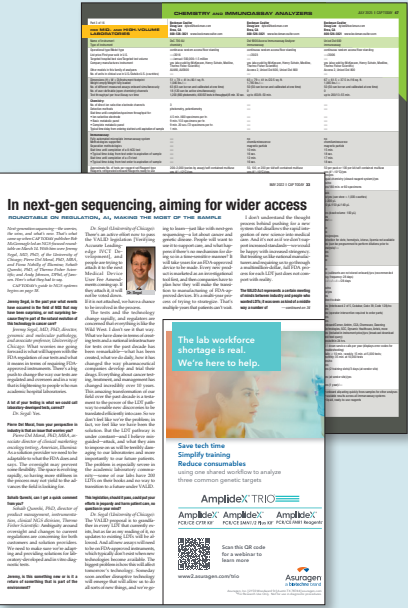


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INSTRUMENTS

- Bedside glucose testing systems
- Chemistry and immunoassay analyzers for mid- and high-volume laboratories
- Chemistry and immunoassay analyzers for point-of-care and low-volume laboratories
- Coagulation analyzers
- Hematology analyzers
- Next-generation sequencing systems
- Urinalysis instrumentation

SOFTWARE SYSTEMS

- Anatomic pathology computer systems
- Billing/Accounts receivable/RCM systems
- Laboratory information systems

Part 1 of 10	Abbott James Pickering james.pickering@abbott.com Lake Forest, IL 800-323-9100 www.corelaboratory.abbott	Abbott James Pickering james.pickering@abbott.com Lake Forest, IL 800-323-9100 www.corelaboratory.abbott
Name of analyzer	Alinity h-series	CELL-DYN Emerald [†]
Analyzer application	diagnostic and research use	diagnostic use
Dimensions of analyzer (H × W × D)/Analyzer footprint	59 × 24 × 36 in./—	13.8 × 9.8 × 13.8 in./—
Country where analyzer was designed/Manufactured	U.S./Singapore	U.S./Germany
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.* First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.* Foreign locations where company markets analyzer	2023/25 2017/975 Brazil, Canada, Italy, Japan, Saudi Arabia, Spain, U.K., Vietnam, more (installed in the aforementioned countries) Brazilian Portuguese, French, German, Italian, more	2009/766 2008/1,513 Brazil, Canada, Italy, Japan, Saudi Arabia, Spain, U.K., Vietnam, more (installed in the aforementioned countries) French, Italian, German, Spanish, Bulgarian, more
Human languages (other than English) supported by analyzer	—	—
Analyzer list price	—	—
• Analyzer acquisition options	purchase, trade in, lease, reagent rental agreement	purchase, trade in, lease, reagent rental agreement
Training included with purchase/Total time for basic training per operator	yes/21 hours (at customer site or vendor office [user's choice])	yes/— (at customer site)
• Follow-up training available	yes (extra charge)	yes (extra charge)
Parameters that analyzer tests and reports	%&# eosinophils, %&# immature granulocytes, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, %&# reticulocyte count, Hb, Hct, MCH, more	%&# lymphocytes, %&# neutrophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC, more
Types of testing FDA cleared or approved for analyzer	—	—
Types of body fluids FDA cleared or approved for analysis on analyzer	—	—
Analytical measurement range for body fluid	—	—
Precision for body fluid	—	—
Accuracy for body fluid	—	—
Automated differential performed for body fluids	—	—
Tests available for research use only	WBC viability fraction, % microcytic RBCs, % macrocytic RBCs, % hypochromic RBCs, % hyperchromic RBCs, more	—
Differential methods used	advanced MAPSS technology	electrical impedance counting
Analytical measurement range:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	WBC: 0.4–96.1 K/μL/RBC: 0.22–7.61 M/μL Hb: 3.3–24.6 g/dL/PLT: 9–1,375 K/μL Hct: 5.3–75.6%/RET: —
Precision:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	WBC: 3.5% CV/RBC: 2.0% CV Hb: 2.1% CV/PLT: 6.1% CV Hct: 1.7% CV/RET: —
Accuracy:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	— — —
Interfering substances:	• WBC/RBC • Hemoglobin/Platelets • Hematocrit/Reticulocytes • Automated differential	cryoglobulin, cryofibrinogen, fragile WBCs, nonviable WBCs, neutrophil aggregates, hemoglobin C crystals, NRBCs, platelet clumps or aggregates/RBC autoagglutinins, cold agglutinins, giant platelets, RBC fragments hemoglobin C crystals/RBC autoagglutinins, cold agglutinins, cryoglobulin, cryofibrinogen, giant platelets, platelet clumps or aggregates, platelet satellitism, RBC fragments, more RBC autoagglutinins, cold agglutinins, giant platelets, platelet clumps or aggregates, more/RBC autoagglutinins, cold agglutinins, babesiosis, malaria, Heinz bodies, more cryoglobulin, cryofibrinogen, fragile WBCs, nonviable WBCs, neutrophil aggregates, hemoglobin C crystals, more
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour • Max. No. of slides processed per hour if stainer included FDA-cleared or -approved sample container types (besides potassium EDTA) Min. specimen volume open mode/Closed mode/Microsample capability	119/119 65 none ≤100 μL/≤100 μL/no	57/57 — none 9.8 μL/—/no
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online	patient demographics, previous test results, graphics, more (customizable)/—	patient demographics, previous test results, more (customizable)/300,000 on USB, 1,500 results on internal memory
Analyzer performs delta checks Parameters for which flags may appear	yes morphological flags, including left shift, blasts, variant lymphocytes, platelet clumps, RBC fragments, more combination of client and vendor selectable yes, for follow-up, confirmatory testing, and potential test rerun (parameters for flags to hold samples defined by client or vendor)	no dispersed data alerts, suspect measurand flags, count invalidation flags yes no
Scattergram display uses cell-specific color Histogram display uses color with thresholds	yes yes	no no
LIS interface formats supported • Middleware interface	ASTM 1394-91, ASTM 1381, HL7 version 2, HL7 version 3 yes (can use company's middleware or third-party middleware or connect directly to LIS) • Information transferred to LIS via middleware or LIS interface numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, more	proprietary (analyzer or vendor specific) yes (can use company's middleware or third-party middleware or connect directly to LIS) numeric results, flagged results
Analyzer transmits LOINC codes for results to LIS or middleware Lab automation system or workcells to which analyzer has a direct interface	no Abbott Diagnostics	no none
Barcode symbologies read on specimen tube	Codabar, Code 39, Code 128, Interleaved 2 of 5	Codabar, Code 39, Code 128, Interleaved 2 of 5, Code 93, EAN8, EAN13, EAN128, IATA, Matrix 2 of 5, more
• Analyzer allows barcode placement per CLSI standard Auto02-A2	yes	no
No. of onboard reagents required for standard specimen analysis • Reagents ready to use/Reagent tracking method	3 yes/barcode reader	2 yes/barcode reader
Time required for analyzer maintenance Onboard diagnostics for troubleshooting • Manufacturer can perform diagnostics via remote access	15 min. daily; 30 min. weekly yes yes	15 min. weekly; ~10 min. biannually no no
Warranty provided/Cost of annual service contract (24 h/7 d)	one-year warranty/variable	one-year warranty/variable
Distinguishing analyzer features (supplied by company) *based on August 2025 survey deadline Note: a dash in lieu of an answer means company did not answer question or question is not applicable	scalable and only 3 reagents to provide CBC results with 6-part WBC differential and NRBC; automated, scheduled maintenance; connectivity to Abbott lab automation and AliniQ products	small sample size, reagent volumes, and physical size; averages one service call per year; easy to use; touchscreen software with intuitive icons and minimal layers †also marketed by distributors

All information is supplied by the companies listed. The tabulation does not represent an endorsement by the CAP.

