

# Convergys<sup>®</sup> liquical

*The Fully Modular Platform for*

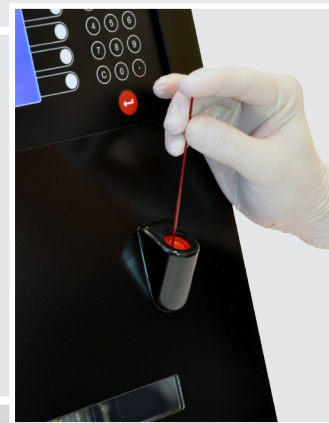
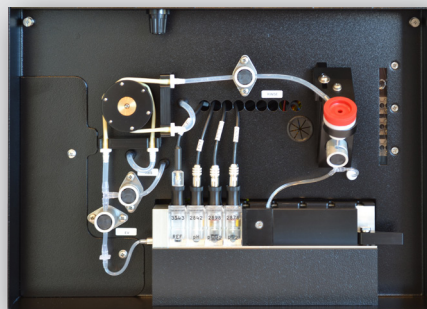
*BLOOD GASES, ELECTROLYTES and METABOLITES*



- 27 Test Parameters:  
pCO<sub>2</sub>, pO<sub>2</sub>, K<sup>+</sup>, Na<sup>+</sup>, Li<sup>+</sup>, Cl<sup>-</sup>, Ca<sup>++</sup>, pH, Glu, Lac, tHb, Barometric Pressure, HCO<sub>3</sub><sup>-</sup>A, HCO<sub>3</sub><sup>-</sup>S, BE, BEecf (SBE), TCO<sub>2</sub>, BB, O<sub>2</sub>sat, O<sub>2</sub>CT, P50, AaDO<sub>2</sub>, Hct, H<sup>+</sup>, AGAP, SHUNT, Acid-base status
- Fully Flexible Calibration Process – Choose between Standard or Economy Modes
- Up to 40 test/hour throughput
- Probe: Whole Blood, Arterial Blood, Plasma, Respiration Gases
- Fully upgradable
- 4-Level QC with a separate Database
- Modular Electrode Design
- Up to 32000 Test Measurements with QC Data sets
- Individually packed Calibration and Rinse Solutions
- Built-in Thermal Printer
- 5.4" illuminated LCD Display

# Convergys<sup>®</sup> liquical

Introducing *Convergys<sup>®</sup> liquical*, a Fully Modular Platform for your Blood Gases, Electrolytes and Metabolites test requirements



- Fully-flexible Integration:**  
 Scale up as you go. Install additional test parameters in your existing analyzer as your business requirements grow. No need to buy additional analyzers.
- Fully-flexible Calibration:**  
 Choose between Standard and Economy calibration modes to keep your lab costs under check.
- Fully-flexible Test Menu:**  
 Select the parameters you need to measure.
- Modular Electrodes Design:**  
 Resulting in low consumable costs. Change only the membrane, not the complete electrode!
- Economy:**  
 Individually replaceable calibrator and rinse solutions. Economical pack sizes keeping the on-board stability and your workload in mind. Not a drop of reagent goes to waste.
- Illuminated Liquid Flow Path:**  
 Easier detection of any blockages or bubbles by a simple visual check.

## Specifications for Convergys<sup>®</sup> liquical

<b>Measured Parameters:</b>	pCO <sub>2</sub> , pO <sub>2</sub> , K <sup>+</sup> , Na <sup>+</sup> , Li <sup>+</sup> , Cl <sup>-</sup> , Ca <sup>++</sup> , pH, Glu, Lac, tHb, barometric pressure
<b>Calculated Parameters:</b>	HCO <sub>3</sub> -A, HCO <sub>3</sub> -S, BE, BEecf (SBE), TCO <sub>2</sub> , BB, O <sub>2</sub> sat, O <sub>2</sub> CT, P50, AaDO <sub>2</sub> , Hct, H <sup>+</sup> , AGAP, SHUNT, Acid-Base Status
<b>Patient Parameter to enter:</b>	Patient temperature, tHb, FIO <sub>2</sub> , RQ
<b>Throughput:</b>	Up to 40 tests/hour depending on configuration
<b>Sampling Method:</b>	Aspiration system adapted for both capillary and syringes, cleaned with Rinse Solution automatically
<b>Sample Volume:</b>	70-200 µl depending on measured parameters
<b>Sample Types:</b>	Whole Blood, Arterial Blood, Serum, Plasma, Respiratory Gas
<b>Quality Control:</b>	4 QC Levels, separate QC database
<b>Calibration:</b>	2-Point calibration in standard and economy modes suited to your working hours
<b>Measurement Temperature of Electrodes and Sensors:</b>	Electrodes and sensor temperature automatically adjusted to 37.0°C ± 0.2 during measurements
<b>User Interface:</b>	Easy-to-use, menu driven user interface with soft key buttons including 17 buttons, 4 corresponding keys appealing to software functions
<b>Languages available:</b>	English, German, French
<b>Data Capacity:</b>	2 GB SD Card, 32000 measurements and QC data sets
<b>Host Computer Interface:</b>	RS232 for PC connection
<b>Built-in Printer:</b>	Thermal Printer 56 mm, for paper-rolls up to a diameter of 60mm
<b>Display:</b>	5.4" LCD-display, illuminated, 15-lines with 30 characters each
<b>Power Requirements:</b>	115 - 230V / 50/60Hz, 70 W
<b>Operating Conditions:</b>	+12 to +32°C, 30-90% RH, non condensing
<b>Dimensions and Weight:</b>	(W x D x H) 325 x 432 x 402 mm, approx.13 kg

