

## Blood Gas Analyzer-BGA-2100



The Right Result at the Right Time.



**Blood Analysis System**

# Blood Gas and electrolytes on a PDA in about 30 seconds

The Enterprise Point of care (epoc) blood Analysis System is the only wireless bedside testing solution to use "Smartcard" technology. This next generation technology provides patient results directly to a PDA and to the EMR, allowing the clinician to stay at the patient's side,

**epoc® BGEM Test Card**



- Single-use, self-calibrated
- Full menu on one Smartcard
- Room temperature storage for up to 6 months
- No refrigeration
- Barcoded with lot and expiration date
- 92 µL blood sample
- Designed to be cost effective

**epoc® Reader**



- Does not require a committed blood sample for test Card calibration
- Auto-scans Test Card Barcode for simplified quality compliance
- Incorporates automated, integrated calibration and quality checks
- Fully portable; AC/rechargeable battery
- Auto electronic QC calibration

**epoc® Host<sup>2</sup>**



- Connects wirelessly and integrates easily with your facility's existing network
- Delivers accurate, bedside results in about 3 minutes
- Critical result management with electronic documentation
- Integrated 1 D (2D-ready) Barcode Scanner
- Operator/Patient/QC lockouts
- Customizable epoc® Host software
- 2000 test data storage



EPOC instrument provided with suitable Bluetooth Printer. Un-obstructed range of wireless printing: 10 meters radius. 58mm wide thermal paper. Rechargeable Li-battery.

# epoc<sup>®</sup> System Process: Reduced steps and turn around times allows Patient centered card



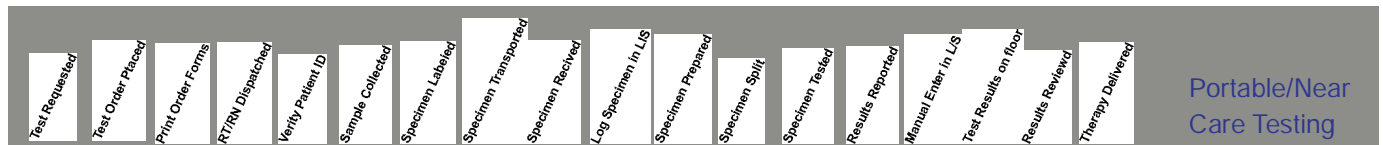
The right process will produce the right result. Immediate values, in your hands, transmitted instantaneously to the EMR, on every patient, every time.

~3minutes



Portable/Near Care Testing

15-20minutes



Portable/Near Care Testing

20min-2hrs

## epoc<sup>®</sup> System Process and Patient Safety

- Reduced Blood Loss equals a less traumatic experience for the patient
- Nearly instantaneous delivery of results enables providers to effect change immediately
- minimize sample degradation with immediate testing at the bedside
- Results are in your hands, post analytical errors are minimized
- Minimize data enter and transcription errors with barcode scanning for patient ID, operator ID and test card information.
- Automated monitoring of testing processes maximize patient safety and error detection

## epoc<sup>®</sup> System Analytical Process and Quality

- Test cards use a single barcode identifying units containing a biosensor array, calibration solution and fluidics
- Test Cards generate electromechanical assay signals and quality control signals which are read by the detectors on the epoc<sup>®</sup> Reader
- Upon insertion into the reader, the test card is scanned for the barcode, initiates sensor calibration and provides a thermal control of the assay
- Reader then "reads" electromechanical quality signals from the test Card and converts them into a secure wireless transmission format
- The epoc<sup>®</sup> Host associates the test results and reader ID with a patient ID and ID, scanned or manually entered to complete the test record
- Complete test record is transmitted instantaneously and wirelessly to the EDM, LIS and EMR

## CAPILLARY FOR PAEDIATRIC SAMPLING



# Test Parameters

## Measured Parameters

Test Name	Acronym	Units of Measure	Measurement Range	Normal Range
pH	pH	pH units	6.5 - 8.0	7.35 - 7.45 arterial
				7.32 - 7.43 venous
Carbon Dioxide, Partial Pressure	pCO <sub>2</sub>	mm Hg	5 - 250	35 - 48 arterial
				42 - 51 venous
		kPa	0.7 - 33.3	4.7 - 6.4 arterial
				5.4 - 6.8 venous
Oxygen, Partial Pressure	pO <sub>2</sub>	mm Hg	5 - 750	83 - 108 arterial
		kPa	0.7 - 100	11.1 - 14.4 arterial
Sodium	Na <sup>+</sup>	mmol/L	85 - 180	138 - 146
		mEq/L		
Potassium	K <sup>+</sup>	mmol/L	1.5 - 12.0	3.5 - 4.5
		mEq/L		
Ionizer calcium	Ca <sup>++</sup>	mmol/L	0.25 - 4.0	1.15 - 1.33
		mg/dL	1.0 - 16.0	4.6 - 5.3
		mEq/L	0.5 - 8.0	2.3 - 2.7
Glucose	Glu	mmol/L	1.1 - 38.5	4.1 - 5.5
		mg/dL	20 - 700	74 - 100
		g/L	0.20 - 7.00	0.74 - 1.00
Hamatocrit	Hct	%PCV	10 - 75	38 - 51
		L/L	0.10 - 0.75	0.38 - 0.51
Creatinine	Crea	mg/dL	0.30 - 15.00	0.51 - 1.19
		µmol/L	27 - 1326	45 - 105
Chloride	Cl <sup>-</sup>	mmol/L	65 - 140	98 - 107
		mEq/L		

## Calculated Parameters

Test Name	Acronym	Units of Measure	Measurement Range	Normal Range
Hemoglobin	cHgb	g/dL	3.3 - 25	12 - 17
		mmol/L	2.0 - 15.5	7.4 - 10.6
		g/L	33 - 250	120 - 170
Actual Bicarbonate	cHCO <sub>3</sub>	mmol/L	1 - 85	21 - 28 arterial
				22 - 29 venous
		mEq/L	1 - 85	21 - 28 arterial
				22 - 29 venous
Total Carbon Dioxide	cTCO <sub>2</sub>	mmol/L	1 - 85	22 - 29 arterial
				23 - 30 venous
		mEq/L	1 - 85	22 - 29 arterial
				23 - 30 venous
base Excess of Extra Cellular Fluid	BE(ecf)	mmol/L	-30 - +30	-2 - +3
		mEq/L		
base Excess of Blood	BE(B)	mmol/L	-30 - +30	-2 - +3
		mEq/L		
Oxygen Saturation	cSO <sub>2</sub>	%	0 - 100	94 - 98
Estimated Glomerular Filtration Rate	eGFR	mL/m/1.73m <sup>2</sup>	2 - 60	**
Estimated Glomerular Filtration Rate if African American	EGRF-a	mL/m/1.73m <sup>2</sup>	2 - 60	**
**Institutions Should establish and set their own normal range values.				
Anion Gap	AGap	mmol/L	-14 - +95	7 - 16
		mEq/L		
Anion Gap, K <sup>+</sup>	AGapK	mmol/L	-10 - +99	10 - 20
		mEq/L		

▶▶▶ Regulatory compliances



▶▶▶ Corporate Social Responsibility



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▶▶▶ Reach us @



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