HEMATOLOGY ANALYZERS

Part 2 of 10	Abbott James Pickering james.pickering@abbott.com Lake Forest, IL 800-323-9100 www.corelaboratory.abbott	Abbott James Pickering james.pickering@abbott.com Lake Forest, IL 800-323-9100 www.corelaboratory.abbott	Advanced Instruments Maria Martinek maria.martinek@aicompanies.com Norwood, MA 800-225-4034 www.aicompanies.com
Name of analyzer	CELL-DYN Emerald 22†	CELL-DYN Emerald 22 Autoloader†	GloCyte Automated Cell Counter for CSF
Analyzer application	diagnostic use	diagnostic use	diagnostic and research use
Dimensions of analyzer (H × W × D)/Analyzer footprint	13.8 × 9.8 × 13.8 in./—	16.1 × 19.7 × 17 in./—	10.0 × 6.0 × 8.0 in./—
Country where analyzer was designed/Manufactured	U.S./Germany	U.S./Germany	U.S./U.S.
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.* First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.* Foreign locations where company markets analyzer	2016/81 2016/497 Brazil, Canada, Italy, Japan, Saudi Arabia, Spain, U.K., Vietnam, more (installed in the aforementioned countries) French, Italian, German, Spanish, Bulgarian, more	2019/32 —/351 Brazil, Canada, Italy, Japan, Saudi Arabia, Spain, U.K., Vietnam, more (installed in the aforementioned countries) French, Italian, German, Spanish, more	2016/200 — U.K. (installed in U.K.)
Human languages (other than English) supported by analyzer	French, Italian, German, Spanish, Bulgarian, more	French, Italian, German, Spanish, more	—
Analyzer list price	\$64,000	\$75,000	—
• Analyzer acquisition options	purchase, trade in, lease, reagent rental agreement	purchase, trade in, lease, reagent rental agreement	purchase
Training included with purchase/Total time for basic training per operator	yes/— (at customer site)	yes/— (at customer site)	yes/2 hours (at customer site or vendor office [user's choice])
• Follow-up training available	yes (extra charge)	yes (extra charge)	yes
Parameters that analyzer tests and reports	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC	—
Types of testing FDA cleared or approved for analyzer	—	—	—
Types of body fluids FDA cleared or approved for analysis on analyzer	—	—	CSF
Analytical measurement range for body fluid	—	—	RBC count: 2–123 cells/μL (reportable range, 2–615,644 cells/μL); TNC count: 3–123 cells/μL (reportable range, 3–6,500 cells/μL)
Precision for body fluid	—	—	RBC count: 2.7–16.3%; TNC count: 2.5–18%
Accuracy for body fluid	—	—	—
Automated differential performed for body fluids	—	—	—
Tests available for research use only	—	—	—
Differential methods used	Uni-Flow optical technology	Uni-Flow optical technology	—
Analytical measurement range:	• WBC count/RBC count WBC: 0.4–90 K/μL/RBC: 1.2–8.3 M/μL	WBC: 0.4–90 K/μL/RBC: 1.2–8.3 M/μL	WBC: — (TNC: 3–6,500 cells/μL)/RBC: 2–123 cells/μL (reportable range, 2–615,644 cells/μL)
Precision:	• Hemoglobin/Platelets • Hematocrit/Reticulocytes • WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	Hb: 5.5–22 g/dL/PLT: 11–1,485 K/μL Hct: 12.1–66.1%/RET: — WBC: 3.2% CV/RBC: 2.0% CV Hb: 1.2% CV/PLT: 7.1% CV Hct: — (MCV: 0.8% CV)/RET: —	— — — — —
Accuracy:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	— — —	— — —
Interfering substances:	• WBC/RBC • Hemoglobin/Platelets • Hematocrit/Reticulocytes • Automated differential	cryoglobulin, cryofibrinogen, heparin, monoclonal proteins, NRBCs, platelet clumping, unlysed RBCs, clotting, more/cryoglobulin, cryofibrinogen, giant platelets, high WBC count (>50,000 K/μL), autoagglutination, more carboxyhemoglobin (>10%), cryoglobulin, cryofibrinogen, in vivo hemolysis, heparin, monoclonal proteins, more/ cryoglobulin, cryofibrinogen, in vivo and in vitro hemolysis, microcytic RBCs, RBC inclusions, WBC fragments, more cryoglobulin, cryofibrinogen, giant platelets, high WBC count (>50,000 K/μL), hyperglycemia (>600 mg/dL), autoagglutination, clotting, in vitro hemolysis, more/— platelet aggregates, erythroblasts, small lymphocytes, immature cells, resistant RBCs, more	— — — —
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour	45/45	40/40	—
• Max. No. of slides processed per hour if stainer included	—	—	—
FDA-cleared or -approved sample container types (besides potassium EDTA)	none	none	—
Min. specimen volume open mode/Closed mode/Microsample capability	17 μL/—/no	21 μL/21 μL/no	60 μL/—/no
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online	patient demographics, previous test results, histograms, more (customizable)/300,000 on USB, 1,000 records with histograms on internal memory	patient demographics, previous test results, graphics, more (customizable)/300,000 on USB, 1,000 records with histograms on internal memory	sample type, sample appearance, sample color, accession number, result/>100,000 results
Analyzer performs delta checks	no	no	no
Parameters for which flags may appear	dispersed data alerts, suspect parameter flags, count invalidation flags	dispersed data alerts, suspect parameter flags, count invalidation flags	control results out of range, expired reagents warning
• Flagging client selectable	no	no	yes
Analyzer recognizes and holds test results	no	yes, for follow-up, confirmatory testing, and potential test rerun (parameters for flags to hold samples defined by vendor)	yes, for potential test rerun (parameters for flags to hold samples defined by vendor)
Scattergram display uses cell-specific color	yes	yes	no
Histogram display uses color with thresholds	yes	yes	no
LIS interface formats supported	proprietary (analyzer or vendor specific)	proprietary (analyzer or vendor specific)	RS232, bidirectional
• Middleware interface	yes (can use company's middleware or third-party middleware or connect directly to LIS)	yes (can use company's middleware or third-party middleware or connect directly to LIS)	no (connects directly to LIS)
• Information transferred to LIS via middleware or LIS interface	numeric results, flagged results	numeric results, flagged results	numeric results, flagged results, patient orders
Analyzer transmits LOINC codes for results to LIS or middleware	no	no	yes
Lab automation system or workcells to which analyzer has a direct interface	none	none	none
Barcode symbologies read on specimen tube	Codabar, Code 39, Code 128, Interleaved 2 of 5, Code 39 Full ASCII, Code 93, EAN8, EAN13, EAN128, IATA, more	Codabar, Code 39, Code 128, Interleaved 2 of 5, Code 39 Full ASCII, Code 93, EAN8, EAN13, EAN128, IATA, more	Codabar, Data Matrix, Code 39, Code 128
• Analyzer allows barcode placement per CLSI standard Auto02-A2	no	no	yes (also supports QR codes)
No. of onboard reagents required for standard specimen analysis	2	2	2
• Reagents ready to use/Reagent tracking method	yes/barcode reader	yes/barcode reader	yes/RFID, barcode reader
Time required for analyzer maintenance	15 min. weekly; ~10 min. quarterly	15 min. weekly; ~10 min. quarterly	—
Onboard diagnostics for troubleshooting	no	no	yes
• Manufacturer can perform diagnostics via remote access	no	no	no
Warranty provided/Cost of annual service contract (24 h/7 d)	one-year warranty/variable	one-year warranty/variable	one-year warranty/—
Distinguishing analyzer features (supplied by company)	small footprint, only 3 reagents (2 of 3 stored onboard), and built-in monitor; auto start, shut down, cleaning; 5-part differential using Uni-Flow optical flow cytometry	small footprint, sample size, and No. of reagents used; open tube safe sampling device; closed tube, continuous autoloading with automated rerun	1 cell/μL limit of detection for RBCs and TNCs; consistent turnaround time for standardization and Lean practices; disposable test cartridges eliminate carryover
<i>*based on August 2025 survey deadline</i>			
<i>Note: a dash in lieu of an answer means company did not answer question or question is not applicable</i>			
<i>†also marketed by distributors</i>			

