



BG-3800

Blood Gas Analyzer



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

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net



>> Specifications

• Sample:

Whole blood, Serum, Plasma, Dialysate, CSF

• Model name:

 ${\rm BG~3800:} \quad {\rm pH~pCO_2} \ {\rm pO_2} \ {\rm K^+~Na^+~CI^+~Ca^{++}~Hct}$

BG 3800A: pH pCO, pO, Hct

 ${\rm BG~3800B:} \quad {\rm pH~pCO_2} \quad {\rm pO_2} \quad {\rm K^+~Na^+~Cl^+~Hct}$

BG 3800Q: pH pCO $_2$ pO $_2$ K $^+$ Na $^+$ Cl $^+$ Ca $^{++}$ Hct AutoQC

BG 3800AQ: pH pCO₂ pO₂ Hct AutoQC

BG 3800BQ: pH pCO $_2$ pO $_2$ K $^+$ Na $^+$ Cl $^+$ Hct AutoQC

BG 3800E: $pH pCO_2 pO_2 K^+ Na^+ Cl^+ Ca^{++} Hct Lac Glu$

BG 3800EQ: pH pCO $_2$ pO $_2$ K $^+$ Na $^+$ CI $^+$ Ca $^{++}$ Hct Lac Glu AutoQC

• Measured Parameters:

Analyte	Measuring range	Unit
Hydrogen ion activity(pH)	6.000—9.000	pH scale
Carbon dioxide	0.667—26.67	KPa
partial pressure(pCO ₂)	5.0—200.0	mmHg
Oxygen partial pressure(pO ₂)	0—106.7	Kpa
_	0.008—0	mmHg
Potassium ion(K ⁺)	0.50—10.00	mmol/L
Sodiumion(Na ⁺)	50.0—200.0	mmol/L
Chloride ion(Cl ⁻)	20.0—200.0	mmol/L
Ionized calcium(Ca ⁺⁺)	0.10—5.00	mmol/L
Hct	12.0—65.0	%
B.P.	500—800	mmHg
Glucose	1.1—66.7	mmol/L
Lactate	0.4—30.0	mmol/L



Derived(Calculated) Parameters:

pH(TC) pH temperature corrected pCO₂ (TC) pCO₂ temperature corrected pO₂(TC) pO₂temperature corrected

 $\begin{array}{lll} {\sf TCO}_2 & & 0\text{-}50 \text{mmol/L} \\ {\sf HCO}_3 & & 0\text{-}50 \text{mmol/L} \\ {\sf Be}_b & & -25.0\text{-}25 \text{mmol/L} \\ {\sf Be}_{\text{ecf}} & & -25.0\text{-}25 \text{mmol/L} \\ {\sf SBC} & & 0\text{-}50 \text{mmol/L} \\ {\sf sO}_2\% & & 40\text{-}100.0\% \end{array}$

Ca⁺⁺(7.4) Ionized calcium "normalized" to pH 7.4

TCa Total calcium content

 $\begin{array}{ll} \text{AG} & \text{Anion gap} \\ \text{RI} & \text{0.0-70.0} \\ \text{AaDO}_2 & \text{0-700mmHg} \end{array}$

O₂SAT Oxygen Saturation

tHb(c) Hemoglobin(Calculated)

• Input parameter :

Patient Temperature

Hemoglobin

FiO₂ B. P.

• Interface:

Serial Line RS-232 TCP/IP interface

USB port

Integrated Bar-code reader

Analysis Time <90s

Sample Volume 95uL Whole blood

(120uL if with Glu and Lac) 50uL Capillary blood

Calibration Automatic, programmable

1-point and 2-point calibration

Data Storage >10000

Display 10.4" TFT touch screen

Battery

Nickel-metal hydride battery,3.0Ah

Printer

Build-In Thermal printer, 70mm

Up to 14 kinds barcode type



• Dimension:

Instrument 400(W)X574(H)X344(D) mm3
CAL PAK 258(W)X 180(H) X 70(D) mm3
AUTOQC 103(W)X180(H)X70(D) mm3

Weight 18kg

Work Environment $15^{\circ}\text{C} \sim 30^{\circ}\text{C}$ Storage Environment $5^{\circ}\text{C} \sim 40^{\circ}\text{C}$

Power supply $100-240V \sim 50/60 \text{ Hz}$

This new designed blood gas analyzer has a convenient disposable calibrants cartridge
containing flush solution, mixed gas and liquid calibrants, waste container. The gas tanks
are eliminated. This new cartridge design can avoid operator biological hazards and
environment pollution.

Intuitive Touch screen

High resolution 10.4" touch screen

User-friendly operation interface

Parameter area provides analyzer status at

a glance

Online operation and self-diagnostic

tutorials

Infrared human-detector •

Flexible and simple calibrants cartridge •

High and low volume testing cartridge can be chose(300,200,150,100,50).

30 days available on board

Stored at room temperature

All-in-one design without extra consumables

Cartridge expiration alarm and residue

information

AutoQC cartridge

Optional AutoQC cartridge containing 3

levels QC design

Auto H/M/L QC once per days, customer

can define 30 days available on board

Stored at room temperature All-in-one design without extra consumables

Cartridge expiration alarm and residue information Auto-stop analysis sample once failing on QC

Reliable and convenient measurement unit

High resolution 10.4" touch screen
User-friendly operation interface
Parameter area provides analyzer
status at a glance
Online operation and self-diagnostic





Easy to use

The sample adaptor is suitable for both syringe and capillary samples. The sample probe's wiper provides convenience, sample integrity and user safety.

Fast data input

Easy sample and patient ID input Convenient bar-code calibrants and Auto-QC cartridge replace Easy bar-code consumables identification

Rich data management

RS-232 interface LIS connection under HL7 protocol Data backup with USB port

Compact, flexible

Size(mm) W*H*D: 400×574×344 Easy move with rolling stand Nickel-metal hydride battery,3.0Ah

Test Menu

pH, pCO $_2$, pO $_2$, Hct, K $^+$, Na $^+$, Ca $^{++}$, Cl $^+$, Glu, Lac



HPLC Servicing, Validation, Trainings and Preventive Maintenance:

HPLC Servicing: 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: 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



UV/VIS Spectro 2080+



Infra FTIR



Optima Gas Chromatograph 3007



Optima Gas Chromatograph 2979 Plus



Flash Chromatograph



Atomic Absorption Spectrophotometer



Liquid Partical Counter



Double Beam

Optical Emission Spectrophotometer



DSC/TGA



Semi Auto Bio Chemistry Analyzer



HEMA 2062 Hematology Analyzer



Micro Plate Reader/Washer



URINOVA 2800 Urine Analyzer



Total Organic Carbon 3800



Fully Automated CLIA



NOVA-2100 Chemistry Analyzer



PCR/Gradient PCR/ RTPCR



TOC Analyzer



Laser Particle Size Analyzer



Ion Chromatograph



Water purification system

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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