## BLOOD GASES ■ ELECTROLYTES ■ METABOLITES

### Parameter Information

Sensor Parameter	Range/Unit	Resolution
pO <sub>2</sub>	0 - 800 mmHg (SI-units selectable)	0.1
pCO <sub>2</sub>	5 - 200 mmHg (SI-units selectable)	0.1
pH	6.000 - 8.000 pH	0.001
Total-hemoglobin (tHb)	3 - 30 g/dl	0.1
Barometric pressure	200 - 900 mmHg (SI-units selectable)	1.0
Na <sup>+</sup>	20 - 250 mmol/l	1.0
K <sup>+</sup>	0 - 20 mmol/l	0.1
Ca <sup>++</sup>	0 - 5.00 mmol/l	0.01
Li <sup>+</sup>	0.40 -5.00 mmol/l	0.01
Cl <sup>-</sup>	20 - 250 mmol/l	1.0
GLU	0 - 30 mmol/l (0 - 550 mg/l)	0.1
LAC	0 - 20 mmol/l (0 - 180 mg/l)	0.1
<b>Patient Parameter to Enter</b>		
Patient temperature	13 - 43 °C	0.1
Hemoglobin (tHb)	0 - 30 g/dl (if not measured)	0.1
Fraction of inspired O <sub>2</sub> (FIO <sub>2</sub> )	15 - 100 % only relevant for AaDO <sub>2</sub>	
Respiratory quotient (RQ)	0.7 - 1.0 only relevant for AaDO <sub>2</sub>	
<b>Calculated Parameter</b>		
Actual bicarbonate (HCO <sub>3</sub> -A)	10 - 50 mmol/l	0.1
Standard bicarbonate (HCO <sub>3</sub> -S)	10 - 50 mmol/l	0.1
Base excess (BE)	-25 - 25 mmol/l	0.1
Standard base excess (SBE, BE <sub>ecf</sub> )	-25 - 25 mmol/l	0.1
Total CO <sub>2</sub> (TCO <sub>2</sub> )	10 - 50 mmol/l	0.1
Buffer base (BB)	0 - 100 mmol/l	0.1
O <sub>2</sub> saturation of Hb (O <sub>2</sub> sat)	20 - 100%	0.1
O <sub>2</sub> content or concentr. (O <sub>2</sub> CT)	0 - 40%	0.1
pO <sub>2</sub> at 50% O <sub>2</sub> -sat. (P50)	10 - 50 mmol/l	0.1
Alveolar to arterial oxygen-tension grade (AaDO <sub>2</sub> )	0 - 800 mmHg	0.1
Hematocrit (Hct)	0 - 100% (only in combination with tHb)	0.1
Hydrogen-ion concentration (H <sup>+</sup> )	10 - 1000 nmol/l	0.1
Anion-gap (AGAP)	0 - 99 mmol/l	0.1
Shunt (SHUNT)	0 - 50%	0.1
Acid-base status	Relevant diagnosis recorded on printer	

# BLOOD GASES ■ ELECTROLYTES ■ METABOLITES

## Ordering Information

Analyzers Convergy's® liquical

REF	Model	Description of Parameters
1100-2100	BG <sup>1, 2</sup>	pCO <sub>2</sub> , pO <sub>2</sub> , pH
1100-2101	BG +ISE <sup>1, 2</sup>	pCO <sub>2</sub> , pO <sub>2</sub> , K <sup>+</sup> , Na <sup>+</sup> , Cl <sup>-</sup> , Ca <sup>++</sup> , pH
1100-2102	BG+ISE+M+Hb <sup>2</sup>	pCO <sub>2</sub> , pO <sub>2</sub> , K <sup>+</sup> , Na <sup>+</sup> , Cl <sup>-</sup> , Ca <sup>++</sup> , pH, Glu, Lac, tHb

<sup>1</sup> Hb optional, <sup>2</sup> Li+ optional



## Ordering Information

Reagents

REF	Convergy's®	BG	BG+ISE	BG+ISE+M+tHb	Description
1100-2111	L-Rinse 1	✓	--	--	330 ml Rinse Solution 1 for Blood Gases
1100-2112	L-Rinse 2	--	✓	--	250 ml Rinse Solution 2 for Blood Gases + ISE
1100-2113	L-Rinse 3	--	--	✓	250 ml Rinse Solution 3 for Blood Gases + ISE + Metabolites
1100-2117	L-CAL 1	✓	--	--	130 ml Calibrator Solution 1 for Blood Gases
1100-2118	L-CAL 2	✓	--	--	130 ml Calibrator Solution 2 for Blood Gases
1100-2119	L-CAL 3	--	✓	✓	130 ml Calibrator Solution 3 for Blood Gases + ISE
1100-2120	L-CAL 4	--	✓	✓	130 ml Calibrator Solution 4 for Blood Gases + ISE
1100-2114	L-CAL 5	--	✓	✓	150 ml Calibrator Solution 5 for Blood Gases + ISE
1100-2115	L-CAL 6	--	✓	--	150 ml Calibrator Solution 6 for Blood Gases + ISE
1100-2116	L-CAL 7	--	--	✓	150 ml Calibrator Solution 7 for Blood Gases + ISE + Metabolites

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

Usage of original Convergent Technologies reagents is **MANDATORY**

Full specifications are available on request

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