Part 3 of 10	Beckman Coulter Eric Pabon epabon@beckman.com Brea, CA 714-993-5321 www.beckmancoulter.com	Beckman Coulter Eric Pabon epabon@beckman.com Brea, CA 714-993-5321 www.beckmancoulter.com	Beckman Coulter Eric Pabon epabon@beckman.com Brea, CA 714-993-5321 www.beckmancoulter.com
Name of analyzer	DxH 500 Hematology Analyzer†	DxH 520 Hematology Analyzer†	DxH 560 AL Hematology Analyzer†
Analyzer application	diagnostic use	diagnostic and research use	diagnostic and research use
Dimensions of analyzer (H × W × D)/Analyzer footprint	16.0 × 10.6 × 16.9 in./6.44 sq. ft.	16 × 10.6 × 16.9 in./5.02 sq. ft.	17.3 × 19.7 × 18.1 in./6.44 sq. ft.
Country where analyzer was designed/Manufactured	U.S./U.S.	U.S./U.S.	U.S./U.S.
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.*	2020/>220	2019/1,250	2020/235
First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.*	2020/>2,000	2019/>2,015	2021/>1,250
Foreign locations where company markets analyzer	worldwide (installed worldwide)	worldwide (installed worldwide)	worldwide (installed worldwide)
Human languages (other than English) supported by analyzer	Japanese, Chinese, French, Italian, German, Spanish, Portuguese, Danish, Swedish, Greek, Czech, others	Japanese, Chinese, French, Italian, German, Spanish, Portuguese, Danish, Swedish, Greek, Czech, others	Japanese, Chinese, French, Italian, German, Spanish, Portuguese, Danish, Swedish, Greek, Czech, others
Analyzer list price	\$36,000	\$40,000	\$53,400
• Analyzer acquisition options	purchase, lease	purchase, lease	purchase, lease
Training included with purchase/Total time for basic training per operator	yes/8 hours (at customer site and vendor office)	yes/8 hours (at customer site and vendor office)	yes/8 hours (at customer site and vendor office)
• Follow-up training available	yes (extra charge)	yes (extra charge)	yes (extra charge)
Parameters that analyzer tests and reports	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC blood count analysis	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC blood count analysis	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC blood count analysis
Types of testing FDA cleared or approved for analyzer	—	—	—
Types of body fluids FDA cleared or approved for analysis on analyzer	—	—	—
Analytical measurement range for body fluid	—	—	—
Precision for body fluid	—	—	—
Accuracy for body fluid	—	—	—
Automated differential performed for body fluids	no	no	no
Tests available for research use only	low hemoglobin density, microcytic anemia factor, more	low hemoglobin density, microcytic anemia factor, more	low hemoglobin density, microcytic anemia factor, more
Differential methods used	CBC analysis based on Coulter Principle; uses simultaneous measurements of volume, axial light loss within WBC aperture to count and size lymphocytes, monocytes, neutrophils, eosinophils, basophils WBC: 0.20–100.00 × 10 ³ cells/μL/RBC: 0.20–8.00 × 10 ⁶ cells/μL Hb: 0.20–25.00 g/dL/PLT: 7.0–2,000.0 × 10 ³ cells/μL Hct: 0.0–85.0%/RET: — WBC: 0.20 to <1.00 × 10 ³ cells/μL: ≤0.15 SD; 1.00 to <3.00 × 10 ³ cells/μL: ≤0.17 SD; 3.00–5.00 × 10 ³ cells/μL: ≤5.00% CV; >5.00–7.00 × 10 ³ cells/μL: ≤4.00% CV; >7.00–100.00 × 10 ³ cells/μL: ≤3.00% CV/RBC: 1.00–3.50 × 10 ⁶ cells/μL: ≤3.00% CV; 3.50–8.00 × 10 ⁶ cells/μL: ≤2.00% CV Hb: 3.00 to <5.00 g/dL: ≤4.00% CV; 5.00 to <11.00 g/dL: ≤2.00% CV; 11.00 g/dL: ≤1.50% CV/PLT: 7.0 to <25.0 × 10 ³ cells/μL: ≤20.00% CV; 25.0–50.0 × 10 ³ cells/μL: ≤15.00% CV; >50.0 to <100.0 × 10 ³ cells/μL: ≤10.00% CV; 100.0–200.0 × 10 ³ cells/μL: ≤7.50% CV; >200.00–2,000.0 ≤5.00% CV Hct: 10.0–85.0%/RET: — WBC: 0.20–100.00 × 10 ³ cells/μL/RBC: 0.20–8.00 × 10 ⁶ cells/μL Hb: 0.20–25.00 g/dL/PLT: 7.0–2,000.0 × 10 ³ cells/μL Hct: 0.0–85.0%/RET: —	CBC analysis based on Coulter Principle; uses simultaneous measurements of volume, axial light loss within WBC aperture to count and size lymphocytes, monocytes, neutrophils, eosinophils, basophils WBC: 0.20–100.00 × 10 ³ cells/μL/RBC: 0.20–8.00 × 10 ⁶ cells/μL Hb: 0.20–25.00 g/dL/PLT: 7.0–2,000.0 × 10 ³ cells/μL Hct: 0.0–85.0%/RET: — WBC: 0.20 to <1.00 × 10 ³ cells/μL: ≤0.15 SD; 1.00 to <3.00 × 10 ³ cells/μL: ≤0.17 SD; 3.00–5.00 × 10 ³ cells/μL: ≤5.00% CV; >5.00–7.00 × 10 ³ cells/μL: ≤4.00% CV; >7.00–100.00 × 10 ³ cells/μL: ≤3.00% CV/RBC: 1.00–3.50 × 10 ⁶ cells/μL: ≤3.00% CV; 3.50–8.00 × 10 ⁶ cells/μL: ≤2.00% CV Hb: 3.00 to <5.00 g/dL: ≤4.00% CV; 5.00 to <11.00 g/dL: ≤2.00% CV; 11.00 g/dL: ≤1.50% CV/PLT: 7.0 to <25.0 × 10 ³ cells/μL: ≤20.00% CV; 25.0–50.0 × 10 ³ cells/μL: ≤15.00% CV; >50.0 to <100.0 × 10 ³ cells/μL: ≤10.00% CV; 100.0–200.0 × 10 ³ cells/μL: ≤7.50% CV; >200.00–2,000.0 ≤5.00% CV Hct: 10.0–85.0%/RET: — WBC: 0.20–100.00 × 10 ³ cells/μL/RBC: 0.20–8.00 × 10 ⁶ cells/μL Hb: 0.20–25.00 g/dL/PLT: 7.0–2,000.0 × 10 ³ cells/μL Hct: 0.0–85.0%/RET: —	CBC analysis based on Coulter Principle; uses simultaneous measurements of volume, axial light loss within WBC aperture to count and size lymphocytes, monocytes, neutrophils, eosinophils, basophils WBC: 0.20–100.00 × 10 ³ cells/μL/RBC: 0.20–8.00 × 10 ⁶ cells/μL Hb: 0.20–25.00 g/dL/PLT: 7.0–2,000.0 × 10 ³ cells/μL Hct: 0.0–85.0%/RET: — WBC: 0.20 to <1.00 × 10 ³ cells/μL: ≤0.15 SD; 1.00 to <3.00 × 10 ³ cells/μL: ≤0.17 SD; 3.00–5.00 × 10 ³ cells/μL: ≤5.00% CV; >5.00–7.00 × 10 ³ cells/μL: ≤4.00% CV; >7.00–100.00 × 10 ³ cells/μL: ≤3.00% CV/RBC: 1.00–3.50 × 10 ⁶ cells/μL: ≤3.00% CV; 3.50–8.00 × 10 ⁶ cells/μL: ≤2.00% CV Hb: 3.00 to <5.00 g/dL: ≤4.00% CV; 5.00 to <11.00 g/dL: ≤2.00% CV; 11.00 g/dL: ≤1.50% CV/PLT: 7.0 to <25.0 × 10 ³ cells/μL: ≤20.00% CV; 25.0–50.0 × 10 ³ cells/μL: ≤15.00% CV; >50.0 to <100.0 × 10 ³ cells/μL: ≤10.00% CV; 100.0–200.0 × 10 ³ cells/μL: ≤7.50% CV; >200.00–2,000.0 ≤5.00% CV Hct: 10.0–85.0%/RET: — WBC: 0.20–100.00 × 10 ³ cells/μL/RBC: 0.20–8.00 × 10 ⁶ cells/μL Hb: 0.20–25.00 g/dL/PLT: 7.0–2,000.0 × 10 ³ cells/μL Hct: 0.0–85.0%/RET: —
Analytical measurement range:	• WBC count/RBC count		
Precision:	• Hemoglobin/Platelets • Hematocrit/Reticulocytes • WBC count/RBC count		
Accuracy:	• Hemoglobin/Platelets • Hematocrit/Reticulocytes • WBC count/RBC count		
Interfering substances:	• WBC/RBC • Hemoglobin/Platelets • Hematocrit/Reticulocytes • Automated differential	unlysed RBCs, NRBCs, cryoglobulin, cryofibrinogen, platelet clumps, giant platelets, agglutinated WBCs/agglutinated RBCs, unlysed RBCs, elevated WBCs, more lipids >62.5 mg/dL (lipemia)/giant platelets, platelet clumps, microcytic RBCs, cryoglobulin, WBC or RBC fragments agglutinated RBCs, unlysed RBCs, elevated WBCs, more/— unlysed RBCs, NRBCs, cryoglobulin, cryofibrinogen, platelet clumps, giant platelets, agglutinated WBCs	unlysed RBCs, NRBCs, cryoglobulin, cryofibrinogen, platelet clumps, giant platelets, agglutinated WBCs/agglutinated RBCs, unlysed RBCs, elevated WBCs, more lipids >100.0 mg/dL (lipemia)/giant platelets, platelet clumps, microcytic RBCs, cryoglobulin, WBC or RBC fragments agglutinated RBCs, unlysed RBCs, elevated WBCs, more/— unlysed RBCs, NRBCs, cryoglobulin, cryofibrinogen, platelet clumps, giant platelets, agglutinated WBCs
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour	60/60	60 open vial, 55 closed vial/60 open vial, 55 closed vial	60 open vial, 55 cassette/60 open vial, 55 cassette
• Max. No. of slides processed per hour if stainer included	—	—	—
FDA-cleared or -approved sample container types (besides potassium EDTA)	none	none	none
Min. specimen volume open mode/Closed mode/Microsample capability	12 μL/—/yes	16.7 μL/16.7 μL/yes	16.7 μL/16.7 μL/yes
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online	results, flags, demographics/30,000	results, flags, demographics/30,000	results, flags, demographics/30,000
Analyzer performs delta checks	yes	yes	yes
Parameters for which flags may appear	flagging limits, system messages, editing of parameters	flagging limits, system messages, editing of parameters	flagging limits, system messages, editing of parameters
• Flagging client selectable	yes	yes	yes
Analyzer recognizes and holds test results	yes, for follow-up, confirmatory testing, and potential test rerun (parameters for flags to hold samples defined by client or vendor)	yes, for follow-up, confirmatory testing, and potential test rerun (parameters for flags to hold samples defined by client or vendor)	yes, for follow-up, confirmatory testing, and potential test rerun (parameters for flags to hold samples defined by client or vendor)
Scattergram display uses cell-specific color	yes	yes	yes
Histogram display uses color with thresholds	yes	yes	yes
LIS interface formats supported	proprietary (analyzer or vendor specific), ASTM 1394-91, ASTM 1238-95, IEEE MIB no (connects directly to LIS)	proprietary (analyzer or vendor specific), ASTM 1394-91, ASTM 1238-95, IEEE MIB no (connects directly to LIS)	proprietary (analyzer or vendor specific), ASTM 1394-91, ASTM 1238-95, IEEE MIB no (connects directly to LIS)
• Middleware interface	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders
• Information transferred to LIS via middleware or LIS interface	yes (also provides list of machine codes for each test and corresponding LOINC code)	yes (also provides list of machine codes for each test and corresponding LOINC code)	yes (also provides list of machine codes for each test and corresponding LOINC code)
Analyzer transmits LOINC codes for results to LIS or middleware	yes	yes	yes
Lab automation system or workcells to which analyzer has a direct interface	none	none	none
Barcode symbologies read on specimen tube	Codabar, Code 39, Code 128, Interleaved 2 of 5	Codabar, Code 39, Code 128, Interleaved 2 of 5	Codabar, Code 39, Code 128, Interleaved 2 of 5
• Analyzer allows barcode placement per CLSI standard Auto02-A2	no	no	—
No. of onboard reagents required for standard specimen analysis	2 (plus 1 outside instrument)	3	3
• Reagents ready to use/Reagent tracking method	yes/barcode reader	yes/barcode reader	yes/barcode reader
Time required for analyzer maintenance	30 min. daily	30 min. daily	30 min. daily
Onboard diagnostics for troubleshooting	no	no	no
• Manufacturer can perform diagnostics via remote access	no	no	no
Warranty provided/Cost of annual service contract (24 h/7 d)	one-year warranty/variable	one-year warranty/variable	one-year warranty/variable
Distinguishing analyzer features (supplied by company)	small aspiration: 12 μL for open tube, 5-part differential, ideal for infants and difficult draws; small footprint: requires only 3 reagents for full CBC/diff	small aspiration: 16.7 μL for open tube, 5-part differential, ideal for infants and difficult draws; small footprint: requires only 3 reagents for full CBC/diff	small aspiration: 16.7 μL for open tube, 5-part differential, ideal for infants and difficult draws; small footprint: requires only 3 reagents for full CBC/diff
<i>*based on August 2025 survey deadline</i>			
<i>Note: a dash in lieu of an answer means company did not answer question or question is not applicable</i>	†also marketed by Medline, McKesson, Henry Schein, Thermo Fisher Scientific	†also marketed by Medline, McKesson, Henry Schein, Thermo Fisher Scientific	†also marketed by Medline, McKesson, Henry Schein, Thermo Fisher Scientific

