

VIKING-EC250

Laboratory Conductivity Meter · Conductivity / Resistivity / TDS / Salinity / Temperature / Ash

Model: VIKING-EC250
 Product number / SKU: PRO5361
 Product family: Conductivity meters
 Format: A4 landscape · EN

VIKING-EC250 is a professional touch-screen **laboratory conductivity meter** for routine and advanced water-analysis workflows, including conductivity, resistivity, TDS, salinity and temperature measurement.

The EC250 configuration is positioned for laboratories requiring **0.5 grade accuracy**, a **5.0" color touch screen**, a standard 4-ring conductivity electrode, USB / RS232 output and conductivity-based ash workflows for application areas such as sugar, water quality and process-control laboratories.

5.0" color touch screen

0.5 grade accuracy

EC to 3000 mS/cm

Resistivity to 105.0 MΩ·cm

TDS to 3000 g/L

Salinity to 87.0 psu

ATC / MTC

Conductivity Ash

USB / RS232

Measurement coverage

Conductivity, resistivity, TDS, salinity, temperature and conductivity-ash workflows.

Electrode concept

Standard 4-ring conductivity electrode supports stable measurements across low and high-conductivity samples.

Calibration

One-point calibration, 10 built-in standards and user-defined standard solutions.

Online reference

Open product page · Water quality knowledge



Key features and laboratory workflow

Touch-screen conductivity platform: VIKING-EC250 is intended for laboratories that need conductivity, resistivity, TDS, salinity, temperature and conductivity-ash capability in a bench instrument with traceable data handling and digital output.

Key instrument features

- 5.0" color touch screen for intuitive operation.
- 0.5 grade conductivity performance for laboratory use.
- Standard 4-ring conductivity electrode for broad conductivity range and reduced polarization in high-salinity samples.
- Conductivity, resistivity, TDS, salinity and temperature measurement modes.
- Conductivity-based ash workflow for applications requiring ash determination.
- 10 built-in international standard solutions and support for user-defined standards.
- Temperature compensation modes: linear, non-linear, off and pure-water workflow where configured.
- Endpoint modes: Auto / Manual / Time.
- USB and RS232 output; optional printer support.

Measurement scope

- **Conductivity:** 0.000 $\mu\text{S}/\text{cm}$ to 3000 mS/cm .
- **Resistivity:** 0.000 $\Omega\cdot\text{cm}$ to 105.0 $\text{M}\Omega\cdot\text{cm}$.
- **TDS:** 0.000 mg/L to 3000 g/L .
- **Salinity:** 0.000 to 87.0 psu, approximately 0.00 to 15.00%.
- **Temperature:** -30.0 to 135.0 $^{\circ}\text{C}$ with ATC / MTC workflow.
- **Ash:** conductivity-ash workflow available for ash-related applications; final range should be confirmed from the official manual.

Measurement and data handling highlights

Display **5.0" color touch**

Accuracy grade **0.5**

Conductivity accuracy **$\pm 0.5\%$ reading**

Temperature accuracy **± 0.1 $^{\circ}\text{C}$**

Endpoint modes **Auto / Manual / Time**

Communication **USB / RS232**

Water quality labs

Broad EC, resistivity, TDS, salinity and temperature coverage supports routine and method-driven water analysis.

Conductivity ash

Suitable for laboratories that use conductivity-based ash determination, especially where sugar-industry methods are required.

Traceable QC

GLP-style database, endpoint control and digital output support repeatable and auditable measurement workflows.

Technical specifications

Conductivity and calibration

Model	VIKING-EC250
Product number / SKU	PRO5361
Instrument type	Laboratory conductivity meter with touch screen and ash workflow
Measured parameters	Conductivity, resistivity, TDS, salinity, temperature, conductivity ash
Conductivity range	0.000 µS/cm to 3000 mS/cm
Conductivity resolution	Automatic, 0.001 to 1 depending on measurement range
Conductivity accuracy	±0.5% of reading across all ranges
Accuracy grade	0.5 grade
Calibration	One-point calibration; 10 built-in standards; user-defined solutions supported
Cell constant	Known cell constant can be entered for electrode calibration
Preset standards	146.5 µS/cm, 1408 µS/cm, 12.85 mS/cm, 111.3 mS/cm; additional values customizable

