

# *Convergys® ISE auto*

## *Fully-automatic Electrolyte Analyzer*

*The comfortable way of Electrolyte Analysis*



- **Measured Parameters:**  
K+, Na+, Cl-, Ca++, Li+, pH  
and TCO<sub>2</sub> as optional
- Autosampler for 24 samples and  
1 emergency sample
- 100 µl sample volume of  
whole Blood, Serum, Plasma,  
Urine or CSF
- 60 tests per hour throughput

- Optional TCO<sub>2</sub> measuring module
- Built-in thermal printer
- Automatic two-point calibration
- 2 level QC management and  
integrated statistical analysis
- 240x128 dots touch LCD
- Large data storage for 500 results
- Integrated air-liquid-air-liquid  
rinsing mode to avoid carry-over

## Specifications of Convergy's® ISE auto

|                                 |                                                                                                                                                                                              |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Measured Parameters:</b>     | K+, Na+, Cl-, Ca++, Li+, pH and TCO <sub>2</sub> as optional                                                                                                                                 |
| <b>Measuring principles:</b>    | ISE based Electrolyte analysis to determine the ion concentrations of K+, Na+, Cl-, Ca++, Li+, pH, Pressure method and reaction solution for determination of TCO <sub>2</sub> concentration |
| <b>Throughput:</b>              | 60 tests/hour                                                                                                                                                                                |
| <b>Reagent system:</b>          | Calibrator-1 solution, Calibrator-2 solution, Cleaning solution, ISE and Ref electrode filling solution, TCO <sub>2</sub> reaction solution as optional                                      |
| <b>Sampling method:</b>         | Fully-automatic aspiration system, using Sample Cup, Capillary or Collection Tube                                                                                                            |
| <b>Sample volume:</b>           | 100 µL                                                                                                                                                                                       |
| <b>Sample types:</b>            | Human (general): whole Blood, Serum, Plasma, Urine or CSF (Built-in reference ranges)                                                                                                        |
| <b>Cleaning procedure:</b>      | Chemical cleaning of the measuring chamber and tubing system with Cleaning solution                                                                                                          |
| <b>Quality Control:</b>         | 2 QC levels. QC parameters include all measured parameters Separate QC database Option for automatic calculation of K and D factors of each ion                                              |
| <b>Calibration:</b>             | Automatic two-point calibration with additional option for carrying out one-point and two-point calibration manually                                                                         |
| <b>Standby Mode:</b>            | Pre-adjusted with automatic calibration step                                                                                                                                                 |
| <b>User interface:</b>          | Easy-to-use, menu driven user interface with touch LCD                                                                                                                                       |
| <b>Diagnostics:</b>             | Self check function for diagnostics with easy to understand messages                                                                                                                         |
| <b>Languages available:</b>     | English menu                                                                                                                                                                                 |
| <b>Data capacity:</b>           | 500 results                                                                                                                                                                                  |
| <b>Host computer Interface:</b> | RS-232 serial link for data download                                                                                                                                                         |
| <b>Built-in printer:</b>        | Stationary Head Graphical Thermal Printer, 58 mm wide paper roll. Prints full report                                                                                                         |
| <b>Display:</b>                 | 240x128 dots high contrast and backlit touch LCD                                                                                                                                             |
| <b>Power requirements:</b>      | 100-120 or 200-240 VAC, 50-60Hz                                                                                                                                                              |
| <b>Operating conditions:</b>    | 15-30°C, 59-86°F (Optimal temperature is 25 °C, 77 °F), 20%~ 80% RH                                                                                                                          |
| <b>Dimensions and weight:</b>   | (W x D x H) 300 x 290 x 275mm, ca. 6.5 kg                                                                                                                                                    |

### Measured parameters

| Parameter                             | Measuring range     | Precision   | SD    | CV    |
|---------------------------------------|---------------------|-------------|-------|-------|
| Potassium ion (K+)                    | 0.50 - 15.00 mmol/L | 0.01 mmol/L | ≤0.08 | ≤1.0% |
| Sodium ion (Na+)                      | 80.0 - 200.0 mmol/L | 0.1 mmol/L  | ≤3.00 | ≤1.0% |
| Chloride ion (Cl-)                    | 80.0 - 200.0 mmol/L | 0.1 mmol/L  | ≤2.00 | ≤1.0% |
| Ionized calcium (Ca++)                | 0.50 - 5.00 mmol/L  | 0.01 mmol/L | ≤0.05 | ≤2.0% |
| Lithium ion (Li+)                     | 0.10 - 4.00 mmol/L  | 0.01 mmol/L | ≤0.06 | ≤3.0% |
| Hydrogen ion activity (pH)            | 6.80 - 8.00         | 0.01        | ≤0.05 | ≤1.0% |
| Total Bicarbonate (TCO <sub>2</sub> ) | 5.0 - 50.0 mmol/L   | 0.1 mmol/L  | ≤0.70 | ≤3.0% |

### Ordering information

| REF       | Article Name                                         | Description                                                                        |
|-----------|------------------------------------------------------|------------------------------------------------------------------------------------|
| 1100-1040 | Convergys® ISE auto Analyzer M03                     | Fully-automatic Electrolyte Analyzer, K+, Na+, Cl-                                 |
| 1100-1041 | Convergys® ISE auto Analyzer M03                     | Fully-automatic Electrolyte Analyzer, K+, Na+, Li+                                 |
| 1100-1042 | Convergys® ISE auto Analyzer M03                     | Fully-automatic Electrolyte Analyzer, K+, Na+, Ca++                                |
| 1100-1043 | Convergys® ISE auto Analyzer M03- TCO <sub>2</sub>   | Fully-automatic Electrolyte Analyzer, K+, Na+, Cl-, TCO <sub>2</sub>               |
| 1100-1044 | Convergys® ISE auto Analyzer M03 -TCO <sub>2</sub>   | Fully-automatic Electrolyte Analyzer, K+, Na+, Li+, TCO <sub>2</sub>               |
| 1100-1045 | Convergys® ISE auto Analyzer M03 -TCO <sub>2</sub>   | Fully-automatic Electrolyte Analyzer, K+, Na+, Ca++, TCO <sub>2</sub>              |
| 1100-1046 | Convergys® ISE comfort Analyzer M06                  | Fully-automatic Electrolyte Analyzer, K+, Na+, Cl, Ca++, Li+, pH                   |
| 1100-1047 | Convergys® ISE comfort Analyzer M06-TCO <sub>2</sub> | Fully-automatic Electrolyte Analyzer, K+, Na+, Cl, Ca++, Li+, pH, TCO <sub>2</sub> |
| 1100-1912 | Convergys® ISE Calibrator-1 (480ml)                  | Standard Calibrator-1 solution                                                     |
| 1100-1913 | Convergys® ISE Calibrator-2 (200ml)                  | Standard Calibrator-2 solution                                                     |
| 1100-1911 | Convergys® ISE Cleaning solution (20ml)              | Standard Cleaning solution                                                         |

\* Convergent Technologies reserves the right to change any of the specifications without prior notice.

\*\* Usage of original Convergent Technologies reagents is recommended

\*\*\* Full specifications are available on request