



## EC 90 SERIES



Making Automation Affordable  
for Labs Everywhere

[www.erbamannheim.com](http://www.erbamannheim.com)

# WHY CHOOSE ERBA MANNHEIM

Backed by over 40 years of industry experience, Erba Mannheim is a leading player in the IVD industry.

Specialising in emerging markets, Erba understands the needs of small to medium laboratories and has designed a range of in-vitro diagnostics that enable laboratory staff everywhere to produce high quality results. The range covers semi-automatic analysers to high throughput automated platforms and a wide range of validated reagents and services, all of which have been designed to be easy to use, efficient in operation and reliable.

## EC 90 SERIES

### INNOVATIVE. PRECISE. AFFORDABLE.

These three words are the core theme of our next generation electrolyte analyser design process. We understand that any new system must be economical to run and reliable to use as much as possible. By utilizing the innovative solid ISEs technology and using high quality components, we have made an analyser that is a great fit for laboratories everywhere.

### EVERYTHING YOU NEED. JUST 1 CLICK AWAY.

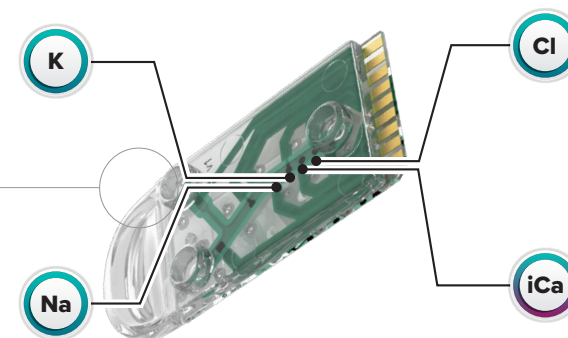
The best things don't need to be difficult to understand or to use. On the opposite - the best technology has to be easy to use, with only small learning curve. With this in mind, EC 90 introduces 1-click Analysis. Everything you need is only 1 click away now. Inserting cartridge? Measuring sample? Printing results on built-in printer? Just 1 click and you are there.



## INNOVATIVE

# Thinking Ahead

Measuring Na, K, Cl and iCa. Really small sample volume and super-fast analysis time combined with low maintenance and excellent analytical performance. In all of these aspects, EC 90 shows why we call it “Next Generation Electrolyte Analyser”. Other benefits, like advanced connectivity and data management are also standard.



## PRECISE

# Analytical Performance

Employing cutting edge technology, the New EC 90 ISE analyser takes laboratory electrolyte measurements to new heights. The linearity on all the parameters extends above clinically required levels and within-run precision is <1% CV.



## AFFORDABLE

# Superb Value

The cartridges maintain their sensitivity and first-class performance for 90 days from the day that they are docked into the analyser. The “all-in-one” cartridges cater for any laboratory size since the cartridges integrate the reagent pack with the biosensor and are available in three different kit sizes; small, medium and large, capable of performing 500, 1,000 and 3,000 sample measurements respectively.



90 days



All-in-One Cartridge

## SOFTWARE

# Just Like a Tablet

Interacting with the EC 90 is made easy with its large touch screen and clean software design. Sample results to QC records - everything is just one tap away.



# EC 90

## Electrolyte Analyser



### INCREASED QUALITY

Trouble Free Operation - State-of the art technology using fully automated production methods. Integrated reference sensor, automatic calibrations and quality reports. High quality components for long life and result stability.



### INCREASED PRODUCTIVITY

Simplified daily routine – maintenance free technology, advanced connectivity with one-click analysis. Plug and play “all-in-one” consumable.



### Meet New EC 90

The Next Generation Electrolyte Anylyser



Scan the QR code  
to play the video



D: 425 mm x W: 268 mm x H: 334 mm

# MEET NEW EC 90

## THE MAGIC IS IN THE *BioSensor*

PATENTED TECHNOLOGY

Innovative technology. Precise results. Affordable cost per test. EC 90 offers all of these and lot more. Learn how our next generation electrolyte analyser can increase productivity, turn around time (TAT) and result precision and accuracy also in your lab.

### INNOVATIVE

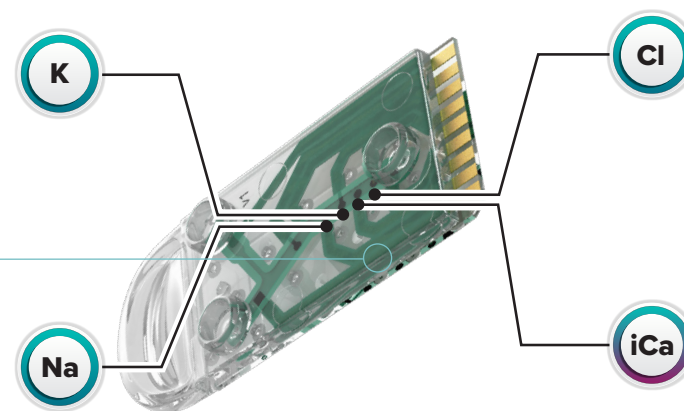
- Solid-contact ISEs easily replaceable
- 35 µL Sample volume
- Maintenance free technology
- Plug & Play
- 35 sec Analysis time

### PRECISE

- Automatic 1 and 2-point calibrations
- Fully functional QC module
- Within run precision <1% CV
- Integrated reference sensor
- Advanced Flagging

### AFFORDABLE

- Low reagent consumption
- 3 months use life
- Self-contained waste
- Kits for low, medium and high-volume laboratories
- Agility





# THE CARTRIDGE

## ADAPTIVE

### Find The Right Size for Your Workload

EC 90 is ready today for what tomorrow brings. Based on your workload, you can easily adjust the power of EC 90. With three sizes of Cartridges - S, M or L, this electrolyte analyser can grow together with your lab.



