COLO.SCIENCE · TECHNICAL SPECIFICATION

# VIKING-EC240

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

Model: VIKING-EC240
Product number / SKU: PRO5369
Product family: Conductivity meters
Format: A4 landscape · EN

**VIKING-EC240** is a professional touch-screen **laboratory conductivity meter** designed for routine and advanced water-analysis workflows, including conductivity, resistivity, TDS, salinity and temperature measurement.

The EC240 configuration is positioned for laboratories requiring **0.5 grade accuracy**, a **5.0" color touch screen**, a standard **4-ring conductivity electrode**, 1000-result GLP database, USB / RS232 output and stable performance from ultra-low conductivity samples to high-salinity workflows.

- 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
- GLP 1000 records
- USB / RS232
- No Ash workflow


**Measurement coverage**
Conductivity, resistivity, TDS, salinity and temperature in one laboratory bench instrument.

**Electrode concept**
Standard 4-ring conductivity electrode supports stable measurement across low and high-conductivity samples.

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

**Online reference**
Open HTML spec · Water quality knowledge

# Key features and laboratory workflow

**Touch-screen conductivity platform:** VIKING-EC240 is intended for laboratories that need conductivity, resistivity, TDS, salinity and temperature capability in a bench instrument with GLP-style data handling and digital output. This model does **not** include conductivity-based Ash determination.

## 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.
- 10 built-in international standard solutions and support for user-defined standards.
- Temperature compensation modes: Linear, Non-linear and Off.
- Endpoint modes: Auto / Manual / Time.
- GLP-style database with 1000 auditable / traceable measurement records.
- USB and RS232 output; optional printer support.

## Measurement scope

- **Conductivity:** 0.000 µS/cm to 3000 mS/cm.
- **Resistivity:** 0.000 Ω·cm to 105.0 MΩ·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 °C with ATC / MTC workflow.
- **Ash:** not included on EC240; select EC250 if conductivity-based ash determination is required.

## Measurement and data handling highlights

| | | |
|---|---|---|
| Display **5.0” color touch** | Accuracy grade **0.5** | Conductivity accuracy **±0.5% reading** |
| Temperature accuracy **±0.1 °C** | GLP database **1000 records** | Communication **USB / RS232** |

## Water quality labs

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

## High-salinity samples

4-ring electrode design reduces polarization effects and supports stable readings in high-conductivity solutions.

## Traceable QC

GLP-style 1000-result database, endpoint control and digital output support repeatable and auditable measurement workflows.

# Technical specifications

## Conductivity and calibration

| | |
|---|---|
| **Model** | VIKING-EC240 |
| **Product number / SKU** | PRO5369 |
| **Instrument type** | Laboratory conductivity meter with 5.0” touch screen |
| **Measured parameters** | Conductivity, resistivity, TDS, salinity, temperature |
| **Ash workflow** | Not included on VIKING-EC240 |
| **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 |

## 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 or Off |
| **Reference temperature** | 20 °C or 25 °C |

## Endpoint and data management

| | |
|---|---|
| **Endpoint modes** | Auto / Manual / Time |
| **GLP database** | 1000 measurements, auditable / traceable |
| **Traceability** | Auditable measurement database for laboratory workflows |
| **Output** | USB and RS232 |
| **Printer** | Optional printer support |
| **Difference from EC250** | EC240 does not include Ash, Pure-water compensation or 2000-record GLP database. |

## 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 |
| **HTML specification** | Open VIKING-EC240 HTML specification |



Note: VIKING-EC240 is the non-Ash configuration. For conductivity-based ash determination, Pure-water compensation and larger 2000-record GLP database, use the VIKING-EC250 configuration. SKU is set as PRO5369

# Laboratory use, selection notes and method fit

## When VIKING-EC240 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 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.
- When Ash determination is not required.

## Configuration and method checks

- Confirm SKU PRO5369 before final catalogue and quotation use.
- Confirm supplied 4-ring conductivity electrode and cell constant.
- Confirm calibration standard set and any user-defined standard solutions.
- Define reference temperature, compensation mode and endpoint mode according to SOP.
- Confirm if optional printer is required for the customer workflow.
- Use VIKING-EC250 if Ash or Pure-water compensation is required.

## 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-EC240 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 laboratories that do not require Ash determination, EC240 gives the same core conductivity, resistivity, TDS, salinity and temperature performance category as the higher EC250 configuration, while keeping the workflow focused on general water-analysis and QC tasks.

### Water quality

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

### Industrial QC

Digital output, endpoint modes and GLP-style data support process-water and industrial quality-control workflows.

### High-salinity samples

4-ring electrode configuration is useful for stable measurements in highly conductive or saline solutions.

# Product links, document paths and technical notice

## Configure VIKING-EC240 for conductivity and water-quality workflows

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

Open HTML specification | 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

- **HTML path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC240.html
- **PDF path:** /wp-content/images/TechSpec/WaterQualityP/VIKING-EC240.pdf
- **Main image:** https://colo.si/wp-content/uploads/2025/09/VIKING-EC250.jpg
- **Knowledge / outbound link:** COLO.Science water quality knowledge
- **Main website:** COLO.Science equipment website

### Configuration confirmation checklist

- Confirm SKU: PRO5369.
- Confirm supplied electrode and cell constant.
- Confirm calibration standards and optional printer.
- Confirm whether customer requires Ash workflow; if yes, select EC250.
- Confirm if Pure-water compensation is required; if yes, select EC250.
- Confirm final accessories before quotation and procurement use.