

Pentra DF Nexus

Process efficiency in Hematology



Pentra DF Nexus

Improve your Hematology workflow

- 120 samples per hour
- 32 parameters
- Automatic reflex testing
- Automatic validation of results
- Integrated cytology atlas
- SPS evolution
Integrated slide maker (optional)



• Reliability

• Ergonomics



Efficiency

- Large color touch screen.
- Intuitive interface with virtual keyboard.
- Smart access to all functionalities.
- Enhanced visibility.
- Comprehensive icons.



External links

- USB port for multi-data exchange and hardware connection.

Reliability: Run 1 - NEXUS - 05/04 14:21

Instrument serial number: P50104

Reagents	Type	Lot	Date/Time
Diluent	1201 5041*	04/04/2012 10:12:06	
Leucodiff	11112085*	29/03/2012 11:06:51	
Abx Lyse	13011320*	21/03/2012 11:06:28	
Beadlys	12011907*	30/03/2012 09:24:32	

QC Status	Instrument	Protocol	Sample ID	Date	Detail	User
	ABX Erytrol - 120		NEXUS-1	05/04/2012 10:09:51	No numeric result: (TECHNICIAN) run	TECHN
			NEXUS-2	05/04/2012 08:53:56	(TECHNICIAN) test	
			NEXUS-3	05/04/2012 09:19:54		
	NEXUS	Abx DiffTotal - 120	P5033H	05/04/2012 08:50:06		
			P5033L	05/04/2012 08:51:06		
			P5033N	05/04/2012 08:50:36		
			R0332-1	05/04/2012 08:48:36		
			R0332-2	05/04/2012 08:48:36		
	ABX Myeloid Ratio - 120		AUT010-1	05/04/2012 08:47:36		

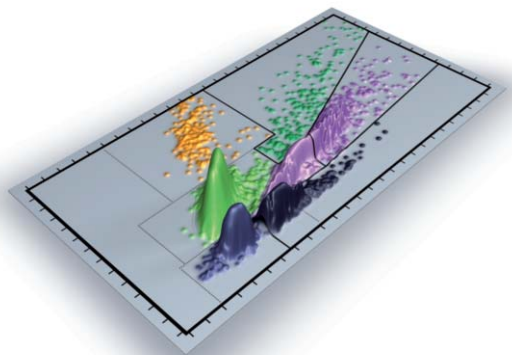
Quality

- Complete traceability (reagents & controls) for each run.
- Control blood management.
- Graphical and tabular statistics.
- XB management.
- QCP Export (Quality Control Program).

Double DIFF matrix

Full leukopoiesis analysis:

- Accurate identification and quantification of precursor cells in routine:
 - immature granulocytic line (IMG)
 - immature lymphocytic line (IML)
 - immature monocytic line (IMM)
- Precise identification of abnormal lymphocytes to determine lymphoid pathologies
- Reduced slide review
- Diagnostic and follow-up tool for rapid decision-making



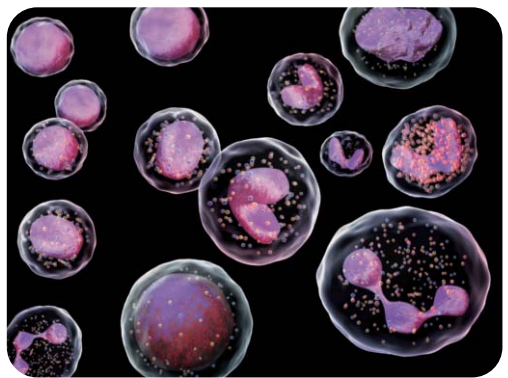
Cytology expertise

Connectivity with Digital Microscopy System: HemaCAM*

- Sharing cells with significant patient file
- Remote validation of slides

Integrated cytology atlas: Hematovision

- Aid to accurate diagnosis support
- Excellent education tool



● Efficiency

● Productivity

● Flexibility



Compatibility

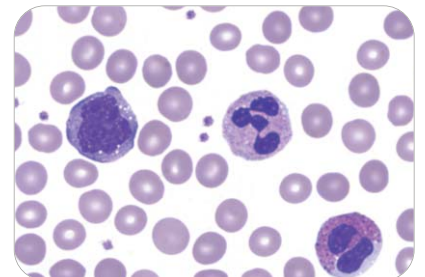
- Racks compatible with most pre-analytical systems and post analytical.
- Two models of racks.



