COLO.SCIENCE · TECHNICAL SPECIFICATION

VIKING-EC500

Benchtop Conductivity Meter · EC / Resistivity / TDS / Salinity / Temperature

Model: VIKING-EC500
Product number / SKU: PRO3566
Product family: Conductivity meters
Format: A4 landscape · EN

VIKING-EC500 is a benchtop conductivity meter for laboratories that require accurate, repeatable and traceable measurement of **conductivity, resistivity, TDS, salinity** and temperature.

The instrument combines a **7-inch high-contrast color LCD touchscreen**, up to 5-point calibration, automatic/manual temperature compensation, GLP-compliant logging, data management and USB / RS-232 communication.

EC / Res / TDS / Sal / Temp | 7" Touchscreen | ±0.5% FS | 1–5 point calibration | ATC / MTC | 1000 groups | USB / RS-232 | IP54

Conductivity range
0.000 µS/cm to 2000 mS/cm with minimum resolution down to 0.001 µS/cm.

Calibration
Up to 5 points with automatic standard recognition and calibration reminder.

Traceability
GLP features, log management and 1000 stored data groups for laboratory workflows.

Online reference
Open product page · Electrochemical instruments

Key features and laboratory workflow

Advanced EC platform: VIKING-EC500 is intended for laboratories that need a touchscreen conductivity meter with broad measurement range, multi-point calibration, selectable reference temperature, traceable data handling and multiple reading modes.

Key instrument features

- 7-inch high-contrast color LCD touchscreen.
- Intelligent OS with user, calibration, method and data management.
- GLP-compliant logging with 1000 stored data groups.
- Calibration up to 1–5 points with automatic standard recognition.
- Automatic or manual temperature compensation: ATC / MTC.
- Multiple reading modes: Auto-Read, Timed-Read and Continuous-Read.
- On-meter data analysis: review, compare and recalculate.
- USB and RS-232 communication for external workflows.
- IP54 splash protection and factory reset to defaults.

Measurement scope

- **Conductivity:** 0.000 µS/cm to 2000 mS/cm.
- **Resistivity:** 5.00 Ω·cm to 100.0 MΩ·cm.
- **TDS:** 0.000 ppm to 1000 ppt.
- **Salinity:** 0.0 to 80.0 ppt as NaCl.
- **Temperature:** −10 to 135 °C / 14 to 275 °F.
- **Input:** EC + temperature probe with 5-pin aviation connector.

Measurement and data handling highlights

Conductivity accuracy **±0.5% FS**	Conductivity resolution down to **0.001 µS/cm**	EC calibration **up to 5 points**
Reference temperature **5 / 10 / 15 / 18 / 20 / 25 °C**	Reading modes **Auto / Timed / Continuous**	Communication **USB 2.0 / RS-232**

Water quality labs

Broad EC range and temperature compensation support routine and method-driven water analysis.

QC environments

GLP logging, data review and communication interfaces support traceable QC workflows.

Research workflows

Multi-point calibration and selectable compensation settings support more demanding conductivity methods.

Technical specifications

Conductivity and calibration

Model	VIKING-EC500
Measured parameters	EC / Resistivity / TDS / Salinity / Temperature
Conductivity range	0.000 µS/cm to 2000 mS/cm
Conductivity resolution	0.001 µS/cm minimum, varies with range
Conductivity accuracy	±0.5% FS
Reference temperature	5, 10, 15, 18, 20, 25 °C, settable
EC calibration	Up to 5 points; calibration reminder
Standard recognition	10, 84, 500, 1413 µS/cm; 12.88 mS/cm; 146.5 µS/cm; 1.408 mS/cm; 12.85 mS/cm; 111.3 mS/cm

Resistivity, TDS, salinity and temperature

Resistivity range	5.00 Ω·cm to 100.0 MΩ·cm
Resistivity resolution	0.01 Ω·cm minimum
Resistivity accuracy	±0.5% FS
TDS range	0.000 ppm to 1000 ppt
TDS resolution	0.001 ppm minimum
TDS accuracy	±0.5% FS
Salinity type and range	NaCl; 0.0 to 80.0 ppt
Salinity resolution / accuracy	0.1 ppt · ±1 ppt
Temperature range	−10 to 135 °C / 14 to 275 °F
Temperature resolution / accuracy	0.1 °C · ±0.1 °C
Temperature units	°C / °F