## AWARD

### German Packaging Award

In 2020 we won the Sustainability Design Awards in Germany and Austria for our cartridge packaging. The Design aims to make the design industry even more aware of aspects such as resource conservation, recyclability and the goals of the UN's Agenda 2030 with regard to climate, biodiversity and participation. At Erba Mannheim we put great emphasis on developing products that are sustainable and innovative, for a better and more sustainable future.



# TECHNICAL SPECIFICATIONS

Touch Screen	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, RS 232, LAN
Dimension	Optional Equipment
425mm (D) x 268mm (W) x 334mm (H)	
Weight	Auto Sampler
<8 kg	to be announced
Printout	Barcode Scanner
built-in, 24 column thermal printer	Sample/Patient ID, QC Materials Data

	Resolution	Display Range	Reproducibility (% CV)		
	[mmol/L]	[mmol/L]	Within-Run	Between-Run	@ range
Serum, plasma, aqueous, whole blood					
Na <sup>+</sup>	0.1	20 - 200	≤ 1	≤ 2	100 - 200
K <sup>+</sup>	0.01	0.2 -40	≤ 1	≤ 2.5	1 - 15
Cl <sup>-</sup>	0.1	25 - 200	≤ 1	≤ 2.5	50 - 170
iCa <sup>2+</sup>	0.01	0.1 - 6.0	≤ 0.02 SD	≤ 0.03 SD	0.1 - 2.5
Urine (diluted 1:3)					
Na <sup>+</sup>	0.1	13 - 1000	≤ 5	≤ 5	13 - 400
K <sup>+</sup>	0.01	1 - 500	≤ 5	≤ 5	2.4 - 180
Cl <sup>-</sup>	0.1	25 - 500	≤ 5	≤ 5	40 - 400

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# OPERATING PARAMETERS

Parameters	Technology
Na <sup>+</sup> , K <sup>+</sup> , iCa <sup>2+</sup> , Cl <sup>-</sup>	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

Cat No	Product No	Product Name	Pack Size
INS00079	10020690	EC 90 electrolyte analyser (w/o cartridge)	Analyser with accessories
REG00058	10020729	EC cartridge S	500 samples/3 months
REG00056	10020691	EC cartridge M	1000 samples/3 months
REG00057	10020692	EC cartridge L	3000 samples/3 months
REG00061	10020782	EC cartridge S plus iCa	500 samples/3 months
REG00062	10020781	EC cartridge M plus iCa	1000 samples/3 months
REG00063	10020783	EC cartridge L plus iCa	3000 samples/3 months
REG00059	10020753	EC Urine Diluent	100mL

With a mission to deliver innovative, affordable and sustainable diagnostic solutions to labs everywhere, Erba Mannheim touches the lives of some 200 million patients across the world.

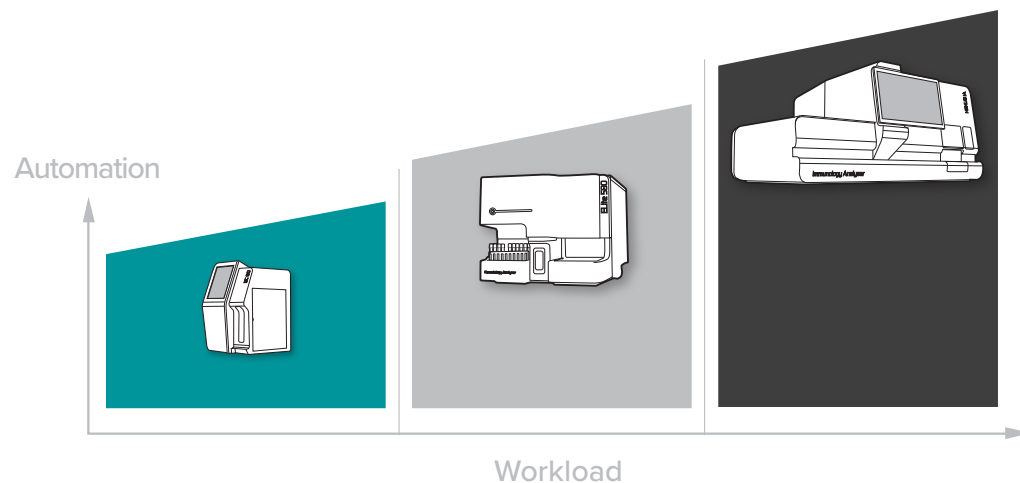
Established in over 100 countries, Erba group uses a combination of cutting-edge R&D in 4 continents with efficient manufacturing to make diagnostic technologies accessible in all resource settings.

We believe every lab should benefit from automation, no matter how big or small. We know that different labs have different needs, so we offer three distinct ranges of products, helping you to find the ideal solution.

**Nexus** Total Lab Automation Made Accessible

**Vertex** Powerful Automation for Mid-Sized Labs

**Apex** Basic Automation for Small Labs



**APEX**

BASIC AUTOMATION  
FOR SMALL LABS

**VERTEX**

POWERFUL AUTOMATION  
FOR MID-SIZED LABS

**NEXUS**

TOTAL LAB AUTOMATION  
MADE ACCESSIBLE

	Small	Mid-size	Large
<b>Lab size</b>	Small	Mid-size	Large
<b>Throughput</b>	Low	Mid-range	Large
<b>Automation</b>	Semi-automation	Full automation	Full automation
<b>Type</b>	Bench-top	Bench-top or floor standing	Bench-top or floor standing
<b>Footprint</b>	Super compact	Compact	Compact/Medium
<b>Look out for this symbol</b>	<b>ΛΞ</b>	<b>VΞ</b>	<b>NΞ</b>

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