

DIAMOND[®]
DIAGNOSTICS



SmartLyte[®]

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⁺: 40-200 mmol/L

Dialysate K⁺: 1.7-15 mmol/L

Cl⁻: 50-200 mmol/L

Ca⁺⁺: 0.3-5.0 mmol/L

Li⁺: 0.2-5.5 mmol/L

Urine Na⁺: 3-300 mmol/L

K⁺: 5-120* mmol/L

Cl⁻: 15-300 mmol/L

*60-120 requires additional dilution

Reproducibility

Typical Within Run (n=30)

Blood, Serum, Plasma

Na⁺: CV ≤ 1% (120-160mmol/L)

K⁺: CV ≤ 2% (2.5-6 mmol/L)

Cl⁻: CV ≤ 2% (85-130 mmol/L)

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

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

(Lithium not typically measured in dialysate samples)

Urine

Na⁺: CV ≤ 5% (100-250 mmol/L)

K⁺: CV ≤ 5% (10-60 mmol/L)

Cl⁻: CV ≤ 5% (100-250 mmol/L)

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

Display Resolution

Na⁺: 1 mmol/L or 0.1 mmol/L

K⁺: 0.1 mmol/L or 0.01 mmol/L

Cl⁻: 1 mmol/L or 0.1 mmol/L

Ca⁺⁺: 0.01 mmol/L or 0.001 mmol/L

Li⁺: 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 (45 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 inches or 335 x 315 x 295 mm

14 lbs or 6 Kgs

DIAMOND®
D I A G N O S T I C S

333 Fiske Street, Holliston, MA 01746
Tel: 508-429-0450 | Fax: 508-429-0452
www.diamonddiagnostics.com

SOP23-0020F REV08 2/10/17