Resistivity, TDS, salinity and temperature

Resistivity range	0.000 Ω·cm to 105.0 MΩ·cm
Resistivity resolution	Automatic, 0.001 to 1.0 depending on range
TDS range	0.000 mg/L to 3000 g/L
TDS resolution	Automatic, 0.001 to 1.0 depending on range
Salinity range	0.000 to 87.0 psu, approximately 0.00 to 15.00%
Salinity resolution	Automatic, 0.001 to 1.0 depending on range
Temperature range	-30.0 to 135.0 °C
Temperature resolution	0.1 °C
Temperature accuracy	±0.1 °C
Temperature compensation	ATC / MTC; linear, non-linear, off; pure-water compensation where configured
Reference temperature	20 °C or 25 °C

Ash, endpoint and data management

Ash workflow	Conductivity-based ash mode / ash evaluation for relevant applications
Ash range	Source material includes an apparent “0.000–2022%” value; confirm official ash range before tender or purchase use
Endpoint modes	Auto / Manual / Time
GLP database	1000 to 2000 measurements depending on confirmed EC250 configuration; confirm final value in official datasheet
Traceability	Auditable / traceable measurement database for laboratory workflows
Output	USB and RS232

Display, input, power and physical data

Display	5.0” color touch screen
Electrode	Standard 4-ring conductivity electrode recommended for broad conductivity and high-salinity samples
Input	Mini-DIN / Cinch, NTC 30 kΩ built-in temperature input
Power input	110–220 V AC, 50/60 Hz
DC power	9–12 V DC
Housing dimensions	250 × 165 × 65 mm
Main unit image	https://colo.si/wp-content/uploads/2025/09/VIKING-EC250.jpg
Product page	Open VIKING-EC250 product page

Conductivity, resistivity, TDS, salinity, ash U/O and physical specifications
Printer Optional printer support

Laboratory use, selection notes and method fit

When VIKING-EC250 is a suitable choice

- When a bench conductivity meter with 5.0" touch-screen operation is required.
- When conductivity, resistivity, TDS, salinity and temperature must be measured in one instrument.
- When conductivity-ash workflow is needed for sugar, food or process-control applications.
- When 0.5 grade accuracy and a 4-ring electrode configuration are preferred.
- When the laboratory requires USB / RS232 output and optional printer support.
- When traceable measurement storage and endpoint control are important for routine QC.

Configuration and method checks

- Confirm whether the supplied EC250 configuration is the ash-enabled HZPD-T503F version.
- Confirm GLP memory capacity as 1000 or 2000 results before publication in tender documents.
- Confirm the official ash range and calculation method from the manufacturer manual.
- Select the correct 4-ring electrode and cell constant for the expected conductivity range.
- Define reference temperature, compensation mode and calibration standards according to the SOP.
- Check whether pure-water compensation is required for ultra-pure water workflows.

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-EC250 makes the instrument suitable for ultra-low to high-conductivity laboratory samples, but method suitability should always be checked against the expected range and acceptance criteria.

For ash-related workflows, the exact conductivity-to-ash method, range, reporting format and acceptance criteria should be confirmed from the official manual or manufacturer-approved method sheet before the instrument is used as a procurement or contractual specification.

Water quality

Routine and advanced checks for conductivity, TDS, salinity, resistivity and temperature in water laboratories.

Food / sugar industry

Conductivity-based ash workflows can support sugar and food laboratories where ash estimation is part of QC.

Ultra-pure water

Pure-water compensation, where confirmed, supports workflows where very low conductivity must be monitored.

Product links, document paths and technical notice

Configure VIKING-EC250 for conductivity, water-quality and ash workflows

COLO.Science can support selection of conductivity meters, 4-ring electrodes, calibration standards and accessories for water quality, food / sugar industry, QC and routine laboratory measurement.

[Open product page](#)

[Water quality knowledge](#)

[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-EC250 product page
- **Knowledge / outbound link:** COLO.Science water quality knowledge
- **HTML path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC250.html
- **PDF path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC250.pdf
- **Main image:** <https://colo.si/wp-content/uploads/2025/09/VIKING-EC250.jpg>

Configuration confirmation checklist

- Confirm model mapping: VIKING-EC250 / HZPD-T503F ash configuration.
- Confirm SKU: PRO5361.
- Confirm GLP memory: 1000 vs 2000 measurement records.
- Confirm ash range and reporting method.
- Confirm supplied electrode, standards, printer and accessories.
- Confirm pure-water compensation availability before use in ultra-pure water claims.

Technical disclaimer: This COLO.Science technical specification is prepared for product orientation, quotation preparation and preliminary comparison only. Technical characteristics, supplied accessories, ash mode, memory capacity 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.