



# **BG - 3800** BLOOD GAS ANALYZER



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

## Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net



#### Innovative Optical Technology

The BG - 3800 utilizing the latest Optical Fluorescence Technology. This unique patented technology does not use traditional electrodes or contact points, which eliminates the need for costly electrode maintenance. It uses maintenance free optical sensors.

#### Accurate Results

Reduce pre-analytical errors with Automatic Sample Aspiration, bubble and clot detection and step by step picture instructions on the High resolution large colorful touch screen.

#### Significant Cost Savings

The BG 3800 analyzer provides lab quality results with zero standby cost. The single use consumable. Stored at room temperature, is only used during a measurement and safety locks waste inside.

#### Simplify Compliance

Compliance and audit trails are made easy with QC Lockouts, maintenance log and multiple levels security. Save time and reduce errors by using the built in barcode scanner to quicker enter user ID and patient Ids.

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## MEASURED PARAMETERS

рН
pCO <sub>2</sub>
pO₂
tHb
SO2
Na <sup>+</sup>
K <sup>+</sup>
Ca <sup>++</sup>
CI⁻
Glucose
Lactate
BUN(Urea)

**Barometric Pressure** 

#### Range

6.6 - 7.8 pH units 10 - 200 mmHg 10 - 700 mmHg 5 - 25 g/dL 60% - 100% 100 - 180 mm01/L 0.8 - 10 mmol/L 0.2 - 3.0 mm01/L 50 - 160 mm01/L 1.7 - 22.2 mm01/L (30 - 400 mg/dL)0.3 - 17.5 mm01/L (2.7-157.7 mg/dL) 2.8 - 112.0 mg/dL (1 - 40 mm01/L) 300 - 800 mmHg

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## RESOLUTION

0.001 pH units 0.1 mmHg 0.1 mmHg 0.1 g/dL 0.1% 0. 1 mmol/L 0.01 mmol/L 0. 01 mmol/L 0. 1 mmol/L 0.1 mmol/L (0.1 mg/dL) 0.01 mmol/L (0.01 mmol/L)

0.1 mmHg



### CALCULATED PARAMETERS

Actual Bicarbonate (HCO3<sup>-</sup>) Standard Bicarbonate (st.HCO3<sup>-</sup>) Base Excess (BE) Base Excess Extra Cellular Fluid (BEecf) Base Excess Actual (BEact) Buffer Base (BB) Standard pH (st.pH) Hydrogen Ion Conc. (cH+) Total CO<sub>2</sub>(tCO<sub>2</sub>) Oxygen Saturation (SO<sub>2</sub>) Oxygen Content (O<sub>2</sub>ct) Alveolar-arterial O<sub>2</sub>Conc. (AaDO<sub>2</sub>) **P50** St. Ionized Calcium (pH=7.4) (nCa++) Hematocrit (Hct) Anion Gap

## INPUT PARAMETERS

Operator ID	O2 Mode
Patient ID	Vent Mode
Accession Number	Pplat
Date of Birth	Mvol
Sex	PIP
Temperature	Litre Flow
Medical Record Number	Tvol
Account Number	PS
Test ID	PEEP
Patient Name	Rate
Age	CPAP
Attending Physician	FIO₂
Patient Location	MCHC
Sample Collection Time	RQ
Sample Type	P50
Puncture Site	Bilevel Pressure
Allen's Test	I/E Ratio
tHb Type	Comment field





### **Wide Operating Temperature**

The BG 3800 analyzer has a measuring chamber heated to 37 C. This allows for a wide operating temperature to meet the needs of colder environments such as the operating room

#### Comprehensive Test Menu

To help meet exact testing needs, the BG 3800 has a variety of cassettes configuration available. Each cassette comes individually wrapped in cartons of 25tests, reducing the potential for consumable waste.

#### Advance Communication

The BG 3800 analyzer now features a standard POCT 1 interface for bi-direction communication and can be interfaced to any LIS/HIS using the Ethernet.

#### >> Rechargeable Battery, Thermal Printer & Cassette Shelf Life

Longer Lasting Rechargeable Battery Backup of upto 8 hours. Allows blood gas testing when electric service is not available. Also it has built in Fast Load Thermal Printer and Long Cassette Shelf Life having 6-12 months from the date of manufacture.

#### Quality Control

BG 3800 provides tri levels Liquid Quality Controls and Electronic QC as well to check the performance of the analyzer on regular and as and when required basis.

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#### OPERATING PARAMETERS

Minimum Sample Size: 125 µL, 60µL for B-60 cassette Sample Type: Whole Blood, Plasma, or Serum Sample Application: Syringe, Capillary or Comfort Sampler™ Sample Input: Automatic Aspiration Analysis Time (Time to Results): < 120 Seconds Ambient Temperature: 10° C - 30° C (50°F - 86°F) Relative Humidity: 5% - 95% (Non-Condensing) Available Languages: English & 10 others



#### **DATA BASE**

Patient Data: 500 Records QC Data: 70 Records Per Level SRC Data: 105 Records per Level

#### **SECURITY**

Storage for 300 Operator IDs (11) Digits) & Passwords Associated PIN (4 Digits) Password Protected Analyzer Setup Operation and Delete Functions User Definable QC Lockout Functions

#### MISCELLANEOUS

Power Consumption (Max.): 110 VA Interface: ASTM, ASCII, and POCT1 protocols (Ethernet and USB Serial) Ports: USB Type A Approvals: CE, UL, IVDD, FDA 510k cleared Size: 4.7 H x 14.2 W x 9.1 D in (12.0 x 36.2 x 23.0 cm) Weight: 4.3 kg (9.6 lbs) with rechargeable Battery Pack Voltage/Frequency: 120 or 240 AC/50-60 Hz

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### HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicin	g:HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most
	affordable cost.
Trainings	:We also take up preventive Maintenace to reduce downtime of HPLC's Trainings.
AMC's/CMC	:AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-
	shooting.
Validations	:Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.
• • •	

Instruments :Instruments :We offer instruments/Renting Services Modules like pumps, detector etc. on Rent.

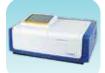




#### **About Analytical Technologies**

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

#### **Our Products & Technologies**







**Optical Emission** Spectrophotometer

Fully Automated

CLIA



DSC/TGA

NOVA-2100

Chemistry Analyzer

Optima Gas Chromatograph 3007



Semi Auto Bio



2979 Plus



HEMA 2062 Hematology Analyzer



Flash Chromatograph



Micro Plate Reader/Washer



Atomic Absorption

Spectrophotometer

URINOVA 2800

Urine Analyzer

Ion Chromatograph



Liquid Partical Counter



Total Organic Carbon 3800



Water purification system





PCR/Gradient PCR/

RTPCR







TOC

Analyzer





Laser Particle Size Analyzer

#### **Regulatory compliances**



#### **Corporate Social Responsibility**

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



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 personallities 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 DETOXIFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.





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