

ABX Pentra XL₈₀

A new way to manage
your hematology workflow

- ▶ CBC and CBC+DIFF / 26 parameters
- ▶ 80 samples per hour
- ▶ High Speed Auto-Sampling
- ▶ Stat sampling on open or closed tubes



Unique features

Integrated Validation Station

Automatic validation according to user setting
Comprehensive Delta check flagging
Possible to input manual differentials including abnormal cells

Automatic Sample Re-run

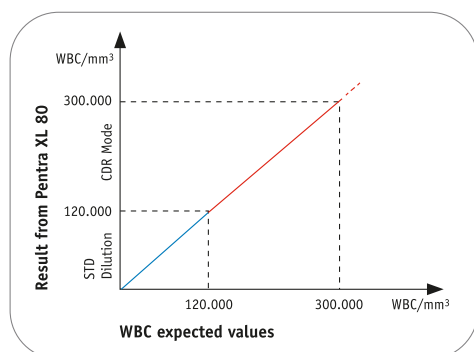
A second analysis is performed immediately and automatically by the Pentra XL 80. This is dependent on the sample re-run criteria established by the user.

◀ CDR (Customized Dilution Ratio)

Samples that are beyond the linear range of the instrument are automatically detected, diluted and re-run for extended linearity results. 3 different dilution ratios are available (1/2, 1/3, 1/5)

Micro Sampling

Only 30μL in CBC or 53μL in CBC+DIFF with ABX patented MDSS technology (Multi Distribution Sampling System).



*Example of linearity extension
with CDR for WBC measurement.*

Pentra XL₈₀

Hematology analyzer



PHYSICAL SPECIFICATIONS

Dimensions & Weight:

	Height	Width	Depth	Weight
Analyzer	54 cm	82 cm	57 cm	55 kg
	22 in	33.4 in	23.3 in	122 lb

Printer:

Laser

Throughput:

Up to 80 samples/hour in automatic mode
Up to 80 samples/hour in stat mode

Sound Pressure Level:

< 60 dBA

Operating Temperature & Humidity:

16 - 34°C (61 - 93°F) room temperature
Maximum relative humidity 80% for temperature up to 31°C (88°F)
linearly decreasing humidity at 40°C (104°F)

Specimen Volume:

CBC 30 µL
CBC + DIFF 53 µL

Power Requirements:

Power supply from 100 V to 240 V (± 10%)

50 Hz to 60 Hz

Power consumption

Maximum 230 VA

Reagents:

ABX Diluent
ABX Alphalyse or cyanide free lyse (optional)
ABX Cleaner
ABX Eosinofix
ABX Basolyse II

METHODS & TECHNOLOGIES

Multi Distribution Sampling System "MDSS"

RBC/PLT Detection Principles

Method	Impedance
Aperture diameter	50 µm
Counting depression	200 mb
Counting duration	2x6 seconds
Dilution ratio	1/10 000
Reaction temperature	35°C

HGB Measurement

Method	Photometry
Wavelength	555 nm
Dilution ratio	1/250
Reaction temperature	35°C (95°F)

HCT Measurement

Method	Numeric integration
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WBC & BASO Count

Method	Impedance
Aperture diameter	80 µm
Counting depression	200 mb
Counting duration	2x6 seconds
Dilution ratio	1/200
Reaction temperature	35°C

Differentiation

Method	Impedance with cytometry & cytochemical hydrofocus
Aperture diameter	60 µm
Hydrofocusing flow diameter	42 µm
Injection duration	12 seconds
Dilution ratio	1/80
Incubation time	12 seconds
Reaction temperature	35°C

MCV, MCH, MCHC, RDW, PCT*, PDW*

Calculation

CERTIFICATION

NF EN 1010-1	cULus listed
NF EN 61326.B	UL 3101-1
NF EN 61000-3-2	C22.2 n°1010-1
NF EN 61000-3-3	CE

SOFTWARE SPECIFICATIONS

Data Processing:

Color LCD touch screen: 12 in
Capacity: 10,000 results + graphics
Industrial PC board Windows XP
Celeron 566 MHz
RAM (256 Mo), Hard disk (10 Go)
Floppy disk & CD ROM reader
RS 232C, TCP/IP, 2 X USB1
User defined flagging limits
Transmit patient & QC to LIS
Uni-directional & bi-directional connections
ASTM protocol inside

Quality Control Management:

24 selectable QC files
XB: 100 operator selectable files with statistics (20 samples per file)
With-in run
Levey-Jennings graphs

Logs:

Reagents, quality controls, calibration, maintenance, data handling, settings, communication, errors, blank cycle, by date

Patient Management:

Delta check
Anteriority (Matrix, curves, data)
Manual entry

PARAMETERS & PERFORMANCE DATA

26 Parameters:

WBC	RBC	PLT
NE# & NE%	HGB	MPV
LY# & LY%	HCT	PCT*
MO# & MO%	MCV	PDW*
EOS# & EOS%	MCH	
BAS# & BAS%	MCHC	
ALY*# & ALY*%	RDW	
LIC*# & LIC*%		

Linearity:

	standard	CDR Mode:**
WBC	0 - 120 x 10 ³ /µL	0 - 300 x 10 ³ /µL
RBC	0 - 8 x 10 ⁶ /µL	0 - 10 x 10 ⁶ /µL
HGB	0 - 24 g/dL	0 - 28 g/dL
HCT	0 - 67%	0 - 80 %
PLT (whole blood)	0 - 1 900 x 10 ³ /µL	0 - 3 000 x 10 ³ /µL
PLT (concentrate)	0 - 2 800 x 10 ³ /µL	0 - 3 200 x 10 ³ /µL

Precision:

Parameters	%CV	Range
WBC	< 2.0	4.0 - 10.0 x 10 ³ /µL
RBC	< 2.0	3.6 - 6.2 x 10 ⁶ /µL
HGB	< 1.0	12.0 - 18.0 g/dL
HCT	< 2.0	36 - 54 %
RDW	< 2.0	80 - 100
PLT	< 5.0	150 - 500 x 10 ³ /µL
MPV	< 3.0	7.6 - 10.9
NE%	< 3.0	50 - 80 %
LY%	< 4.0	25 - 50 %
MO%	< 8.0	2 - 10 %
EOS%	< 15.0	0 - 5 %
BAS%	< 20.0	0 - 2 %

Accuracy:

Parameters	Mean % Diff.	Mean Diff.
WBC	< 3	± 0.2
RBC	< 3	± 0.1
HGB	< 3	± 0.3
HCT	< 4	± 1.5
PLT	< 5	± 10

* RUO parameters (Research Use Only)

** Customized Dilution Ratio (for information only)

HORIBAABX
Diagnostics

HORIBA ABX INTERNATIONAL (33 / 4 67 14 15 16) - HORIBA ABX - FRANCE (33 / 4 67 14 15 15) - HORIBA ABX - BENELUX (32 / 3 281 49 08) - HORIBA ABX - ITALY (39 / 06 51 59 22 1)

HORIBA ABX - SPAIN (34 / 91 353 3010) - HORIBA ABX - PORTUGAL (351 / 2 14 72 17 70) - HORIBA ABX - U.K. (44 / 1462 8144 00) - HORIBA ABX - AUSTRIA (43 / 1 718 78 44 00)

HORIBA ABX - POLAND (48 / 22 673 20 22) - HORIBA ABX - USA (1 / 949 453 0500) - HORIBA ABX - BRAZIL (55 / 11 55 45 1500) - GERMANY AXON LAB AG (49 / 7153 92260)

ABX ONLINE : <http://www.horiba-abx.com>