

POCT BGA-3100

Handheld Blood Gas Analyser



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

►► **ACCURATE AND IMMEDIATE BEDSIDE RESULTS WITHOUT SPENDING MORE.**

The POCT BGA-3100 point of care blood analysis system is the first and only wireless bedside testing solution to use SmartCard technology. This breakthrough platform provides state-of-the-art lab results directly to a hand-held PDA. It's easy to use. It requires no refrigeration of consumables. It interfaces with your facility's existing wireless system. And in most cases it does it all for less than you're spending now waiting for lab results.

The quality of test results from the POCT BGA-3100 system is equal to or better than the results generated by traditional blood gas or chemistry analyzers run in a laboratory. Why? Because, once fresh blood is passed across biosensors on the POCT BGA-3100 test card, results are sent to your PDA in just 30 seconds. Other systems often require more time between sample acquisition, sample entry and analysis and can result in sample degradation and possibly compromised results.

►► **HIGHER TECHNOLOGY EQUALS LOWER COST.**

POCT BGA-3100 is significantly more cost effective to implement and use than other POC systems. With POCT BGA-3100 you will easily attain the recognized benefits of an improved critical care process without theoretical implementation models that typically demand labor reductions and other operational changes to meet financial objectives.

►► **FAST AND EASY.**

Unlike other systems, POCT BGA-3100 test cards have no refrigerated storage requirements. The cards can be placed at the patient bedside with the POCT BGA-3100 Reader, at the nurses' station, in the operating suite – whenever and wherever it's most convenient for the flow of patient care. All that's required is a 100 microliter blood sample.

►► **POCT BGA-3100 REDUCES ERRORS.**

Immediate introduction of a patient's blood sample into an POCT BGA-3100 test card minimizes pre-analytical sample handling errors. And because the complete test record is captured at the point of care, post-analytical errors are also reduced. The POCT BGA-3100 system features bar code scanning for patient ID, operator ID and test card information - minimizing data entry and transcription errors. Automated monitoring of all steps in the testing process assures error detection and reduction.

►► **PERFECT FOR RESPIRATORY THERAPISTS & CRITICAL CARE PROVIDERS.**

The POCT BGA-3100 BGEM test card is a blood gas and electrolyte panel consisting of the following:

- measured analytes:
pH, pCO₂, pO₂, Na⁺, K⁺, Ca⁺⁺, Glu, Lac, Hct
- calculated values:
HCO₃⁻, TCO₂, Base Excess, cSO₂, cHgb

►► **POCT BGA-3100 BLOOD ANALYSIS SYSTEM**

POCT BGA-3100 test cards are single-use bar code identified units containing a biosensor array, calibration solution and fluidics. Test cards generate electrochemical assay signals and quality control signals which are read by detectors in the POCT BGA-3100 Reader.

Upon insertion of a test card, the POCT BGA-3100 Reader scans the card's bar code, initiates sensor calibration and provides thermal control of the assay. It reads electrochemical signals and quality control signals from the test card and converts them to a secure wireless transmission format.

The POCT BGA-3100 mobile computer, a customized PDA, can receive transmitted signals from one or more POCT BGA-3100 Readers. The PDA associates the test results and reader ID with a patient ID and user ID—scanned or manually entered—to complete the test record. The complete test record is wirelessly transmitted to the POCT BGA-3100 Data Manager for further compliance reporting, analysis and system management.

►► **POCT BGA-3100 FITS YOUR ORGANIZATION TODAY– AND TOMORROW.**

POCT BGA-3100 easily integrates into your clinical care process. With its small size and wireless capability, POCT BGA-3100 keeps caregivers at the bedside where they are needed most, not running back and forth between a distant workstation or laboratory. It seamlessly integrates into your existing wireless network and easily interfaces into your hospital's LIS/HIS system. Additional POCT BGA-3100 readers can be placed where needed, and can interact with an unlimited number of POCT BGA-3100 PDAs.

The POCT BGA-3100 system also has an evolving test menu and will have numerous panels available in the near future. Its completely modular – which allows customized implementation solutions to fit the specific needs of any clinical workflow throughout the organization.