Part 4 of 10	Beckman Coulter Eric Pabon epabon@beckman.com Brea, CA 714-993-5321 www.beckmancoulter.com	Beckman Coulter Eric Pabon epabon@beckman.com Brea, CA 714-993-5321 www.beckmancoulter.com	CellaVision Scott Dunbar scott.dunbar@cellavision.com Durham, NC 415-810-5994 www.cellavision.com
Name of analyzer	DxH 690T Hematology Analyzer	DxH 900 Workcell Automated Hematology Solution	DC-1†
Analyzer application	diagnostic and research use	diagnostic and research use	diagnostic use
Dimensions of analyzer (H × W × D)/Analyzer footprint	40.6 × 29.75 × 32.6 in./9.09 sq. ft.	80.5 × 67 × 33 in. (includes slide maker stainer)/18.9 sq. ft.	14.6 × 11.0 × 15.4 in./1.18 sq. ft.
Country where analyzer was designed/Manufactured	U.S./U.S.	U.S./U.S.	Sweden/Sweden
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.* First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.* Foreign locations where company markets analyzer Human languages (other than English) supported by analyzer	2020/>530 2020/>410 worldwide (installed worldwide) Japanese, Chinese, French, Italian, German, Spanish, Portuguese, Swedish, Greek, Czech, Hungarian, others	2018/>1,200 2018/>2,450 worldwide (installed worldwide) Japanese, Chinese, French, Italian, German, Spanish, Portuguese, Swedish, Greek, Czech, Hungarian, others	2020/>700 2019/>1,200 worldwide (installed worldwide) German, Spanish, French, Italian, Portuguese, Japanese, simplified Chinese, traditional Chinese, Korean, Russian
Analyzer list price • Analyzer acquisition options Training included with purchase/Total time for basic training per operator • Follow-up training available	\$218,000 (slide maker stainer sold separately) purchase, lease yes/20 hours (at customer site and vendor office) yes (extra charge)	\$690,000 (slide maker stainer sold separately) purchase, lease yes/20 hours (at customer site and vendor office) yes (extra charge)	— (slide maker stainer sold separately) purchase yes/8 hours (at customer site and online) yes (no extra charge)
Parameters that analyzer tests and reports	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, %&# reticulocyte count, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, NRBC, WBC blood count analysis, body fluid analysis	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, %&# reticulocyte count, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, NRBC, WBC blood count analysis, body fluid analysis	%&# eosinophils, %&# immature granulocytes, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, PLT, NRBC
Types of testing FDA cleared or approved for analyzer Types of body fluids FDA cleared or approved for analysis on analyzer Analytical measurement range for body fluid	CSF, synovial fluid, serous fluid RBC count: 1,000–6,200,000 cells/mm ³ ; TNC count: 20–89,000 cells/mm ³	CSF, synovial fluid, serous fluid RBC count: 1,000–6,200,000 cells/mm ³ ; TNC count: 20–89,000 cells/mm ³	—
Precision for body fluid	RBC count: 10,000–15,000 cells/mm ³ ; TNC count: 50–2,000 cells/mm ³	RBC count: 10,000–15,000 cells/mm ³ ; TNC count: 50–2,000 cells/mm ³	—
Accuracy for body fluid	RBC count: 1,000–6,200,000 cells/mm ³ ; TNC count: 20–89,000 cells/mm ³	RBC count: 1,000–6,200,000 cells/mm ³ ; 20–89,000 cells/mm ³	—
Automated differential performed for body fluids	no	no	—
Tests available for research use only	body fluid mononuclear cell %, more	body fluid mononuclear cell %, more	—
Differential methods used	prepared sample transferred to multi-transducer module, with cells counted in an isometric sample stream; algorithm analysis separates WBC into 5 populations	prepared sample transferred to multi-transducer module, with cells counted in an isometric sample stream; algorithm analysis separates WBC into 5 populations	automated digital image analysis supported by artificial intelligence
Analytical measurement range:	• WBC count/RBC count		—
Precision:	• Hemoglobin/Platelets • Hematocrit/Reticulocytes • WBC count/RBC count		—
Accuracy:	• Hemoglobin/Platelets • Hematocrit/Reticulocytes • WBC count/RBC count		—
Interfering substances:	• WBC/RBC • Hemoglobin/Platelets • Hematocrit/Reticulocytes • Automated differential	NRBCs, giant platelets, platelet clumps, malarial parasites, precipitated elevated proteins, more/very high WBC count, high concentration of very large platelets, autoagglutination severe lipemia, heparin, certain unusual RBC abnormalities that resist lysing/giant platelets, platelet clumps, WBC and RBC fragments, electronic noise, very small RBCs very high WBC count, high concentration of very large platelets, more/erythrocyte inclusions stained by new methylene blue if sufficiently numerous within sample, more hypogranular granulocytes, agranular granulocytes, lyse-resistant RBCs, elevated triglycerides, more	— — — —
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour • Max. No. of slides processed per hour if stainer included FDA-cleared or -approved sample container types (besides potassium EDTA) Min. specimen volume open mode/Closed mode/Microsample capability	100/100 — none 165 µL/165 µL/yes	100–300, based on module/100–300, based on module 140 none 165 µL/165 µL/yes	— — — —
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online Analyzer performs delta checks Parameters for which flags may appear	results, including graphics, raw data files/100,000 yes delta checks, reference range flags, action limit flags, critical limit flags, suspect messages, more yes yes, for follow-up, confirmatory testing, and potential test rerun (parameters for flags to hold samples defined by client or vendor)	results, including graphics, raw data files/100,000 yes delta checks, reference range flags, action limit flags, critical limit flags, suspect messages, more yes yes, for follow-up, confirmatory testing, and potential test rerun (parameters for flags to hold samples defined by client or vendor)	patient ID, cell images, cell differential/— — — — —
Scattergram display uses cell-specific color Histogram display uses color with thresholds	yes yes	yes yes	— —
LIS interface formats supported	proprietary (analyzer or vendor specific), ASTM 1394-91, ASTM 1238-95, IEEE MIB yes (can use company's middleware)	proprietary (analyzer or vendor specific), ASTM 1394-91, ASTM 1238-95, IEEE MIB yes (can use company's middleware)	ASTM 1394-91
• Middleware interface • Information transferred to LIS via middleware or LIS interface	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, more	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, more	yes (can use Sysmex Caresphere Workflow Solution) numeric results, host query for patient demographics and orders
Analyzer transmits LOINC codes for results to LIS or middleware	yes (also provides list of machine codes for each test and corresponding LOINC code)	yes (also provides list of machine codes for each test and corresponding LOINC code)	no
Lab automation system or workcells to which analyzer has a direct interface	Beckman Coulter	Beckman Coulter	—
Barcode symbologies read on specimen tube • Analyzer allows barcode placement per CLSI standard Auto02-A2	Codabar, Code 39, Code 128, Interleaved 2 of 5, NW-7, ASTM yes	Codabar, Code 39, Code 128, Interleaved 2 of 5, NW-7, ASTM yes	Codabar, Data Matrix, Code 39, Code 128 — (supports QR codes)
No. of onboard reagents required for standard specimen analysis • Reagents ready to use/Reagent tracking method	4 yes/barcode reader	4 yes/barcode reader	— —
Time required for analyzer maintenance Onboard diagnostics for troubleshooting • Manufacturer can perform diagnostics via remote access	30 min. daily yes yes	30 min. daily yes yes	— yes yes
Warranty provided/Cost of annual service contract (24 h/7 d)	one-year warranty/variable	one-year warranty/variable	one-year warranty/—
Distinguishing analyzer features (supplied by company)	benchtop system minimizes slide reviews, maximizes lab staff time, provides cost savings for mid-volume labs	connects to DxH Slidemaker Stainer II, which prepares slides automatically on orders from LIS; labs can select criteria for blood film prep and define staining protocols	not a traditional cell counter but a digital cell morphology analyzer; presents high-quality images of preclassified cells
<i>*based on August 2025 survey deadline</i> <i>Note: a dash in lieu of an answer means company did not answer question or question is not applicable</i>			
<i>†also marketed by Sysmex</i>			

