



# ELECTROLYTE ANALYZER

25 s

20  $\mu$ L

oQC



## THE EXIAS e|1 ANALYZER MAKES IT POSSIBLE

Developed and produced in **Austria**, the **e|1 Analyzer** stands for quality and high standards.

The system uses an **all-in-one cartridge** that enables a **maintenance free** operation. Outstanding performance due to all advantages of **direct ISE** method, offered on a compact measuring cell using innovative **thick-film sensor** technology.

Robust and clever design with a compact footprint makes the **e|1 Analyzer** well suited for both the **point-of-care** and **laboratory** environment.

*„EXIAS  
meets the highest  
quality standards and  
is certified according to  
ISO 13485“*



## THE e|1 ANALYZER SETS NEW STANDARDS

**e|1 Na<sup>+</sup>, K<sup>+</sup>, Cl<sup>-</sup>  
Ca<sup>2+</sup>, pH, Hct**

**e|1 25 s**

Shortest time to result  
on the market

**e|1 20 µL**

Lowest sample volume  
on the market

**e|1 oQC**

Fully programmable  
automated 3 level on-board QC  
for max. 60 measurements per level

**e|1 Levey-Jennings-Chart**

QC-Trend visualization

**e|1 Cont. monitored sensor signals**

Highest within-run precision  
Self-detection and corrective actions

**e|1 Maintenance free**

All-in-one cartridge

**e|1 Ease of use**

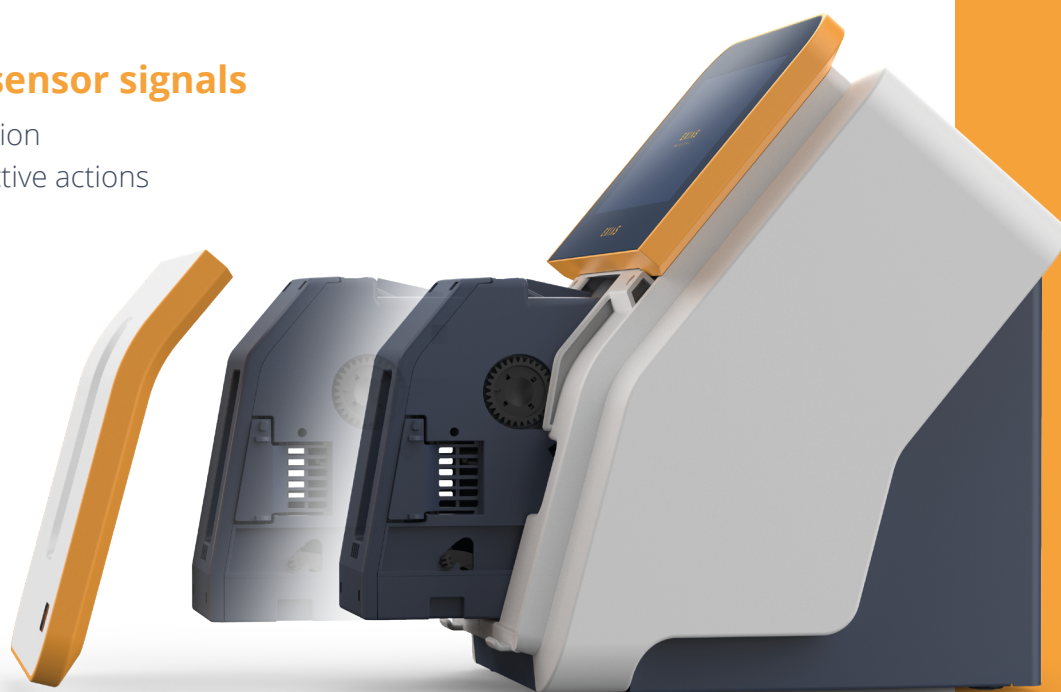
Versatile sample input  
Intuitive user interface

**e|1 Full connectivity**

Data exchange with LIS  
Network connection via LAN (RJ45)  
Data export via USB flash drive

**e|1 Robust and clever design**

Compact footprint  
Dimensions 20 x 31 x 28 cm (W x H x D)



## MEASURED PARAMETERS

Parameter	Sample Type	Range	CV in %*
Na <sup>+</sup>	B/S/P	85 – 200 mmol/l	0.18
	U	5.0 – 300 mmol/l	0.50
K <sup>+</sup>	B/S/P	1.0 – 15.0 mmol/l	0.46
	U	5.0 – 120 mmol/l	0.73
Cl <sup>-</sup>	B/S/P	60 – 150 mmol/l	0.43
	U	5.0 - 300 mmol/l	0.62
iCa <sup>2+</sup>	B/S/P	0.1 – 3.2 mmol/l	0.80
pH	B/S/P	6.5 – 8.0	0.04
Hct	B	10 – 75%	1.64

### Legend

- B** Whole blood
- S** Serum
- P** Plasma
- U** Urine (undiluted)

\*Repeatability (within-run precision)