Measurement, compensation and I/O

Reading modes	Auto Read: Fast / Medium / Slow; Timed; Continuous
On-screen prompts	Reading / Stable / Locked
Temperature compensation	ATC / MTC
Compensation types	None / linear / pure water
Settable options	Cell constant, temperature coefficient, TDS factor
Data & GLP	1000 groups; GLP features; log management
Communication	USB 2.0: flash, PC, scanner; RS-232: printer, auto-sampler
Input connector	5-pin aviation connector, EC + temperature probe

Display, power and physical data

Display	7-inch high-contrast color LCD touchscreen; backlight
Auto shutdown	1–60 minutes or off
Protection	IP54 splash-proof protection
Date & time	Yes
Factory reset	Yes
Power	AC adapter, 100–240 V input, DC 24 V output
Dimensions	220 × 195 × 68 mm
Net weight	950 g / 2.09 lb

Laboratory use, selection notes and method fit

When VIKING-EC500 is a suitable choice

- When conductivity, resistivity, TDS, salinity and temperature are required in one instrument.
- When a 7-inch touchscreen and guided user / method management are preferred.
- When 1–5 point calibration and automatic standard recognition are important.
- When laboratories need GLP-compliant data storage and log management.
- When data export, printer connection or auto-sampler integration may be required.

Configuration and method checks

- Confirm the conductivity range and expected sample matrix before quotation.
- Select the correct EC electrode and cell constant for the target application.
- Define reference temperature and temperature coefficient according to the method.
- Use suitable standards across the expected measurement range.
- Review reporting, GLP, USB and RS-232 requirements before final configuration.

Important measurement considerations

Conductivity measurement depends on electrode cell constant, temperature compensation settings, calibration standard condition, sample matrix, sample temperature and probe cleanliness. The wide conductivity range of VIKING-EC500 makes the instrument suitable for both low and high conductivity laboratory samples, but method suitability should always be checked against the expected range and acceptance criteria.

For SOP-compliant workflows, GLP logging, method management, review / compare / recalculate functions and export options help laboratories maintain traceability, reduce rework and document repeatable results.

Water quality

Routine and method-based checks for water, process water and environmental samples.

Production QC

Conductivity and TDS monitoring in food, beverage, chemical and pharmaceutical workflows.

Research

Advanced data handling and selectable compensation settings for demanding laboratory work.

Product links, video placeholder and technical notice

Configure VIKING-EC500 for traceable conductivity workflows

COLO.Science can support selection of conductivity meters, EC electrodes, calibration standards and accessories for water quality, QC, research and routine laboratory measurement.

Open product page | Benchtop conductivity meters | Electrochemical instruments

Request quotation | PDF version

COLO.Science

Laboratory equipment, technical specifications and product configuration.

sales@colo.si
+386 64 222 724
https://colo.si/contacts/

Recommended document links

- **Product page:** VIKING-EC500 product page
- **Category:** Benchtop conductivity meters
- **Electrochemistry page:** Electrochemical instruments
- **HTML path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC500.html
- **PDF path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC500.pdf

Video presentation · in preparation

A VIKING-EC500 product video can be added later. It should present the touchscreen interface, EC calibration workflow, conductivity / resistivity / TDS / salinity measurement routines, electrode connection and data export options.

Temporary video placeholder: #viking-ec500-video
Replace this anchor with the final YouTube / product video URL when available.

Technical disclaimer: This COLO.Science technical specification is prepared for product orientation, quotation preparation and preliminary comparison only. Technical characteristics, supplied accessories and configuration options may vary depending on the confirmed offer, manufacturer documentation and selected electrode configuration. Only the official quotation, order confirmation and manufacturer-approved specification should be treated as definitive for procurement, tender or contractual use.