NEW iQM2 provides real-time assurance

GEM PAK offers advanced simplicity

GEMweb® Plus Custom Connectivity for complete control of analyzers—in the lab and at the point-of-care

iQM2 assures quality before, during and after every sample

Continuous quality monitoring through 5 types of checks:

- System checks
- Sensor checks using multiple levels of NIST-traceable Process Control Solutions (PCS)
- Pattern Recognition checks
- New IntraSpect technology—checks during every sample analysis
- PCS stability checks

Automatic, real-time:
- Detection of sensor, system-stability or sample errors
- Correction of errors
- Documentation of all corrective actions, with reports available from any analyzer or PC

GEMweb Plus Custom Connectivity
Provides intuitive, customizable control of instruments and operators—from any GEM Premier 5000 system or PC

Simple all-in-one, multi-use GEM PAK
- Contains all components needed for testing
- Just replace every 31 days*
- No refrigeration required

* 21-day onboard use-life for 600-test PAK.
Analyzer

More than 30 menu PAK options for customized flexibility

Test volumes

75, 150, 300, 450, 600*

Menu

| Blood Gas, Hct, tHb, O2Hb, HHb, COHb, MetHb, sO2, tBili
| Blood Gas, Electrolytes, Hct, tHb, O2Hb, HHb, COHb, MetHb, sO2, tBili
| Blood Gas, Electrolytes, Glu, Lac, Hct, tHb, O2Hb, HHb, COHb, MetHb, sO2, tBili

* PAKs have a 31-day onboard use-life, except 600-test PAK which has a 21-day use-life.

** PAKs available with or without tBili.

Dimensions and Weight

H: 18.6 in  W: 13 in  D: 16.4 in  Wt: 45.4 lbs

Sample Volume

150 µL BG/Hct/Lytes/Glu/Lac/CO-Ox or any subset of the menu that includes CO-Ox
100 µL CO-Ox/tBili only
65 µL BG/Hct/Lytes/Glu/Lac (micro mode) (capillary only)

1 BG = pH, pCO2, pO2
2 Lytes = Na+, K+, Ca++, Cl–

Sample Type

Heparinized whole blood

Time to Results

All tests with and without CO-Ox: 45 seconds from sample introduction.

Sample capacity: 75 – 600 tests

Throughput: 29 samples/hour

Interface Protocols

ASTM or HL7 enables data transmission to a laboratory, hospital or third-party information-management system.

Measurement Methodology

Amperometric: pO2, Glu, Lac
Potentiometric: pH, pCO2, Na+, K+, Ca++, Cl–
Conductivity: Hct

Optical measurement following chemical lysing of the whole blood sample: tHb, O2Hb, COHb, MetHb, sO2, HHb, tBili

Measured Analytes

Analyte  Unit  Reportable Range

pH  n/a  7.00 – 7.92
pCO2  mmHg  6 – 125
pO2  mmHg  6 – 756
Na+  mmol/L  100 – 180
K+  mmol/L  1.0 – 19
Ca++  mmol/L  0.11 – 4.25
Cl–  mmol/L  40 – 158
Glu  mg/dL  4 – 685
Lac  mmol/L  0.3 – 17
Hct  %  15 – 72
tHb  g/dL  3.0 – 23
O2Hb  %  0 – 100
COHb  %  0 – 75
MetHb  %  0 – 30
HHb  %  0 – 100
tBili  mg/dL  2.0 – 40
sO2  %  0 – 100

‡ sO2 = O2Hb/O2Hb + HHb.
† The reportable range for a parameter is the range where performance claims are verified and validated.

Derived (Calculated) Parameters

BE(B)  pCO2  RI
BE(ecf)  O2cap  CcO2
tHb(c)  sO2(c)  a-vDO2
Ca++ (7.4)  O2,ct  Qs/Qp (est)
Anion gap (AG)  HCO3 – std  Qs/Qp
P/F ratio  TCO2  Hct
pAO2  HCO3 – (c)
CaO2  A-aDO2
CvO2  paO2/pAO2

Technical Specifications

GEM PAK

Dimensions and Weight

H: 6.75 in  W: 10 in  D: 8 in  Wt: 8.1 lbs

All-in-one, multi-use cartridge contains all components for analytical testing, including: sampler, sensor card, CO-Ox, tubing, PCSs, waste, lysing and reference.

All PCSs are traceable to NIST or CLSI at Medical Decision Levels.

Onboard use-life

Up to 31 days

Storage stability

Room-temperature storage. Six-month stability at 15 – 25°C.

Improving patient care and efficiency. Now that’s intelligent.