Expert validation station

- Customized alarms and rules.
- Reflex testing.
- Automatic rerun.
- Automatic validation (Lab rules integrated dictionary).
- International recommendation rules** for Hematology review integrated in routine.

** (ISLH, Laboratory Hematology 11:83-90 © 2005 Carden Jennings Publishing Co., Ltd. doi: 10.1532/LH96.05019)



Integrated Slide maker*

- 120 slides per hour.
- Fully automated and secured process.
- Choice of staining protocols.
- Positive identification.
- Smearing flexibility.

* Optional module

Pentra DF Nexus

Technical Specifications



PHYSICAL SPECIFICATIONS

Dimensions & Weight

	Height	Width	Depth	Weight
Without SPS	73 cm	120 cm	55 cm	110 kg
	28.7 in	47.2 in	21.6 in	242.5 lb
With SPS	73 cm	170 cm	55 cm	170 kg
	28.7 in	66.9 in	21.6 in	374 lb

Printer

Laser

Throughput

Up to 120 samples/hour in CBC, DIFF, SPS modes

Operating temperature:

16 - 34°C (61 - 93°F) room temperature

Specimen volume:

Manual cycle 130 µL

Automatic cycle 200 µL

Power requirements:

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

50 Hz to 60 Hz

Power consumption Pentra DF120 800 VA

Reagents:

ABX Diluent

ABX Lysebio (cyanide free)

ABX Leucodiff

ABX Basolyse

ABX Cleaner

PARAMETERS

CBC

WBC RBC HGB HCT MCV MCH MCHC RDW PLT MPV PCT* PDW*

Differential Leukocytes

NEU# & NEU% LYM# & LYM% MON# & MON% EOS# & EOS% BAS# & BAS%
ALY*# & ALY*% LIC*# & LIC*% IMG*# & IMG*% IMR*# & IMR*% IML*# & IML*%

* RUO parameters (Research Use Only)

SOFTWARE SPECIFICATIONS

Data Processing

Color LCD: 12.1 in

Capacity: 90,000 results

Operating System: Windows XP Embedded™

Processor: Genuine Intel 1.60 GHz

RAM (Random Access Memory): 1 GB

External DVD/CD drive connected to instrument USB port

RS 232C, 5 X USB1

User defined flagging limits

Transmit patient & QC to LIS

Mono & bi-directional connections

Quality Control Management

48 selectable QC files

XB: 100 operator selectable files with statistics (20 samples per file)

With-in run

Levey-Jennings graphs

Logs

Reagents, quality control, calibration, maintenance, user, settings, communication, errors, blanks

PERFORMANCE DATA

Linearity

Parameters	Standard	Unit
WBC	0 - 150	10 ⁹ /mm ³
RBC	0 - 8	10 ⁹ /mm ³
HGB	0 - 24	g/dL
HCT	0 - 67	%
PLT	0 - 1900	10 ⁹ /mm ³
PLT (platelet concentrated)	0 - 2800	10 ⁹ /mm ³

Precision:

Parameters	Range	Units	% CV
WBC	4.0 - 10.0	10 ⁹ /mm ³	< 2
RBC	3.6 - 6.2	10 ⁹ /mm ³	< 2
HGB	12.0 - 18.0	g/dL	< 1
HCT	36 - 54	%	< 2
PLT	150 - 500	10 ⁹ /mm ³	< 5
NEU%	50 - 80	%	< 3
LYM%	25 - 50	%	< 5
MON%	2 - 10	%	< 12
EOS%	1 - 5	%	< 20
BAS%	0.5 - 2.5	%	< 30

CERTIFICATION

EN 61326: 2001

IEC 61000-3-2 : 2000

IEC 61000-3-3 : 2001

IEC 61010-1 : 2001

IEC 61010-2-081 : 2001

IEC 61010-2-101 : 2002

CE 98/79/EC

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Operating IMS