Part 5 of 10	CellaVision Scott Dunbar scott.dunbar@cellavision.com Durham, NC 415-810-5994 www.cellavision.com	Diatron Frank Matuszak frank.matuszak@diatron.com Budapest, Hungary www.diatron.com	Diatron Frank Matuszak frank.matuszak@diatron.com Budapest, Hungary www.diatron.com
Name of analyzer	DM-9600†	Abacus 3 CP††	Abacus 5††
Analyzer application	diagnostic use	diagnostic and research use	diagnostic and research use
Dimensions of analyzer (H × W × D)/Analyzer footprint	31.1 × 22.8 × 22 in./3.48 sq. ft.	14 × 12 × 19 in./1.58 sq. ft.	18 × 16 × 20 in./2.22 sq. ft.
Country where analyzer was designed/Manufactured	Sweden/Sweden	Hungary/Hungary	Hungary/Hungary
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.*	2015/>250	2013/56	2013/24
First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.*	2014/>800	2013/1,500	2009/3,410
Foreign locations where company markets analyzer	worldwide (installed worldwide)	worldwide (installed worldwide)	worldwide (installed worldwide)
Human languages (other than English) supported by analyzer	German, Spanish, French, Italian, Portuguese, Japanese, simplified Chinese, traditional Chinese, Korean, Russian	Spanish, Portuguese, French, Russian	Spanish, Protuguese, French, Chinese, Russian
Analyzer list price	— (slide maker stainer sold separately)	\$20,385	\$31,850
• Analyzer acquisition options	purchase	purchase	purchase
Training included with purchase/Total time for basic training per operator	yes/8 hours (at customer site and online)	yes/—	yes/—
• Follow-up training available	yes (no extra charge)	—	—
Parameters that analyzer tests and reports	%&# eosinophils, %&# immature granulocytes, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, PLT, NRBC	%&# lymphocytes, %&# monocytes, %&# neutrophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC
Types of testing FDA cleared or approved for analyzer	—	blood count analysis	blood count analysis
Types of body fluids FDA cleared or approved for analysis on analyzer	CSF, peritoneal/ascites, pericardial fluid, pleural fluid, synovial fluid (differential only)	—	—
Analytical measurement range for body fluid	—	—	—
Precision for body fluid	—	—	—
Accuracy for body fluid	—	—	—
Automated differential performed for body fluids	yes (5-part differential)	—	—
Tests available for research use only	none	—	—
Differential methods used	automated digital image analysis supported by artificial intelligence	impedance technology	laser light scatter technology
Analytical measurement range:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	WBC: 0.95–83.45 × 10 ³ /μL/RBC: 0.44–7.74 × 10 ⁶ /μL Hb: 1.4–23.7 g/dL/PLT: 11–975 × 10 ³ /μL	WBC: 0.2–100 × 10 ³ /μL/RBC: 0.36–7.19 × 10 ⁶ /μL Hb: 1.1–22.2 g/dL/PLT: 15–2,000 × 10 ³ /μL
Precision:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	—	—
Accuracy:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	WBC: <2.7%/RBC: <1.7% Hb: <2.0%/PLT: <6.0% Hct: <1.7%/RET: —	WBC: <2.7%/RBC: <1.7% Hb: <2.0%/PLT: <6.0% Hct: <1.7%/RET: —
Interfering substances:	• WBC/RBC • Hemoglobin/Platelets • Hematocrit/Reticulocytes • Automated differential	>5% NRBC, platelet clumps, large platelets/WBC >50 × 10 ³ /μL WBC >50 × 10 ³ /μL, lipids >270 mg/dL/platelet clumps, large platelets WBC >50 × 10 ³ /μL— >5% NRBC, platelet clumps, large platelets	>5% NRBC, platelet clumps, large platelets/WBC >75 × 10 ³ /μL WBC >75 × 10 ³ /μL, lipids >280 mg/dL/platelet clumps, large platelets WBC >75 × 10 ³ /μL— >5% NRBC, platelet clumps, large platelets
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour	—	60/60	60/60
• Max. No. of slides processed per hour if stainer included	—	—	—
FDA-cleared or -approved sample container types (besides potassium EDTA)	—	none	none
Min. specimen volume open mode/Closed mode/Microsample capability	—	100 μL/100 μL/yes	110 μL/110 μL/yes
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online	patient ID, cell images, cell differential/—	demographics, test results, histograms, flags and alerts/10,000	demographics, test results, histograms, scattergrams, flags and alerts/100,000
Analyzer performs delta checks	—	no	no
Parameters for which flags may appear	—	pathologic flags, out of reference values, reagent and instrument alerts	pathologic flags (immature granulocytes, atypical lymphocytes), out of reference values, reagent and instrument alerts
• Flagging client selectable	—	no	no
Analyzer recognizes and holds test results	—	yes, for follow-up (parameters for flags to hold samples defined by vendor)	yes, for follow-up (parameters for flags to hold samples defined by vendor)
Scattergram display uses cell-specific color	—	—	yes
Histogram display uses color with thresholds	—	yes	yes
LIS interface formats supported	ASTM 1394-91	HL7 version 2, Diatron protocol version 3.1	HL7 version 2, Diatron protocol version 3.1
• Middleware interface • Information transferred to LIS via middleware or LIS interface	yes (can use Sysmex Caresphere Workflow Solution) numeric results, host query for patient demographics and orders	no (connects directly to LIS) numeric results, flagged results, histograms, patient demographics	no (connects directly to LIS) numeric results, flagged results, histograms, scatterplots, patient demographics
Analyzer transmits LOINC codes for results to LIS or middleware	no	no	no
Lab automation system or workcells to which analyzer has a direct interface	—	none	none
Barcode symbologies read on specimen tube	Codabar, Data Matrix, Code 39, Code 128	Codabar, Code 39, Code 128, Interleaved 2 of 5	Codabar, Code 39, Code 128, Interleaved 2 of 5
• Analyzer allows barcode placement per CLSI standard Auto02-A2	— (supports QR codes)	no	yes
No. of onboard reagents required for standard specimen analysis	—	3	3
• Reagents ready to use/Reagent tracking method	—	yes/hardware key	yes/hardware key
Time required for analyzer maintenance	—	10 min. daily; 15 min. weekly; 10 min. monthly	10 min. daily; 15 min. weekly; 10 min. monthly
Onboard diagnostics for troubleshooting	yes	yes	yes
• Manufacturer can perform diagnostics via remote access	yes	no	no
Warranty provided/Cost of annual service contract (24 h/7 d)	one-year warranty/—	one-year warranty/—	one-year warranty/—
Distinguishing analyzer features (supplied by company)	not a traditional cell counter but a digital cell morphology analyzer; presents high-quality images of preclassified cells	reliable 3-part differential analyzer with 2 sampling modes (closed and open tubes); USB and barcode option to load QC target values; reading QR codes for reference input data; comprehensive QC software package	modular system (autoloader); high accuracy blood sampling (shear valve)
<i>*based on August 2025 survey deadline</i>			
<i>Note: a dash in lieu of an answer means company did not answer question or question is not applicable</i>			
†also marketed by Sysmex		††all information listed was provided to CAP TODAY in 2024; company did not provide updated information by 2025 entry deadline	
		††all information listed was provided to CAP TODAY in 2024; company did not provide updated information by 2025 entry deadline	

Part 6 of 10	HORIBA Susan Behnke susan.behnke@horiba.com Irvine, CA 888-903-5001 www.horiba.com	HORIBA Susan Behnke susan.behnke@horiba.com Irvine, CA 888-903-5001 www.horiba.com	HORIBA Susan Behnke susan.behnke@horiba.com Irvine, CA 888-903-5001 www.horiba.com
Name of analyzer	ABX Micros 60	ABX Micros ES60	ABX Pentra 60C+
Analyzer application	diagnostic use	diagnostic use	diagnostic use
Dimensions of analyzer (H × W × D)/Analyzer footprint	16.5 × 14.2 × 12.6 in./1.01 sq. ft.	16.9 × 14.2 × 14.2 in./1.4 sq. ft.	20.3 × 17.5 × 19 in./2.31 sq. ft.
Country where analyzer was designed/Manufactured	—/France	—/France	—/France
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.*	2002/>2,000	2014/>2,000	2000/400
First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.*	—/>18,000	—/>18,000	—/>2,000
Foreign locations where company markets analyzer	South America, Europe, Asia, Africa, Middle East	South America, Europe, Asia, Africa, Middle East	South America, Europe, Asia, Africa, Middle East
Human languages (other than English) supported by analyzer	—	—	Spanish, Portuguese, French, German, Polish, Russian, Chinese, Japanese
Analyzer list price	— (slide maker stainer sold separately)	— (slide maker stainer sold separately)	— (slide maker stainer sold separately)
• Analyzer acquisition options	purchase, trade in, lease, reagent rental agreement	purchase, trade in, lease, reagent rental agreement	purchase, trade in, lease, reagent rental agreement
Training included with purchase/Total time for basic training per operator	yes/— (at customer site)	yes/— (at customer site)	yes/— (at customer site)
• Follow-up training available	yes (no extra charge)	yes (no extra charge)	yes (no extra charge)
Parameters that analyzer tests and reports	%&# lymphocytes, %&# monocytes, %&# granulocytes, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC	%&# lymphocytes, %&# monocytes, %&# granulocytes, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC
Types of testing FDA cleared or approved for analyzer	blood count analysis	blood count analysis	blood count analysis
Types of body fluids FDA cleared or approved for analysis on analyzer	—	—	—
Analytical measurement range for body fluid	—	—	—
Precision for body fluid	—	—	—
Accuracy for body fluid	—	—	—
Automated differential performed for body fluids	—	—	—
Tests available for research use only	—	—	PDW, PCT, RDW-SD, ALY#, ALY%, LIC#, LIC%
Differential methods used	impedance, specific lyse action	impedance, specific lyse action	impedance with hydrofocus cytometry and cytochemistry, flow cytometry double hydrodynamic sequential system
Analytical measurement range:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	WBC: 0–100 × 10 ³ /mm ³ /RBC: 0–8 × 10 ⁶ /mm ³ Hb: 0–26 g/dL/PLT: 0–4,000 × 10 ³ /mm ³ Hct: 0–80%/RET: —	WBC: 0–120 × 10 ³ /mm ³ /RBC: 0–8 × 10 ⁶ /mm ³ Hb: 0–24 g/dL/PLT: 0–2,800 × 10 ³ /mm ³ Hct: 0–67%/RET: —
Precision:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	WBC: <2.5% CV/RBC: <2.0% CV Hb: <1.5% CV/PLT: <5.0% CV Hct: <2.0% CV/RET: —	WBC: <2.0% CV/RBC: <2.0% CV Hb: <1.0% CV/PLT: <5.0% CV Hct: <2.0% CV/RET: —
Accuracy:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	— — —	— — —
Interfering substances:	• WBC/RBC • Hemoglobin/Platelets • Hematocrit/Reticulocytes • Automated differential	multiple myeloma, hemolysis, platelet agglutination, chemotherapy, cryoglobulins/agglutinated RBCs, cold agglutinins elevated lipemia, increased turbidity/RBC agglutination, chemotherapy, hemolysis, platelet agglutination RBC agglutination/— —	multiple myeloma, hemolysis, platelet agglutination, chemotherapy, cryoglobulins/agglutinated RBCs, cold agglutinins elevated lipemia, increased turbidity/RBC agglutination, chemotherapy, hemolysis, platelet agglutination RBC agglutination/— —
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour	—/60	—/60	—/60
• Max. No. of slides processed per hour if stainer included	—	—	—
FDA-cleared or -approved sample container types (besides potassium EDTA)	—	—	—
Min. specimen volume open mode/Closed mode/Microsample capability	10 µL/10 µL/yes	10 µL/10 µL/yes	CBC: 30 µL; CBC with differential: 53 µL/—/yes
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online	—	—	—
Analyzer performs delta checks	—	no	no
Parameters for which flags may appear	—	—	—
• Flagging client selectable	combination of client and vendor selectable	combination of client and vendor selectable	combination of client and vendor selectable
Analyzer recognizes and holds test results	yes, for potential test rerun (parameters for flags to hold samples defined by client or vendor)	yes, for potential test rerun (parameters for flags to hold samples defined by client or vendor)	yes, for potential test rerun (parameters for flags to hold samples defined by client or vendor)
Scattergram display uses cell-specific color	no	no	yes
Histogram display uses color with thresholds	yes	yes	yes
LIS interface formats supported	proprietary (analyzer or vendor specific), HL7 version 2, HL7 version 3	proprietary (analyzer or vendor specific), ASTM 1394-91, ASTM 1238-95, ASTM 1381, HL7 version 2, HL7 version 3	proprietary (analyzer or vendor specific), ASTM 1394-91, ASTM 1238-95, ASTM 1381, HL7 version 2, HL7 version 3, IEEE MIB
• Middleware interface	yes (can use company's middleware)	yes	no (connects directly to LIS)
• Information transferred to LIS via middleware or LIS interface	numeric results, flagged results, histograms, patient demographics, patient orders, host query for patient demographics and orders	numeric results, flagged results, histograms, patient demographics, host query for patient demographics and orders	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, host query for patient demographics and orders
Analyzer transmits LOINC codes for results to LIS or middleware	no	—	—
Lab automation system or workcells to which analyzer has a direct interface	none	none	—
Barcode symbologies read on specimen tube	—	Codabar, Data Matrix, Code 39, Code 128	Codabar, Data Matrix, Code 39, Code 128
• Analyzer allows barcode placement per CLSI standard Auto02-A2	yes	yes	yes
No. of onboard reagents required for standard specimen analysis	3	3	4 (plus 1 cleaner)
• Reagents ready to use/Reagent tracking method	yes/barcode reader	yes/barcode reader	yes/barcode reader
Time required for analyzer maintenance	<10 min. daily; 10 min. weekly	10 min. weekly	10 min. weekly
Onboard diagnostics for troubleshooting	yes	yes	yes
• Manufacturer can perform diagnostics via remote access	yes	yes	yes
Warranty provided/Cost of annual service contract (24 h/7 d)	one-year warranty/—	one-year warranty/—	one-year warranty/—
Distinguishing analyzer features (supplied by company)	platelet analytical measurement range; sample tube holder with 16 tube sizes	real-time instrument status with help messages; sample tube holder with 16 tube sizes	impedance with hydrofocus cytometry and cytochemistry for differential stains, WBC nuclei, granules, and membranes; measures actual cell volume; measures cell content; sample tube holder with 16 tube sizes; multidistribution sampling system technology; sample dispensed into pretreated analysis chamber for highly reproducible results; tangential flow reagent dilution for optimal sample mixing
*based on August 2025 survey deadline			
Note: a dash in lieu of an answer means company did not answer question or question is not applicable			

Part 7 of 10	HORIBA Susan Behnke susan.behnke@horiba.com Irvine, CA 888-903-5001 www.horiba.com	HORIBA Susan Behnke susan.behnke@horiba.com Irvine, CA 888-903-5001 www.horiba.com	PixCell Medical Carmit Shpalter info@pixcell-medical.com Davie, FL 754-236-9694 www.pixcell-medical.com
Name of analyzer	ABX Pentra XL80	Yumizen H2500	HemoScreen [†]
Analyzer application	diagnostic use	diagnostic use	diagnostic use
Dimensions of analyzer (H × W × D)/Analyzer footprint	21.5 × 32.3 × 22.4 in./3.35 sq. ft.	28.7 × 34.3 × 26.4 in./6.3 sq. ft.	11.8 × 6.9 × 10.2 in./0.56 sq. ft.
Country where analyzer was designed/Manufactured	—/France	—/France	Israel/Israel
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.*	2003/400	2024/10	2018/—
First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.*	—/>2,000	2016/>1,500	2016/—
Foreign locations where company markets analyzer	South America, Europe, Asia, Africa, Middle East	South America, Europe, Asia, Africa, Middle East	Europe, Asia (installed in Europe, Asia)
Human languages (other than English) supported by analyzer	Spanish, Portuguese, French, German, Polish, Russian, Chinese, Japanese	Spanish, Portuguese, French, German, Polish, Russian, Chinese, Japanese	—
Analyzer list price	— (slide maker stainer sold separately)	— (slide maker stainer sold separately)	—
• Analyzer acquisition options	purchase, trade in, lease, reagent rental agreement	purchase, trade in, lease, reagent rental agreement	purchase, reagent rental agreement
Training included with purchase/Total time for basic training per operator	yes/— (at customer site)	yes/— (at customer site)	yes/1 hour (at customer site)
• Follow-up training available	yes (no extra charge)	yes (no extra charge)	—
Parameters that analyzer tests and reports	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC	%&# eosinophils, %&# immature granulocytes, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, %&# reticulocyte count, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, NRBC, WBC	%&# eosinophils, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC
Types of testing FDA cleared or approved for analyzer	blood count analysis	blood count analysis, body fluid analysis, reticulocytes	blood count analysis
Types of body fluids FDA cleared or approved for analysis on analyzer	—	CSF, synovial fluid, serous fluid	whole blood
Analytical measurement range for body fluid	—	—	—
Precision for body fluid	—	—	—
Accuracy for body fluid	—	—	—
Automated differential performed for body fluids	—	yes (3-part differential)	yes (5-part differential)
Tests available for research use only	PDW, PCT, RDW-SD, ALY#, ALY%, LIC#, LIC%	PDW, PCT, MIC%, MAC%, IML#, IML%, IMM#, PIC, MFI, TNC BAS, TNC Hb, BF WBC DIF, BF WBC Hb	—
Differential methods used	impedance with hydrofocus cytometry and cytochemistry, flow cytometry double hydrodynamic sequential system	impedance, absorbancy, specific lysing, flow cytometry double hydrodynamic sequential system	digital microscopy and computer-vision algorithms
Analytical measurement range:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	WBC: 0–120 × 10 ³ /μL/RBC: 0–8 × 10 ³ /μL Hb: 0–24 g/dL/PLT: 0–2,800 × 10 ³ /μL Hct: 0–67%/RET: —	WBC: 0.25–95.0 × 10 ³ /μL/RBC: 1.0–8.8 × 10 ⁶ /μL Hb: 3.0–25 g/dL/PLT: 7–988 × 10 ³ /μL Hct: 9.0–78.0%/RET: —
Precision:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	WBC: <2.0% CV/RBC: <2.0% CV Hb: <1.0% CV/PLT: <5.0% CV Hct: <2.0% CV/RET: —	WBC: 4.0%/RBC: 1.5% Hb: 1.6%/PLT: 3.5% Hct: 1.6%/RET: —
Accuracy:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes	— — —	— — —
Interfering substances:	• WBC/RBC • Hemoglobin/Platelets • Hematocrit/Reticulocytes • Automated differential	multiple myeloma, hemolysis, platelet agglutination, chemotherapy, cryoglobulins/agglutinated RBCs, cold agglutinins elevated lipemia, increased turbidity/RBC agglutination, chemotherapy, hemolysis, platelet agglutination RBC agglutination/parasites (malaria, babesia), platelet aggregates, hemolysis —	no significant interference up to 50 mg/dL for bilirubin, 729 mg/dL for triglycerides/no significant interference up to 50 mg/dL for bilirubin, 729 mg/dL for triglycerides no significant interference up to 50 mg/dL for bilirubin, 729 mg/dL for triglycerides/no significant interference up to 30 mg/dL for bilirubin, 729 mg/dL for triglycerides no significant interference up to 50 mg/dL for bilirubin, 729 mg/dL for triglycerides/— —
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour	—/80	—/120	20/10
• Max. No. of slides processed per hour if stainer included	—	—	—
FDA-cleared or -approved sample container types (besides potassium EDTA)	sodium citrate	sodium citrate	—
Min. specimen volume open mode/Closed mode/Microsample capability	CBC: 30 μL; CBC with differential: 53 μL/CBC: 30 μL; CBC with differential: 53 μL/yes	110 μL/110 μL/yes	40 μL/40 μL/yes
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online	—	—	none/—
Analyzer performs delta checks	no	yes	no
Parameters for which flags may appear	—	—	all CBC and differential parameters, pathologic flags, range flags, measurement condition flags, parameter warning, error flags
• Flagging client selectable	combination of client and vendor selectable	combination of client and vendor selectable	no
Analyzer recognizes and holds test results	yes, for follow-up and potential test rerun (parameters for flags to hold samples defined by client or vendor)	yes, for follow-up, confirmatory testing, and potential test rerun (parameters for flags to hold samples defined by client or vendor)	no
Scattergram display uses cell-specific color	yes	yes	no
Histogram display uses color with thresholds	yes	yes	no
LIS interface formats supported	proprietary (analyzer or vendor specific), ASTM 1394-91, ASTM 1238-95, ASTM 1381, HL7 version 2, HL7 version 3, IEEE MIB	proprietary (analyzer or vendor specific), ASTM 1394-91, ASTM 1238-95, ASTM 1381, HL7 version 2, HL7 version 3, IEEE MIB	HL7 version 2, HL7 version 3, POCT-1A
• Middleware interface	no (connects directly to LIS)	yes	yes (can use Radiometer Aqure, Synlab MediPOC, Siemens Healthineers POCcelerator, Telcor, Abbott RALS, RelayMed, Orchard, SCC SoftLab, others)
• Information transferred to LIS via middleware or LIS interface	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, host query for patient demographics and orders	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, host query for patient demographics and orders	numeric results, flagged results
Analyzer transmits LOINC codes for results to LIS or middleware	—	no	yes
Lab automation system or workcells to which analyzer has a direct interface	none	Horiba	Abbott Diagnostics, Telcor
Barcode symbologies read on specimen tube	Codabar, Data Matrix, Code 39, Code 128	Codabar, Data Matrix, Code 39, Code 128	Codabar, Code 39, Code 128
• Analyzer allows barcode placement per CLSI standard Auto02-A2	yes	—	— (supports QR codes)
No. of onboard reagents required for standard specimen analysis	4 (plus 1 cleaner)	5 (plus 1 cleaner)	—
• Reagents ready to use/Reagent tracking method	yes/barcode reader	yes/barcode reader	—/barcode reader
Time required for analyzer maintenance	—	—	—
Onboard diagnostics for troubleshooting	yes (diagnostic programs limited to software problems)	yes	yes
• Manufacturer can perform diagnostics via remote access	yes	yes	yes
Warranty provided/Cost of annual service contract (24 h/7 d)	one-year warranty/—	one-year warranty/—	one-year warranty/—
Distinguishing analyzer features (supplied by company)	sample dispensed into pretreated analysis chamber for highly reproducible results; tangential flow reagent dilution for optimal sample mixing; customized dilution ration—samples are automatically flagged, resampled, then diluted to provide a result within an extended linearity range; impedance with hydrofocus cytometry and cytochemistry for differential stains, WBC nuclei, granules, and membranes; measures actual cell volume; measures cell content	platelet histogram contains 256 channels between 2 and 30 fL; mobile threshold moves according to RBC microcytic population in platelet analysis area and looks for the valley; extensive matrix—WBC and NRBC with associated flagging	cartridge-based, 5-part differential—CBC analyzer FDA cleared for POC use; easy to use—no calibration, reagent handling, or routine maintenance required; lab-quality results within 5 minutes
<i>*based on August 2025 survey deadline</i>			
<i>Note: a dash in lieu of an answer means company did not answer question or question is not applicable</i>			<i>[†]also marketed by Thermo Fisher Scientific, Henry Schein, Medline</i>