## ALL-IN-ONE CARTRIDGE

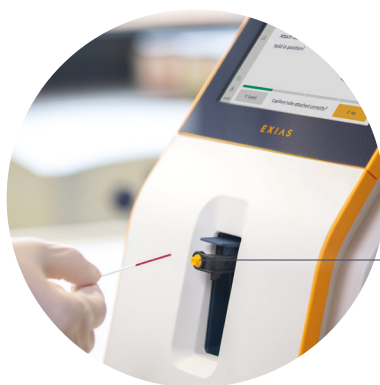
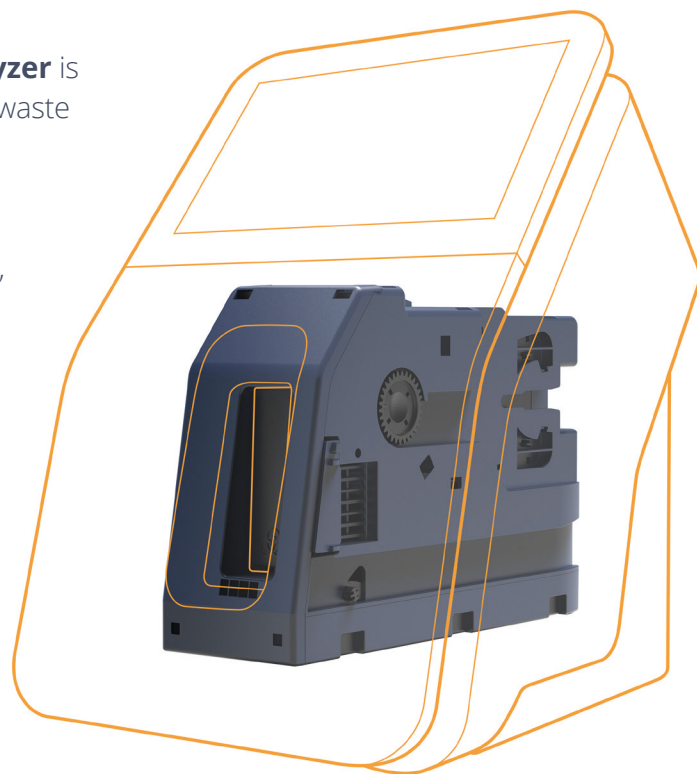
Due to the sophisticated all-in-one cartridge, the **e|1 Analyzer** is completely maintenance free. All sensors, all solutions and waste pouches, as well as all wear and tear parts are integrated into the **e|1 Cartridge**.

The versatile sample input allows testing with sample tubes, capillaries and syringes **without further adapters**.

Smart clot detection, automatic declotting and self-diagnostic system checks ensure highest **on-board stability**.

Combined with the **on-board QC (oQC)** option the **e|1 Cartridge** sets high standards for quality and accurate testing.

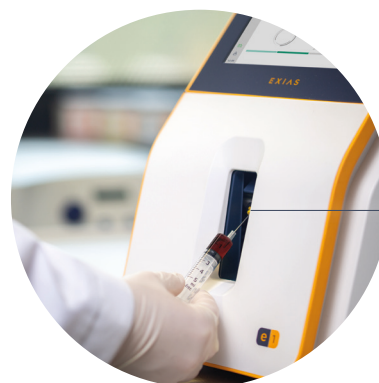
Three cartridge sizes (150, 300 or 600 samples) meet the individual needs of all EXIAS operators.



Capillary mode



Sample tube mode



Syringe mode

## ACCESSORIES

### e|1 QC MATERIAL

Beside the on-board QC option, EXIAS provides manual QC ampoules that improve operator's quality procedures in the daily point-of-care and laboratory environment.

To ensure reliable patient results, **three levels** of QC ampoules are available.

All ampoules are equipped with **barcodes** for an easy data setup via scanner.



*“EXIAS ensures accurate and precise patient sample results”*



### CAPILLARY TUBES

The **heparinized** single-use capillary with a container volume of **50 µL** is optimized for the small sample volume of the **e|1 Analyzer**.

In order to guarantee maximum security for operators, the capillaries are made of **break-proof plastic**, and are hygienically packed in a dispenser with a user-friendly donator function.

## TECHNICAL SPECIFICATIONS

### OPERATIONAL CHARACTERISTICS

Parameters	Na <sup>+</sup> , K <sup>+</sup> , Cl <sup>-</sup> , Ca <sup>2+</sup> , pH, Hct
Calculated parameters	nCa <sup>2+</sup> , tHb(c)
Min. sample volume	20 µL
Sample type	whole blood, serum, plasma, urine (undiluted)
Sample container	sample tubes, syringes, capillaries (no adapter required)
Time to result	25 s
Throughput	TYP 104 samples / hour
Wet-up time	30 min (new cartridge installation)

### ALL-IN-ONE CARTRIDGE

Number of samples	150, 300, 600
On-board stability	28 days / 42 days
Storage temperature	+2 °C to +25 °C
Shelf life	9 months

### QUALITY CONTROL

Integrated on-board QC (oQC)	3 levels
oQC measurements / Level	30, 50, 60
Manual QC	3 levels
QC-Trend visualization	Levey-Jennings-Chart
Proficiency testing / External Quality Assurance	3 <sup>rd</sup> party external quality control measurements possible

### CALIBRATION DATA

Calibration	Automatic 2-point cal
Duration	30 s
Interval	4, 8, 12 h (configurable)

### INTERFACE

Touch Display	7" TFT
Resolution	800 x 480 px
Ethernet	RJ45
USB flash drive	2 USB ports (2.0)
Barcode reader	optional
WiFi dongle	optional

### STORAGE CAPACITY

Patient results	500.000
QC & Calibration data	min. 24 months
Operators	100

### COMMUNICATION

Data exchange	LIS
Protocol	LIS2-A2 protocol (ASTM)
Remote access	Screen sharing

### ADDITIONAL INFORMATION

Printer	Built-in 2" thermal printer (easy load)
Dimensions (W x H x D)	20 x 31 x 28 cm
Instrument weight	4.0 kg
In-use weight	4.7 kg

### POWER REQUIREMENTS

Voltage	100 – 240 V
Power	mean 15 W; max. 60 W
Frequency	50 / 60 Hz

### ENVIRONMENTAL REQUIREMENTS

Temperature	+15 °C to +32 °C
Humidity	15 % to 90 %
Barometric pressure	462 mmHg to 769 mmHg



## EXCELLENCE IN ANALYTICAL SYSTEMS

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