity

Conductivity range	0.000 µS/cm to 2000 mS/cm
Resolution (EC)	min 0.001 µS/cm (varies with range)
Accuracy (EC)	±0.5% FS
Reference temperature	5, 10, 15, 18, 20, 25 °C
EC calibration	Up to 5 points
Calibration reminder	Yes
Standard recognition	10 µS/cm, 84 µS/cm, 500 µS/cm, 1413 µS/cm, 12.88 mS/cm; 146.5 µS/cm, 1408 µS/cm, 12.85 mS/cm, 111.3 mS/cm
Resistivity	5.00 Ω·cm to 100.0 MΩ·cm (min res. 0.01 Ω·cm)
TDS	0.000 to 1000 ppt (min res. 0.001 ppm; range-dependent)
Salinity type	%NaCl
Salinity range	0.0 to 80.0 ppt
Salinity resolution	0.1 ppt
Salinity accuracy	±1 ppt

Dissolved Oxygen (Polarographic)

Concentration range	0.00 to 99.99 ppm
Concentration resolution	0.01 ppm
Concentration accuracy	(0.00–50.00) ppm: ±0.10 ppm; (50.0–99.99) ppm: ±0.50 ppm
% Saturation range	0.0 to 600 %
% Saturation resolution	0.10 %
% Saturation accuracy	±2.0 %
Calibration	Air-saturated water or zero point
Barometric compensation	Automatic
Salinity correction	Manual factor
Calibration reminder	Yes

Temperature & Measurement

Temperature range	–10 to 135 °C (14 to 275 °F)
Units	°C, °F
Resolution	0.1
Accuracy	±0.1 °C
Reading modes	Auto (Fast/Medium/Slow), Timed, Continuous

Prompts Reading, Stable, Locked
Temp. compensation ATC, MTC

Memory & Data

Data storage 1000 groups
GLP features Yes
Log management Yes

Inputs & Outputs

pH electrode BNC (Q9)
DO + Temp. probe 4-pin aviation connector
Conductivity + Temp. probe 5-pin aviation connector
USB USB 2.0 flash device; PC; scanner
RS-232 Printer; auto-sampler

Display & Power

Backlight Yes
Auto shutdown 1–60 min, or off
IP rating IP54
Date & time Yes

General

Power AC adapter, 100–240 V AC input, 24 V DC output
Dimensions 220 × 195 × 68 mm
Net weight 950 g (2.09 lb)

More laboratory equipment at
[COLO.Science](http://colo.si).

Accessories: