Diestro
Medical Device Technology



V4r

pH & TCO2 + Electrolyte Analyzer

Na^+ | K^+ | Cl^- | Ca^{++} | Li^+ | pH | TCO_2 | Ca^{++}@ pH7,40 | Anion Gap | HCO_3^-



- Autosampler for primary tubes (optional)
- Self-cleaning II port
- Automatic calibration
- 60 samples per hour (w/o TCO2)
  30 samples per hour (w/ TCO2)
- Manual and/or Automatic sample loading
  From syringe, tube or capillary
- HD 4" touchscreen
  Multilingual, user friendly interface
- User acces
- Built-in barcode reader
- Built-in printer
- Levey-Jennings charts
- QC validation software
  Local or remote
- Connectivity
  LIS, keyboard, mouse, ethernet, USB, wireless connectivity

Electrolytes/Parameters available

(up to 10 simultaneously)

pH , TCO2, Na^+, K^+ , Cl^-, Ca^{++}, Li^+
Calculated parameters: AnionGap, Ca^{++}@pH 7,40, HCO_3^-

Principle measurement

Direct ISE, manometric method for TCO2

Autosampler

(opcional)

Up to 40 positions.
Primary pediatric or adult tubes, cups, Eppendorf

Autosampler Cap Pierce

(opcional)

Up to 45 positions. Pierces test tubes.
Primary pediatric or adult tubes with or without cap, cups, Eppendorf

Sample type

Whole blood, serum, plasm, urine, sweat and others.

Minimum sample volume

175 µl (5 electrolytes + pH)
200 µl (5 electrolytes + pH + TCO2)

Large memory for sample results

Calibration & Rinse

Automatico, modo Standby configurable

Operator information

Multiple user login

Pack of consumables on board



Manual load	With autosampler	Time to results
60 samples per hour (w/o TCO2) 30 samples per hour (withTCO2)	43 samples per hour, rinse between samples (w/oTCO2) 26 samples per hour, rinse between samples (withTCO2)	60 seconds (w/oTCO2) 95 seconds (withTCO2)

Ranges and reproducibility

Serum measurement range(mmol/l)	Reproducibility in Serum Within Run (n=20)(mmol/L)	Urine measurement range (mmol/l)	Reproducibility in Urine Within Run (n=20)(mmol/L)
Na^+ : 40.0 - 220.0	Na^+ (140-160) CV≤ 1%	Na^+ : 20.0 - 300.0	Na^+ CV≤ 10%
K^+: 1.00 - 30.00	K^+ (4-8) CV≤1%	K^+ : 2.00 - 150.00	K^+ CV≤ 5%
Cl^- : 20,0 - 250,0	Cl^-(90-125) CV≤ 1%	Cl^-: 20.0 - 300.0	Cl^- CV≤ 5%
Ca^{++} : 0,20 - 5,00	Ca^{++} (1-1,5) SD ≤0,05		
Li^+ : 0,30 - 5,00	Li^+ (1-1,5)SD≤0,06		
pH : 6,80 - 7,80	pH (7,0-7,6) SD≤0,01		
TCO2: 5,0 - 100,0	TCO2 (15-50)≤3,5%		

GMP CE