COLO.SCIENCE · TECHNICAL SPECIFICATION

VIKING-EC400

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

Model: VIKING-EC400
Product number / SKU: PRO2747
Product family: Conductivity meters
Format: A4 landscape · EN

VIKING-EC400 is a benchtop conductivity meter for laboratories that require accurate, straightforward and traceable measurement of **conductivity, resistivity, TDS, salinity** and temperature.

The instrument combines a **7.0-inch high-resolution LCD display**, 1–3 point EC calibration, automatic/manual temperature compensation, Auto-Hold endpoint locking, GLP storage for 500 sets per parameter and USB / RS-232 communication.

EC / Res / TDS / Sal / Temp | 7" LCD | ±0.5% FS | 1–3 point calibration | ATC / MTC | 500 results each | USB / RS-232 | IP54

Conductivity range
0.000 µS/cm to 1000 mS/cm with minimum resolution down to 0.001 µS/cm.

Calibration
Up to 3 points with automatic recognition of 84 µS/cm, 1413 µS/cm and 12.88 mS/cm standards.

Traceability
GLP features, date/time records and 500 stored results for each parameter.

Online reference
Open product page · Electrochemical instruments

Key features and laboratory workflow

Reliable EC platform: VIKING-EC400 is intended for laboratories that need a stable benchtop conductivity meter with traceable storage, 1–3 point calibration, ATC/MTC compensation and a clear 7-inch LCD operating interface.

Key instrument features

- 7.0-inch high-resolution LCD display with backlight.
- Multiple reading modes: Auto-Read, Timed-Read and Continuous-Read.
- Automatic and manual temperature compensation: ATC / MTC.
- Auto-Hold detects and locks the measurement endpoint.
- GLP storage: 500 sets per parameter with date and time.
- USB or RS-232 communication for laboratory reporting workflows.
- 1–3 point EC calibration with automatic standard recognition.
- Settable cell constant, temperature coefficient and TDS factor.
- Compensation types: none, linear and pure water.
- IP54 splash protection and reset to factory defaults.

Measurement scope

- **Conductivity:** 0.000 µS/cm to 1000 mS/cm.
- **Resistivity:** 5.00 Ω·cm to 100.0 MΩ·cm.
- **TDS:** 0.00 ppm to 1000 ppt.
- **Salinity:** 0.0 to 80.0 ppt and 0.00 to 8.00 %NaCl.
- **Temperature:** −10.0 to 135.0 °C / 14.0 to 275.0 °F.
- **Input:** EC + temperature probe with 5-pin aviation connector.

Measurement and data handling highlights

Conductivity accuracy **±0.5% FS**	Resolution down to **0.001 µS/cm**	EC calibration **up to 3 points**
Reference temperature **20 / 25 °C**	Reading modes **Auto / Timed / Continuous**	Communication **USB / RS-232**

Water quality

Routine conductivity, TDS, salinity and temperature measurement for water quality workflows.

QC environments

GLP storage, endpoint locking and communication ports support traceable QC routines.

Research and education

Straightforward operation and stable measurement modes support repeatable laboratory training and research.

Technical specifications

Conductivity and calibration

Model	VIKING-EC400
Measured parameters	EC / Resistivity / TDS / Salinity / Temperature
Conductivity range	0.000 µS/cm to 1000 mS/cm
Conductivity resolution	0.001 µS/cm minimum, varies with range
Conductivity accuracy	±0.5% FS
Reference temperature	20, 25 °C
EC calibration	Up to 3 points; automatic standard recognition
Standard recognition	84 µS/cm, 1413 µS/cm, 12.88 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	0.00 ppm to 1000 ppt
TDS resolution	0.01 ppm minimum
TDS accuracy	±0.5% FS
Salinity range	0.0 to 80.0 ppt and 0.00 to 8.00 %NaCl
Salinity resolution / accuracy	0.1 ppt / 0.1% · ±1 ppt
Temperature range	−10.0 to 135.0 °C / 14.0 to 275.0 °F
Temperature resolution / accuracy	0.1 · ±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
Auto-Hold	Detects and locks the measurement endpoint
Temperature compensation	ATC / MTC
Compensation types	None / linear / pure water
Settable options	Cell constant, temperature coefficient, TDS factor
Data & GLP	500 results each; GLP features; date and time
Input connector	5-pin aviation connector, EC + temperature probe
Outputs	USB for PC; RS-232 for printer

Display, power and physical data

Display	7.0-inch high-resolution LCD display; backlight
Auto shutdown	1–60 minutes or off
Protection	IP54 splash-proof protection
Factory reset	Yes
Power	AC adapter, 100–240 V input, DC 20 V output
Dimensions	242 × 195 × 68 mm
Net weight	900 g / 1.98 lb
Carton size	370 × 305 × 330 mm
Shipping weight	2.5 kg

Laboratory use, selection notes and method fit

When VIKING-EC400 is a suitable choice

- When conductivity, resistivity, TDS, salinity and temperature are required in one benchtop instrument.
- When the laboratory needs a reliable LCD-based meter without full touchscreen complexity.
- When 1–3 point calibration and automatic standard recognition are sufficient for the method.
- When GLP storage, date/time records and stable endpoint detection are important.
- When USB or RS-232 communication is needed for PC or printer workflows.

Configuration and method checks

- Confirm the expected conductivity range and sample matrix before quotation.
- Select the correct EC probe and cell constant for the application.
- Use suitable standards at 84 µS/cm, 1413 µS/cm or 12.88 mS/cm according to the method range.
- Define whether linear, pure water or no temperature compensation is required.
- Review data export, printer and GLP storage requirements before final configuration.

Important measurement considerations

Conductivity measurement depends on electrode cell constant, temperature compensation settings, standard condition, sample matrix, sample temperature and probe cleanliness. VIKING-EC400 covers routine low-to-high conductivity samples, but the selected electrode and method should always match the expected range and laboratory acceptance criteria.

For SOP-compliant workflows, Auto-Hold endpoint locking, GLP storage, date/time logging and USB / RS-232 communication help laboratories document repeatable results and reduce manual recording errors.

Water quality

Routine checks for water quality, process water, wastewater and environmental samples.

Production QC

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

Education and research

Repeatable LCD-based operation for teaching laboratories, research projects and method comparison.

Product links, video placeholder and technical notice

Configure VIKING-EC400 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.

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Recommended document links

- **Product page:** VIKING-EC400 product page
- **Category:** Benchtop conductivity meters
- **Electrochemistry page:** Electrochemical instruments
- **HTML path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC400.html
- **PDF path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC400.pdf

Video presentation · in preparation

A VIKING-EC400 product video can be added later. It should present the LCD display, EC calibration workflow, conductivity / resistivity / TDS / salinity measurement routines, electrode connection and data export options.

Temporary video placeholder: #viking-ec400-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.