



Knowing now matters.™



# epoc<sup>®</sup> Blood Analysis System

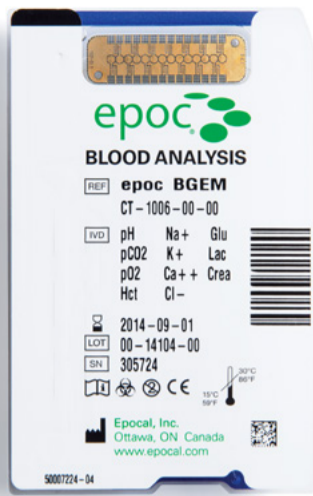
The Right Result at the Right Time



Gain immediate access  
to critical test results.

The **epoc® System** is a handheld,  
wireless solution that provides  
blood gas, electrolyte and  
metabolite results at the patient's  
bedside in approximately 30  
seconds after sample introduction.





## Test Card

- Room temperature storage
- Barcoded with lot and expiration for error-free test panel recognition
- 92  $\mu$ L (about a 1/10th of a CC) sample

### 11 critical tests on a single card

pH	pO <sub>2</sub>	K <sup>+</sup>	Cl <sup>-</sup>	Lac	Hct
pCO <sub>2</sub>	Na <sup>+</sup>	Ca <sup>++</sup>	Glu	Crea	

### Calculated values

AGap	cHCO <sub>3</sub> <sup>-</sup>	BE(ecf)	cSO <sub>2</sub>	eGFR
AGapK	cTCO <sub>2</sub>	BE(b)	cHgb	eGFR-a



## epoc Host<sup>2</sup> Mobile Computer

- Runs the customizable epoc Host Software and is the caregiver's interface to the system
- Customizable reference and critical ranges
- Electronic documentation of test results, patient information and respiratory parameters

## epoc Reader

- Auto-calibrates the epoc Test Card prior to sample introduction
- Communicates bi-directionally with the epoc Host via Bluetooth<sup>®</sup>
- Fully portable; AC/rechargeable battery



## epoc Enterprise Data Manager (EDM) Software

- Provides access through any computer on the hospital network
- Seamlessly connects to hospital LIS/HIS via industry standard HL7<sup>®</sup> interface
- Offers the ability to manage the entire epoc System, interface and users



# Streamline the patient testing process

By moving patient testing to the bedside, caregivers, patients and hospital administration all benefit from a more streamlined process with improved turn around times and operational efficiencies.

**epoc® System**

**7 Steps ~3 Minutes**

Portable / Near Care Testing

**14 Steps 15-20 Minutes**

Central Lab Testing

**18 Steps 20 Minutes-2 hours**

MINUTES



## Wireless communication delivers real-time results and reporting

With the epoc System, easily transmit patient results from the bedside to the electronic medical record (LIS/HIS) in seconds. Reduce transcription errors or delays when downloading results at remote locations.



## 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	$p\text{CO}_2$	mm Hg	5 - 250	35 - 48 arterial
				41 - 51 venous
		kPa	0.7 - 33.3	4.7 - 6.4 arterial
				5.4 - 6.8 venous
Oxygen, Partial Pressure	$p\text{O}_2$	mm Hg	5 - 750	83 - 108 arterial
		kPa	0.7 - 100	11.1 - 14.4 arterial
Sodium	$\text{Na}^+$	mmol/L	85 - 180	138 - 146
		mEq/L		
Potassium	$\text{K}^+$	mmol/L	1.5 - 12.0	3.5 - 4.5
		mEq/L		
Ionized Calcium	$\text{Ca}^{++}$	mmol/L	0.25 - 4.00	1.15 - 1.33
		mg/dL	1.0 - 16.0	4.6 - 5.3
		mEq/L	0.5 - 8.0	2.3 - 2.7
Chloride	$\text{Cl}^-$	mmol/L	65 - 140	98 - 107
		mEq/L		
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
Lactate	Lac	mmol/L	0.30 - 20.00	0.56 - 1.39
		mg/dL	2.7 - 180.2	5.0 - 12.5
		g/L	0.03 - 1.80	0.05 - 0.12
Creatinine	Crea	mg/dL	0.30 - 15.00	0.51 - 1.19
		$\mu\text{mol/L}$	27 - 1326	45 - 105
Hematocrit	Hct	% PCV	10 - 75	38 - 51
		L/L	0.10 - 0.75	0.38 - 0.51

## 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	$\text{cHCO}_3^-$	mmol/L	1 - 85	21 - 28 arterial
				22 - 29 venous
		mEq/L	1 - 85	21 - 28 arterial
				22 - 29 venous
Total Carbon Dioxide	$\text{cTCO}_2$	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	$\text{cSO}_2$	%	0 - 100	94 - 98
Estimated Glomerular Filtration Rate	eGFR	$\text{mL/min/1.73m}^2$	2 - 60 or >60	**
Estimated Glomerular Filtration Rate if African American	eGFR-a	$\text{mL/min/1.73m}^2$	2 - 60 or >60	**
<i>** Institutions should establish and set their own normal range values</i>				
Anion Gap	AGap	mmol/L	-14 - +95	7 - 16
		mEq/L		
Anion Gap, $\text{K}^+$	AGapK	mmol/L	-10 - +99	10 - 20
		mEq/L		



For more information, please visit [alere-epoc.com](http://alere-epoc.com)

