

ABL80 FLEX analyzer – BASIC version

Specifications

Measured parameters

Type	Parameter	Units	Measuring range
pH	pH		6.00–8.00
Blood Gas	pCO ₂	mmHg	0.0–150.0
		kPa	0.00–20.00
	pO ₂	mmHg	0–760
		kPa	0.0–101.3
Electrolytes	cCa ²⁺	mmol/L	0.00–5.00
		mEq/L	0.00–10.00
		mg/dL	0.00–20.00
	cCl ⁻	mmol/L	0–250
		mEq/L	0–250
	cK ⁺	mmol/L	0.00–20.00
mEq/L		0.00–20.00	
Lactate	cLac	mmol/L	0.0–40.0
		mg/dL	0–360
Hematocrit	Hct	%	0–85

The *Measuring range* for a parameter is the range within which the analyzer is physically capable of measuring. The measuring range corresponds to the “range of indication” as defined in the “International vocabulary of basic and general terms in the metrology” (VIM).

Derived parameters

cHCO₃(P)
 cBase(B)
 cBase(B,ox)
 cBase(Ecf)
 cBase(Ecf,ox)
 cHCO₃(P,st)
 ctCO₂(P)
 ctCO₂(B)
 cCa²⁺(7.40)
 Anion Gap (K⁺)
 Anion Gap
 ctO₂
 sO₂
 ctHb
 pO₂(A)
 pO₂(a/A)
 pO₂(A–a)
 RI

Sensor cassette

Sample volume	~ 70 µL
Measuring time	~ 100–115 sec (~ 125 sec with lactate)
Cycle time	~ 100–115 sec (~ 125 sec with lactate)
Startup time	~ 5 min (~ 12 - 15 min with lactate)
Shelf life	120 days (90 days with lactate)
Storage temperature	5–25 °C / 41–77 °F (2–8 °C / 36–46 °F with lactate)

Versions

Tests per day	0.4	0.8	1.7	3.3	5	6.7	10	20	40
Sensor cassettes without lactate									
Patient tests	25	50	100	200	300		300	300	600
In-use lifetime (days)	60	60	60	60	60		30	15	15
Sensor cassettes with lactate									
Patient tests		25	50	100		200	300	300	600
In-use lifetime (days)		30	30	30		30	30	15	15

Solution pack

	Solution 1	Solution 2
Fluidic cycles	450	110
In-use lifetime	Dependent on number of patient and QC samples and frequency of calibration. Up to 60 days maximum.	
Shelf life	150 days	
Storage temperature	2–25 °C / 36–77 °F	

Calibration data

Details	Default interval	Interval options	Duration
Automatic: 1-point cal	With measurement	-	-
Automatic: 2-point cal	8 hours	Every 2, 4 or 8 hours or manual	2 min.

Hardware

Computer specifications

Microsoft Windows®XP Embedded operating system
Minimum 1 GB hard drive
ETX single board CPU
Minimum 512 MB EDO-RAM

Interfaces

8.4" color TFT-LCD, resolution 800 × 600 SVGA Touch screen
Barcode reader
Serial line RS232
RJ45 Ethernet port
2 USB 1.1
PS2 keyboard

Software

Correlation correction

Standard correlation mode:
For whole blood: all parameters available
Other fluids mode: For all parameters except Hct
Hemodilution mode: For the Hct parameter only

Data capacity

Patient results: 500
Manual QC results: 500
2-point cal. results: 500
Event records: 1500
Security records: 1500
User IDs: 1000

Printer display options

Autoprint (on/off)
Select derived parameters
Custom report layout
QC ranges with results
Select input variables
Reference ranges with results
Analyzer name (user-defined)
Edit log

Security and QA features

Seven programmable user-access levels
User ID and access-level verification
Automatic lockout of parameter that fails QC or option to inactivate individual sensors for failed calibration
QC statistics and on-board Levey-Jennings plots
Air-in-sample detection
Mandatory input fields

Communication

HIS/LIS communication

High-level protocols:
ASTM (E1394-97)
ASTM 6xx
HL7 (Version 2.2/2.5)
Low-level serial protocols:
ASTM (E1381-95)
Low-level network protocols:
TCP/IP

Radiometer IT solution

Interface via Ethernet adapter

Additional information

Dimensions

Width	22 cm	9 in
Height	40 cm	16 in
Depth	28 cm	11 in
Weight	8.5 kg	19 lbs

Other

Operating environment	12–28 °C / 54–82 °F
Altitude	2290 m/7513 feet above sea level
Power	100–240 VAC, 50/60 Hz, 130 VA
Thermostat control	37.0 °C ± 0.2 within 10 sec