

**DIAMOND<sup>®</sup>**  
DIAGNOSTICS



**SmartLyte<sup>®</sup>**

The World's Most Reliable Electrolyte Analyzer



# SmartLyte®

The World's Most Reliable Electrolyte Analyzer

## Sample

Whole Blood, Serum, Plasma, Urine or Dialysate

## Sample Size

95 µl

## Number of Parameters

3 (Simultaneously)

## Detection Range

Blood Na<sup>+</sup>: 40-200 mmol/L

Dialysate K<sup>+</sup>: 1.7-15 mmol/L

Cl<sup>-</sup>: 50-200 mmol/L

Ca<sup>++</sup>: 0.3-5.0 mmol/L

Li<sup>+</sup>: 0.2-5.5 mmol/L

Urine Na<sup>+</sup>: 3-300 mmol/L

K<sup>+</sup>: 5-120\* mmol/L

Cl<sup>-</sup>: 15-300 mmol/L

\*60-120 requires additional dilution

## Reproducibility

Typical Within Run (n=30)

Blood, Serum, Plasma, Dialysate

Na<sup>+</sup>: CV ≤ 1% (120-160mmol/L)

K<sup>+</sup>: CV ≤ 2% (2.5-6 mmol/L)

Cl<sup>-</sup>: CV ≤ 2% (85-130 mmol/L)

Ca<sup>++</sup>: SD ≤ 0.02 mmol/L (0.8-1.5 mmol/L)

Li<sup>+</sup>: SD ≤ 0.02 mmol/L (0.4-1.3 mmol/L)

(Lithium not typically measured in dialysate samples)

Urine

Na<sup>+</sup>: CV ≤ 5% (100-250 mmol/L)

K<sup>+</sup>: CV ≤ 5% (10-60 mmol/L)

Cl<sup>-</sup>: CV ≤ 5% (100-250 mmol/L)

(Calcium and Lithium are not typically measured in urine samples)

## Display Resolution

Na<sup>+</sup>: 1 mmol/L or 0.1 mmol/L

K<sup>+</sup>: 0.1 mmol/L or 0.01 mmol/L

Cl<sup>-</sup>: 1 mmol/L or 0.1 mmol/L

Ca<sup>++</sup>: 0.01 mmol/L or 0.001 mmol/L

Li<sup>+</sup>: 0.01 mmol/L or 0.001 mmol/L

## Veterinary Options

Feline, Canine, Bovine, Equine, Swine, Ovine or Open

This analyzer is produced and distributed by Diamond Diagnostics Inc. There is no affiliation, connection, sponsorship or association between Diamond Diagnostics Inc. and Roche Diagnostics.



## Analysis Time

60 sec without printout (60 per hour)

72 sec with printout (50 per hour)

## Data Storage

1000 Patient Results

500 Level 1 QC Results

500 Level 2 QC Results

500 Level 3 QC Results

## Calibration

2 Point every 4 hours

On Demand

1 Point after every Measurement

## User Input

Keypad, External Keyboard

External Barcode Scanner (optional)

## Output

Graphic backlit display

Graphic 16 column printer

RS232 LIS Communication

## Ambient Conditions

15-32°C, Room temperature (60-90°F)

<85% humidity

## Languages

English, Chinese, French, German, Italian, Korean  
Japanese, Portuguese, Russian, Spanish, Polish

## Power

100-240V ~ 50/60 Hz (self adjusting)

1.6 A max, 50 Watts max

## Size & Weight

13.2 x 12.4 x 12" or 335 x 315 x 295 mm

14 lbs or 6 kgs

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