

VIKING-EC510

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

Model: VIKING-EC510

Product family: Portable conductivity meters

Protection: IP65

Format: A4 landscape · EN

VIKING-EC510 is a rugged portable conductivity meter for measurement of **conductivity, TDS, salinity, resistivity** and temperature in laboratory and field workflows.

The instrument combines a **4.3-inch high-contrast color touchscreen**, intelligent operating system, GLP storage, USB 2.0 communication, up to 5-point calibration and IP65 protection for routine water quality analysis.

0.000 $\mu\text{S}/\text{cm}$ – 3000 mS/cm

$\pm 0.5\%$ FS

1–5 point calibration

GLP 1000 groups

USB 2.0

ATC / MTC

IP65

Rechargeable battery

Parameter coverage

EC, TDS, salinity, resistivity and temperature in one portable meter.

Field-ready housing

IP65 protection, rugged handling and transport case support field applications.

Traceability

1000 GLP data groups with date/time support and USB 2.0 communication.

Online reference

Open HTML spec · Electrochemical instruments



Key features and supplied configuration

Portable multi-parameter conductivity platform: VIKING-EC510 is designed for users who need EC, TDS, salinity, resistivity and temperature measurement with touchscreen control, GLP data handling and rugged IP65 field usability.

Key instrument features

- 4.3-inch high-contrast color LCD touchscreen.
- Intelligent operating system for user, calibration, electrode, method, data and log management.
- Measurement parameters: conductivity, resistivity, TDS, salinity and temperature.
- Multiple reading modes: Auto-Read, Timed-Read and Continuous-Read.
- Auto-Read supports Fast / Medium / Slow measurement behaviour.
- Automatic and manual temperature compensation: ATC / MTC.
- Temperature compensation types: none, linear and pure water.
- Up to 5-point calibration with automatic standard recognition.
- Settable cell constant, reference temperature, temperature coefficient and TDS factor.
- GLP-compliant memory: 1000 data groups with date/time support.
- On-meter data review, comparison and recalculation.
- USB 2.0 communication for flash drive, PC and scanner workflows.
- Rechargeable lithium battery and auto power-off options.
- IP65 waterproof and dust-tight protection.

Included accessories

DJS-1VTC

EC / temperature combination electrode

1413 µS/cm

EC standard solution, 50 mL, 1 vial

Electrode holder

For laboratory operation

Silicone rubber case

Protection and improved grip

Wrist strap and touch pen

Field-use accessories

Carrying case

Transport and storage



Carrying case with standards and field-ready accessory layout. Exact supplied configuration should be confirmed in the approved quotation.

Technical specifications

Conductivity, resistivity and TDS

Model	VIKING-EC510
Instrument type	Portable EC / TDS / salinity / resistivity / temperature meter
Conductivity range	0.000 $\mu\text{S}/\text{cm}$ – 3000 mS/cm
Conductivity resolution	0.001 $\mu\text{S}/\text{cm}$ minimum, varies with range
Conductivity accuracy	$\pm 0.5\%$ FS
Resistivity range	5.00 $\Omega\cdot\text{cm}$ – 100.0 $\text{M}\Omega\cdot\text{cm}$
Resistivity resolution	0.01 $\Omega\cdot\text{cm}$ minimum
Resistivity accuracy	$\pm 0.5\%$ FS
TDS range	0.000 ppm – 1000 ppt
TDS resolution	0.001 mg/L minimum, range-dependent
TDS accuracy	$\pm 0.5\%$ FS

Calibration and data management

Calibration	1–5 points with automatic standard recognition
Reading modes	Auto-Read, Timed-Read, Continuous-Read
Auto-Read modes	Fast / Medium / Slow
Endpoint function	Auto-Hold endpoint sensing and lock
Status prompts	Reading / Stable / Locked
Data storage	1000 groups with GLP and date/time support
Data analysis	Review / compare / recalculate on meter

