EXIAS
MEDICAL

e1

ELECTROLYTE ANALYZER



25 s

20 µL

oQC

EXIAS
MEDICAL

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 is guaranteed by the **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 and IVDR“



THE e|1 ANALYZER SETS NEW STANDARDS

Na^+, K^+, Cl^-, Ca^{2+}, pH, Hct

+ 4 calculated parameters:
nCa^{2+}, tHb(c), 24 h urine, HCO_3^-(c)

25 s

Shortest time to result
on the market

20 µL

Lowest sample volume
on the market

oQC

Fully programmable
automated 3 level on-board QC

Levey-Jennings-Chart

QC-Trend visualization and export

Continously monitored sensor signals

Highest within-run precision
Self-detection and corrective actions

Maintenance free

All-in-one cartridge

Ease of use

Versatile sample input
Intuitive user interface

Full connectivity

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

Robust and clever design

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



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MEASURED PARAMETERS

Parameter	Sample Type	Range	CV in %*
Na^+	B/S/P	85 – 200 mmol/l	0.18
	U	5.0 – 300 mmol/l	0.50
K^+	B/S/P	1.0 – 15.0 mmol/l	0.46
	U	5.0 – 120 mmol/l	0.73
Cl^-	B/S/P	60 – 150 mmol/l	0.43
	U	5.0 - 300 mmol/l	0.62
Ca^{2+}	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

*Repeatability (within-run precision)

Legend

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



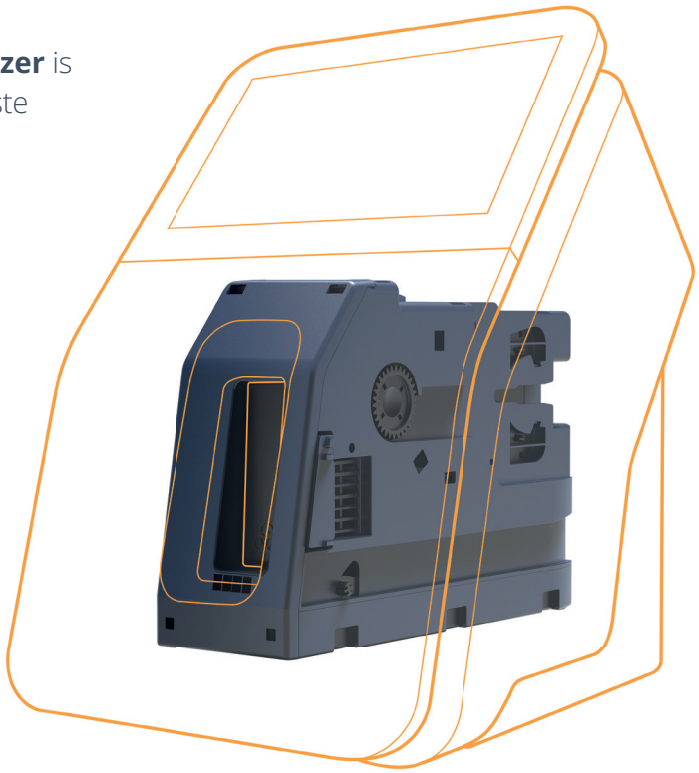
ALL-IN-ONE CARTRIDGE

Due to the sophisticated all-in-one cartridge, the **e|1 Analyzer** is completely maintenance free. All sensors, 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.

Four cartridge sizes (100, 150, 300 or 600 samples) meet the individual needs of all EXIAS users.





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^+, K^+, Cl^-, Ca^{2+}, pH, Hct
Calculated parameters	nCa^{2+}, tHb(c), 24 h urine, HCO_3^-(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)
Measurement method	direct ISE - thick-film sensor technology

ALL-IN-ONE CARTRIDGE

Number of samples	100, 150, 300, 600
On-board stability	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, 30, 50, 60
Manual QC	3 levels
Sensor monitoring	continuous sensor signal monitoring
QC-Trend visualization	Levey-Jennings-Chart
Proficiency testing / External Quality Assurance	3rd 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

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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IVD CE

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