►► THE POCT BGA-3100 BLOOD ANALYSIS SYSTEM

- Accurate, bedside results in about 30 seconds
- Room temperature storage of test cards
- Barcoded test cards for quality and inventory management
- Automated, integrated calibration and quality checks
- Wireless data capture and transmission

►► THE POCT BGA-3100 SYSTEM TEST MENU

POCT BGA-3100 BGEM Test Card

Measurement Parameters	Units	Range
pH	pH units	6.5 - 8.0
pCO ₂	mmHg	5 - 250
pO ₂	mmHg	5 - 750
Na ⁺	mmol/L	85 - 180
K ⁺	mmol/L	1.5 - 12
Ca ⁺⁺	mmol/L	0.25 - 4
Glu	mg/dL	20 - 700
Lac	mmol/L	0.30 - 20.00
Hct	%PCV	10 - 75

Calculated Parameters	Units	Range
cTCO ₂	mmol/L	1 - 85
cHCO ₃ ⁻	mmol/L	1 - 85
BE(ecf)	mmol/L	-30 - +30
BE(b)	mmol/L	-30 - +30
cSO ₂	%	0 - 100
cHgb	g/dL	3.3 - 25

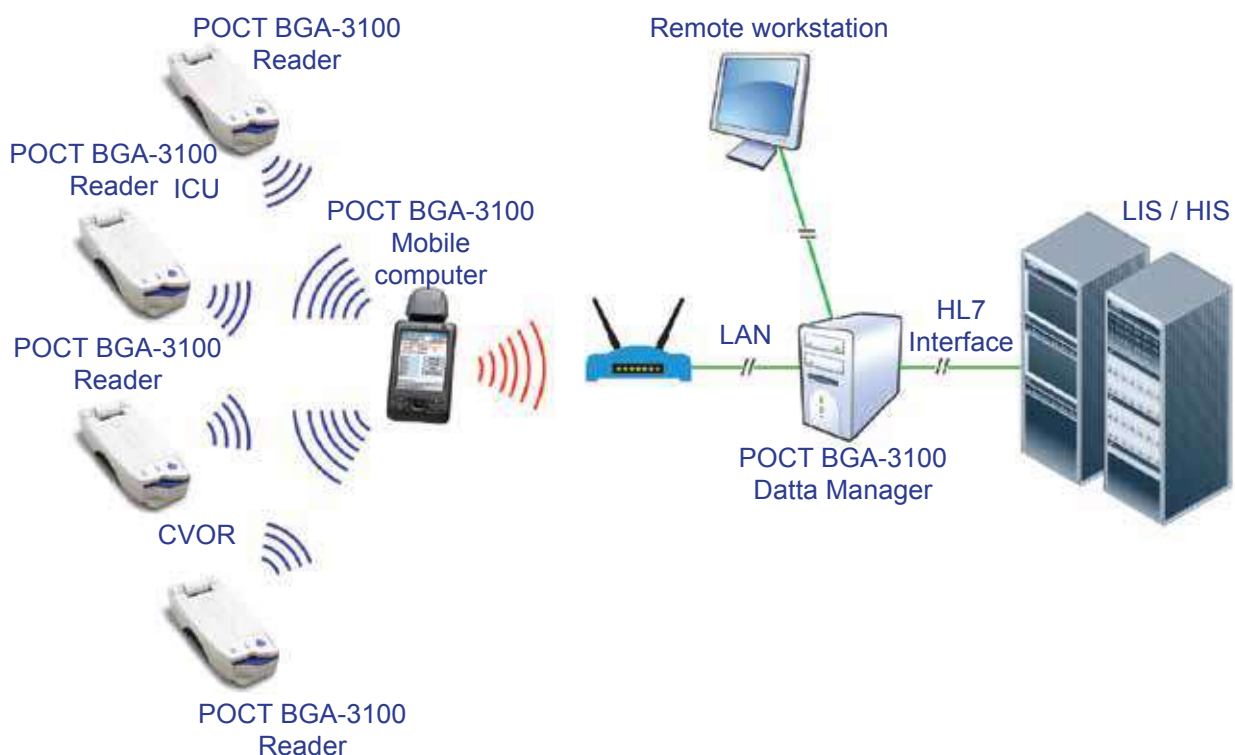
►► AN EXPANDING PRODUCT ARRAY

POCT BGA-3100 test cards currently in development include additional blood chemistries, hemostasis, hematology and immunoassay panels.

►► WIRELESS COMMUNICATION MEANS REAL-TIME RESULT REPORTING.

The POCT BGA-3100 system features wireless communications using state-of-the-art industry standard protocols. Mobile computers communicate with all card readers in the organization regardless of location for testing activities and result review. Test data and inventory information is transmitted effortlessly in real time to the POCT BGA-3100 Data Manager and into the hospitals' clinical systems (LIS/HIS).

Other point of care and near-patient systems require physical infrastructure (wiring, data transfer stations, information hubs, etc.) as well as additional procedural steps for successful data exchange. POCT BGA-3100's wireless capabilities allow immediate implementation to any area of the healthcare enterprise-at any time - without the cost and delays that infrastructure expansions typically require.



Regulatory compliances



Corporate Social Responsibility

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1. Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

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