

Electrolyte Analyzer with Ion-Selective Electrodes

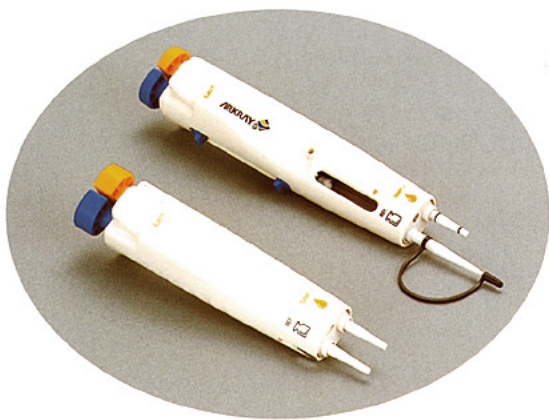


# SPOTCHEM™ EL

SE-1520

## Fast, accurate and simple electrolyte analysis of body fluids — essential in an emergency!

Patients suffering perhaps from organ damage, or from dehydration . . . Electrolyte analysis of body fluids in these and other emergencies are critical! When dealing with urgent situations, the performance of an analyzer is gauged in simplicity of operation, no less than speedy and accurate analysis. SPOTCHEM™ EL is an electrolyte analysis system with the capacity for total electrolyte analysis requirements in all fields, from clinics and testing centers, to emergency rooms, ICUs, CCUs and operating theaters.



The Twin-pipette II (above) can contain the reference solution for about 20 distributions, which is very useful for measuring a large number of samples.



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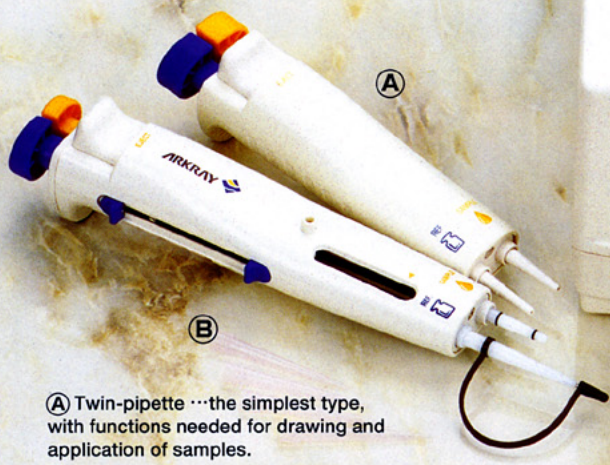
# SPOTCHEM™ EL SE-1520

## Minute samples

Whole blood, serum, plasma and urine can be measured with very small samples (only 22  $\mu$ L). This greatly lightens the burden on patients, especially children and sensitive patients.

## Covenient Twin-pipette

Two types of special twin-pipette are available. Choose the pipette according to the number of samples to be tested.



(A) Twin-pipette ...the simplest type, with functions needed for drawing and application of samples.

(B) Twin-pipette II ...efficient measurement of multiple samples, through pooling and continuous feeding of the drawn reference solution.

## Operation is this simple!



Set the exclusive E-Plate.



Draw the sample and reference solution with the Twin-pipette.

Set the pipette and apply.



Remove the pipette.

Measurement starts automatically and the test result comes out in one minute.



## Easy calibration

Insertion of the magnetic card attached to the E-Plate into the analyzer completes calibration.

## Simultaneous test of three electrolytes

The levels of three electrolytes — Na, K, Cl — are measured at the same time on the same E-Plate.

## Highly reliable special electrodes

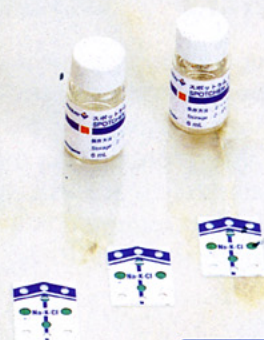
The E-Plate has three pairs of internal electrodes. Electrolyte concentrations in the sample are calculated from the potential difference generated between the sample and an equal amount of reference solution dropped onto the plate.



## Test results produced promptly and automatically

Removing the Twin-pipette after applying the sample automatically starts measurement.

A printout of the three measurements is produced in just one minute.



## Compact and lightweight

Together with improved basic functions, the analyzer has also become more compact and lightweight, requiring only a A5-size (148 × 210mm) space. A large table area is no longer needed.

※ The LCD display shown is a composite photo.

## Specifications

Samples	Whole blood, plasma, serum and urine
Electrolytes	Na, K, Cl
Measurement principle	Potentiometry, by ion-selective electrodes
Measurement range	For whole blood / plasma / serum Na: 50~250mmol/L, K: 1~15mmol/L, Cl: 50~200mmol/L For urine (diluted to 50% with distilled water) Na: 10~350mmol/L, K: 1~80mmol/L, Cl: 3~300mmol/L
Measurement time	About 1 minute
Sample volume	About 22 $\mu$ L
Data storage volume	50 measurements
Warm-up time	About 1 minute (at room temperature of 25°C)
Display	20 digits × 2 lines LCD
Printer	58mm width built-in thermal printer
External output	RS-232C (serial)
Measurement conditions	Temperature : 10~30°C, Relative humidity : 20~80% (non-condensation)
Power supply	AC100~240V 50/60Hz
Power consumption	40VA
Dimensions	225 (D) × 135 (W) × 138 (H) mm
Weight	Analyzer : 1.5kg AC adapter : 0.2kg

※Design and specifications may be subject to change without notice.

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