# EC 90

## Electrolyte Analyser



Making Automation Affordable
for Labs Everywhere

# EC 90

Thanks to its biosensor innovative technology, high quality components and simplified daily routine, this next generation electrolyte analyser increases productivity, turnaround time and results accuracy.

Measuring $Na^+$, $K^+$, $Cl^-$ and $iCa^{2+}$, the EC 90 ISE analyser takes laboratory measurements to new heights. By utilizing the innovative solid ISE cutting edge technology. The EC 90 is designed to be easy to use, efficient in operation and reliable.

## The Magic is in the **BIO**sensor

PATENTED TECHNOLOGY

### INNOVATIVE

- Clean biosensor technology
- Maintenance free technology
- Advanced connectivity and data management
- 35 µL Sample Volume
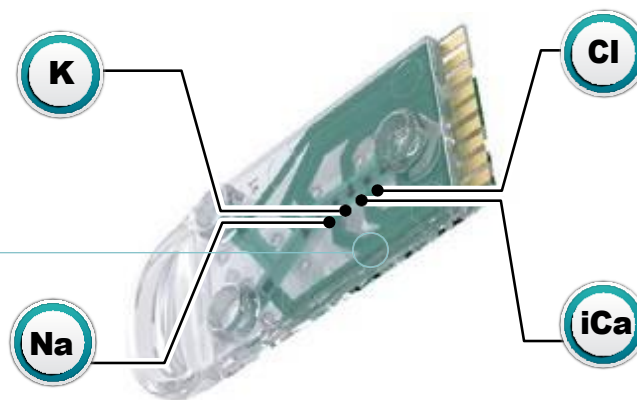- Low reagent consumption
- 35 seconds analysis time

### PRECISE

- Integrated reference sensor
- Automatic 1 and 2-point calibrations
- Fully functional QC module
- Within-run precision <1% CV
- Extended linearity of all parameters
- Advanced flagging

### ACCESSIBLE

- Large touch screen and clean software design
- 3 months use life cartridges
- Self-contained waste
- Plug and play
- 3 different cartridge sizes: small, medium and large

# THE CARTRIDGE

## ⚙ ADAPTIVE

Find the right size for your workload. Based on the workload, the laboratory can easily adjust the power of EC 90 with 3 sizes of cartridges: S, M or L.

## ♻ SUSTAINABLE

In 2020 we won the Sustainability Design Awards in Germany and Austria for our cartridge packaging.

At Erba Mannheim we put great emphasis on developing products that are sustainable and innovative, for a better and more sustainable future.

**500 samples / 3 months**    **1000 samples / 3 months**    **3000 samples / 3 months**

| CAT NO | PRODUCT NAME | PACK SIZE |
| --- | --- | --- |
| INS00079 | EC 90 | Analyser with accessories |
| REG00058 | EC cartridge S | 500 samples / 3 months |
| REG00056 | EC cartridge M | 1000 samples / 3 months |
| REG00057 | EC cartridge L | 3000 samples / 3 months |
| REG00061 | EC cartridge S plus iCa | 500 samples / 3 months |
| REG00062 | EC cartridge M plus iCa | 1000 samples / 3 months |
| REG00063 | EC cartridge L plus iCa | 3000 samples / 3 months |
| REG00059 | EC urine diluent | 100mL |

# TECHNICAL SPECIFICATIONS

| Touchscreen | Operating Conditions |
|---|---|
| 8.4 inch colour touch screen | 15-35°C (59-95°F) / 15-90% humidity |

| Display | Electronics |
|---|---|
| 600 x 800 pixel graphic display | microprocessor controlled |

| Power | Connectivity |
|---|---|
| 100-240 VAC 50/60 Hz 60 W | 2 x USB-A, 1 x USB-B, 1 x LAN, 1 x RS232 |

| Dimension | Weight |
|---|---|
| D: 425 mm x W: 268 mm x H: 334 mm | <8 kg |

| Auto Sampler | Printout |
|---|---|
| to be announced | built-in, 24 column thermal printer |

| Barcode Scanner |
|---|
| Sample/Patient ID, QC Materials Data |

| Parameters | Technology |
|---|---|
| Na$^+$, K$^+$, iCa$^{2+}$, Cl$^-$ | electrochemistry, thick film biosensor cartridge |

| Principle | Sample Type |
|---|---|
| direct measurement | whole blood, plasma, serum, dil. urine, aqueous sol. |

| Sample Volume | Sample Temperature |
|---|---|
| 35 and 90 µL measuring modes | 15-35 °C |

| Throughput | Analysis Time |
|---|---|
| 90 samples/hour | 35 sec |

| Data Storage | Data Management |
|---|---|
| 10000 samples | fully functional QC with Levey-Jennings and Westgard rules, programmable reference ranges, advanced flagging |

| Language/s | 1-point calibration |
|---|---|
| English & others on demand | automatic 1-point calibration with every sample or on-demand |

| 2-point calibration | Standby Mode |
|---|---|
| automatic 2-point calibration every 12 hours or on demand | automatically controlled or user defined |

| Metrological data | Resolution | Display Range | Reproducibility (% CV) | | Measuring range [mmol/L] |
|---|---|---|---|---|---|
| Serum, plasma, aqueous, whole blood | [mmol/L] | [mmol/L] | Within-Run | Between-Run | |
| Na$^+$ | 0.1 | 20 - 200 | ≤ 1 | ≤ 2 | 25 - 400 |
| K$^+$ | 0.01 | 0.2 -40 | ≤ 1 | ≤ 2.5 | 1 - 15 |
| Cl$^-$ | 0.1 | 25 - 200 | ≤ 1 | ≤ 2.5 | 50 - 170 |
| iCa2$^+$ | 0.01 | 0.1 - 6.0 | ≤ 0.02 SD in mmol/L | ≤ 0.03 SD in mmol/L | 0.1 - 2.5 |
| Urine (diluted 1:3) | | | | | |
| Na$^+$ | 0.1 | 13 - 1000 | ≤ 5 | ≤ 5 | 13 - 400 |
| K$^+$ | 0.01 | 1 - 500 | ≤ 5 | ≤ 5 | 2.4 - 180 |
| Cl$^-$ | 0.1 | 25 - 500 | ≤ 5 | ≤ 5 | 40 - 400 |