Salinity and temperature

Salinity range	0.0 – 80.0 ppt
Salinity resolution	0.1 ppt
Salinity accuracy	± 1 ppt
Temperature range	$-10 - 135$ °C / $14 - 275$ °F
Temperature resolution	0.1 °C
Temperature accuracy	± 0.1 °C
Temperature compensation	ATC / MTC
Compensation types	None / linear / pure water
Reference temperature	5 / 10 / 15 / 18 / 20 / 25 °C, settable
Settable method factors	Cell constant, temperature coefficient, TDS factor

Display, connectivity and physical data

Display	4.3-inch high-contrast color LCD touchscreen
Connectivity	USB 2.0: flash drive, PC, scanner
IP rating	IP65 waterproof and dust-tight
Power	Rechargeable lithium battery + AC adapter, 100–240 V input, DC 5 V output
Auto shutdown	300 / 600 / 1200 / 1800 / 3600 s or off
Dimensions	90 × 255 × 40 mm
Weight	500 g / 1.1 lb

Portable workflow, accessories and connector layout



Carrying case with standards: VIKING portable meter configuration can be organised for routine field measurement, storage and transport. Included accessories and final configuration depend on approved quotation.



Connector detail: portable VIKING meter connector layout for sensor and temperature workflow reference. Verify final probe compatibility before quotation.

Field measurement

IP65 housing, rechargeable power and carrying case make VIKING-EC510 suitable for field water quality measurements and environmental monitoring.

Laboratory support

Touchscreen operation, calibration guidance and GLP records support daily laboratory EC/TDS/salinity workflows.

Process checks

Wide conductivity range, TDS and salinity coverage support industrial process water, wastewater and QC checks.

Configuration and compatibility notes

The VIKING-EC510 configuration should be selected according to sample matrix, expected conductivity range, electrode type, required calibration standards, temperature compensation method and documentation workflow.

For water quality monitoring, environmental field work and industrial process control, confirm probe compatibility, standard solutions, carrying case content and accessory list before final purchase or tender specification.

Application guidance and selection notes

When VIKING-EC510 is a suitable choice

- When EC, TDS, salinity, resistivity and temperature must be measured with one portable meter.
- When field teams need rugged IP65 protection and a transportable case-based configuration.
- When the laboratory needs GLP data storage, date/time support and USB 2.0 export.
- When up to 5-point calibration and automatic standard recognition are required.
- When touchscreen operation and guided data management improve daily workflow efficiency.

Method and configuration checks

- Confirm conductivity range and sample matrix before final instrument selection.
- Select the correct EC electrode and cell constant for the expected measurement range.
- Choose calibration standards that match the operating range and laboratory SOP.
- Define temperature compensation type: none, linear or pure water.
- Review whether data export, GLP records, carrying case and field accessories are required.

Water quality labs

Routine monitoring of EC, TDS, salinity, resistivity and temperature for water quality control.

Environmental field work

Portable IP65 measurement for environmental monitoring, surface water checks and sample screening.

Industrial process control

Process water, wastewater, food and beverage, chemical and pharmaceutical QC workflows.

Measurement reliability: Conductivity readings depend on clean electrodes, correct cell constant, calibration standard condition, temperature compensation settings and sample matrix. VIKING-EC510 provides a robust portable platform, but method validation and calibration practice remain critical for dependable results.

Product links, quotation support and technical notice

Configure VIKING-EC510 for portable water quality measurement

COLO.Science can support selection of portable conductivity meters, EC electrodes, standards, carrying cases and accessories for water quality laboratories, environmental monitoring and industrial QC teams.

[Open HTML specification](#)[PDF version](#)[Electrochemical instruments](#)[COLO.Science water quality](#)[Request quotation](#)

COLO.Science

Laboratory equipment, technical specifications and product configuration.

sales@colo.si

+386 64 222 724

<https://colo.si/contacts/>

Recommended document links

- **HTML path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC510.html
- **PDF path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC510.pdf
- **Electrochemical instruments:** colo.si/products/electrochemical-instruments/
- **COLO.Science knowledge:** Water Quality category

Video presentation · in preparation

A VIKING-EC510 product video can be added later. It should present touchscreen operation, EC calibration workflow, conductivity / TDS / salinity / resistivity measurement routines, carrying case configuration and USB data export.

Temporary video placeholder: #viking-ec510-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.