Part 8 of 10	Scopio Labs Lianne Trantz lianne.trantz@scopiolabs.com Tel Aviv, Israel +972 50-272-7929 www.scopiolabs.com	Sysmex Corp. Madelaine Dintelman communications@sysmex.com Lincolnshire, IL 888-879-7639 www.sysmex.com	Sysmex Corp. Madelaine Dintelman communications@sysmex.com Lincolnshire, IL 888-879-7639 www.sysmex.com
Name of analyzer	X100/X100HT with Full-Field Peripheral Blood Smear Application†	pocH-100†	XN-330, XN-430, XN-530†
Analyzer application	diagnostic and research use	diagnostic use	diagnostic use
Dimensions of analyzer (H × W × D)/Analyzer footprint	37.5 × 36.2 × 32 in./—	10.1 × 7.3 × 13.8 in./—	XN-530: 17.7 × 17.7 × 26 in./varies by configuration
Country where analyzer was designed/Manufactured	Israel/Israel	Japan/Japan	Japan/Japan
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.*	2022/—	2004/>2,000	2017/>1,500
First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.*	2022/—	2003/>5,000	2015/—
Foreign locations where company markets analyzer	Canada, U.K., Ireland, Europe, Israel (installed in Canada, U.K., Europe, Israel)	—	—
Human languages (other than English) supported by analyzer	—	—	—
Analyzer list price	— (slide maker stainer sold separately)	\$21,003.84 (slide maker stainer sold separately)	— (slide maker stainer sold separately)
• Analyzer acquisition options	purchase, lease	purchase, trade in, lease, cost per reportable contract	purchase, trade in, lease, cost per reportable contract
Training included with purchase/Total time for basic training per operator	yes/3 hours (at customer site)	yes/— (at customer site or vendor office; virtual, instructor-led training)	yes/— (at customer site or vendor office; virtual, instructor-led training)
• Follow-up training available	yes (extra charge)	yes (no extra charge)	yes (no extra charge)
Parameters that analyzer tests and reports	%&# eosinophils, %&# immature granulocytes, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, %&# reticulocyte count, PLT, RBC, NRBC, WBC	%&# lymphocytes, %&# neutrophils, Hb, Hct, MCHC, MCV, PLT, RBC, WBC	%&# eosinophils, %&# immature granulocytes, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC
Types of testing FDA cleared or approved for analyzer	—	—	blood count analysis, body fluid analysis
Types of body fluids FDA cleared or approved for analysis on analyzer	—	—	—
Analytical measurement range for body fluid	—	—	—
Precision for body fluid	—	—	—
Accuracy for body fluid	—	—	—
Automated differential performed for body fluids	—	—	—
Tests available for research use only	—	—	—
Differential methods used	—	direct current	fluorescent flow cytometry
Analytical measurement range:	• WBC count/RBC count	WBC: 1.0–99.9 × 10 ³ /μL/RBC: 0.3–7.0 × 10 ⁶ /μL	WBC: 0.04–440.00 × 10 ³ /μL/RBC: 0.02–8.60 × 10 ⁶ /μL
	• Hemoglobin/Platelets	Hb: 0.1–25.0 g/dL/PLT: 10–999 × 10 ³ /μL	Hb: 0.1–26.0 g/dL/PLT: 2–5,000 × 10 ³ /μL
Precision:	• Hematocrit/Reticulocytes	Hct: 10–60%/RET: —	Hct: 0.2–74.5%/RET: —
	• WBC count/RBC count	WBC: ≤3.5%/RBC: ≤2.0%	WBC: <3.0%/RBC: <1.5%
	• Hemoglobin/Platelets	Hb: ≤1.5%/PLT: ≤6.0%	Hb: <1.0%/PLT: <4.0%
	• Hematocrit/Reticulocytes	Hct: ≤2.0%/RET: —	Hct: <1.5%/RET: —
Accuracy:	• WBC count/RBC count	—	—
	• Hemoglobin/Platelets	—	—
	• Hematocrit/Reticulocytes	—	—
Interfering substances:	• WBC/RBC	lyse-resistant RBCs, cold agglutinins, cryoglobulins, platelet aggregation, NRBCs/cold agglutinins, severe microcytosis, fragmented RBCs	no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 996 mg/dL for hemolysis, 30.320 optical density for intralipid, 2,880 OD for chyle/ no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 996 mg/dL for hemolysis, 30.320 optical density for intralipid, 2,880 OD for chyle
	• Hemoglobin/Platelets	severe lipemia, abnormal protein, leukocytosis (>100,000/μL)/platelet aggregation, giant platelets, microcytic RBCs, fragmented RBCs	no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 199 mg/dL for hemolysis/ no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 996 mg/dL for hemolysis, 30.320 optical density for intralipid, 2,880 OD for chyle
	• Hematocrit/Reticulocytes	cold agglutinins, severe microcytosis, fragmented RBCs/—	no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 996 mg/dL for hemolysis, 30.320 optical density for intralipid, 2,880 OD for chyle/—
	• Automated differential	—	—
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour	—	30/30	60/60
• Max. No. of slides processed per hour if stainer included	—	—	—
FDA-cleared or -approved sample container types (besides potassium EDTA)	—	none	none
Min. specimen volume open mode/Closed mode/Microsample capability	—	15 μL/15 μL/yes	25 μL/25 μL/yes
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online	none/—	flags, histograms/100 samples	demographics, results, flags/10,000 results
Analyzer performs delta checks	—	yes	yes
Parameters for which flags may appear	customizable to lab procedures and clinical findings (e.g. presence of plasma cells)	flagging system suggests sample error for WBC, RBC, platelet parameters	flags for all reportable parameters deemed abnormal per lab's protocol, more
• Flagging client selectable	yes	no	combination of client and vendor selectable
Analyzer recognizes and holds test results	yes, for potential test rerun (parameters for flags to hold samples defined by vendor)	no	yes, for potential test rerun
Scattergram display uses cell-specific color	—	no	yes
Histogram display uses color with thresholds	—	yes	yes
LIS interface formats supported	HL7 version 2, HL7 version 3	ASTM 1381, ASTM 1394-97, RS-232C	ASTM 1381, ASTM 1394-97
• Middleware interface	yes (can use Remisol, ADM, Data Innovations)	yes (can use company's middleware or Data Innovations)	yes (can use company's middleware or Data Innovations)
• Information transferred to LIS via middleware or LIS interface	numeric results, flagged results, patient demographics, host query for patient demographics and orders	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, host query for patient demographics and orders	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, host query for patient demographics and orders
Analyzer transmits LOINC codes for results to LIS or middleware	yes (also provides list of machine codes for each test and corresponding LOINC code)	no (provides list of machine codes for each test and corresponding LOINC code)	yes
Lab automation system or workcells to which analyzer has a direct interface	available but not operational (to Beckman Coulter)	none	none
Barcode symbologies read on specimen tube	—	Code 39, Code 128, ASTM, ITF, NW-7, JAN-8, JAN-13	Codabar, Code 39, Code 128, ITF, NW-7, ISBT 128, JAN/EAN/UPC
• Analyzer allows barcode placement per CLSI standard Auto02-A2	—	no	yes
No. of onboard reagents required for standard specimen analysis	—	2	4
• Reagents ready to use/Reagent tracking method	—	yes/barcode reader	yes/RFID, barcode reader
Time required for analyzer maintenance	—	<2 min. daily; <2 min. weekly; <2 min. monthly	2 min. daily; 15 min. weekly
Onboard diagnostics for troubleshooting	—	yes	yes
• Manufacturer can perform diagnostics via remote access	yes	yes	yes
Warranty provided/Cost of annual service contract (24 h/7 d)	—	one-year warranty/—	one-year warranty/—
Distinguishing analyzer features (supplied by company)	full-field digital imaging of all clinical areas of interest in the sample, from monolayer to feathered edge; built-in remote capabilities through secure hospital network for referrals, consultations, and multisite remote analysis	hydrodynamic focusing, automatic floating discriminators; ISBT-compliant, data-masking software for blood donor centers; can link directly to EMR	6-part WBC differential including immature granulocyte for smaller labs; BeyondCare Quality Monitor for Hematology standard on all models
<i>*based on August 2025 survey deadline</i>			
<i>Note: a dash in lieu of an answer means company did not answer question or question is not applicable</i>	<i>†also marketed by Beckman Coulter, Siemens Healthineers</i>	<i>†also marketed by McKesson, Henry Schein</i>	<i>†also marketed by McKesson, Henry Schein</i>

All information is supplied by the companies listed. The tabulation does not represent an endorsement by the CAP.

Part 9 of 10	Sysmex Corp. Madelaine Dintelman communications@sysmex.com Lincolnshire, IL 888-879-7639 www.sysmex.com	Sysmex Corp. Jill Crist communications@sysmex.com Lincolnshire, IL 888-879-7639 www.sysmex.com	Sysmex Corp. Madelaine Dintelman communications@sysmex.com Lincolnshire, IL 888-879-7639 www.sysmex.com
Name of analyzer	XN-350, XN-450, XN-550†	XN Series† (XN-1000, XN-2000, XN-3100, XN-9100)	XQ-320†
Analyzer application	diagnostic use	diagnostic use	diagnostic use
Dimensions of analyzer (H × W × D)/Analyzer footprint	XN-550: 17.7 × 17.7 × 26 in./varies by configuration	XN-10 module: 33.7 × 25.4 × 29.7 in./varies by configuration	17 × 14 × 17.5 in./—
Country where analyzer was designed/Manufactured	Japan/Japan	Japan/Japan	Japan/Japan
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.*	2017/>2,500	2012/>6,000	2025/—
First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.*	2015/—	2011/—	—
Foreign locations where company markets analyzer	—	—	—
Human languages (other than English) supported by analyzer	—	—	—
Analyzer list price	— (slide maker stainer sold separately)	\$202,667 (slide maker stainer sold separately)	\$33,998.80 (slide maker stainer sold separately)
• Analyzer acquisition options	purchase, trade in, lease, cost per reportable contract	purchase, trade in, lease, cost per reportable contract	purchase, trade in, lease
Training included with purchase/Total time for basic training per operator	yes/— (at customer site or vendor office; virtual, instructor-led training)	yes/— (at customer site or vendor office; virtual, instructor-led training)	yes/— (at customer site or vendor office; e-learning curriculum)
• Follow-up training available	yes (no extra charge)	yes (no extra charge)	yes (no extra charge)
Parameters that analyzer tests and reports	%&# eosinophils, %&# immature granulocytes, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, %&# reticulocyte count, Hb, Hct, MCH, more	%&# eosinophils, %&# immature granulocytes, %&# lymphocytes, %&# monocytes, %&# neutrophils, %&# basophils, %&# reticulocyte count, Hb, Hct, MCH, more	%&# lymphocytes, %&# neutrophils, Hb, Hct, MCH, MCHC, MCV, PLT, RBC, WBC
Types of testing FDA cleared or approved for analyzer	blood count analysis, body fluid analysis	blood count analysis, body fluid analysis	—
Types of body fluids FDA cleared or approved for analysis on analyzer	CSF, peritoneal/ascites, pleural fluid, synovial fluid (on XN-L 50 series only)	CSF, peritoneal/ascites, pleural fluid, synovial fluid	—
Analytical measurement range for body fluid	WBC count: 0.004–10.000 × 10 ³ /μL; RBC count: 0.002–5.000 × 10 ³ /μL; TNC count: 0.004–10.000 × 10 ³ /μL	WBC count: 0.003–10.000 × 10 ³ /μL; RBC count: 0.002–5.000 × 10 ⁶ /μL; TNC count: 0.003–10.000 × 10 ³ /μL	—
Precision for body fluid	WBC count: ≤30.0% (0.005–0.015 × 10 ³ /μL), ≤20.0% (0.016–0.030 × 10 ³ /μL), ≤15.0% (0.031–0.050 × 10 ³ /μL); RBC count: ≤40.0% or ≤ 0.007 × 10 ⁶ /μL (0.003–0.050 × 10 ⁶ /μL) max.–min.; TNC count: ≤30.0% (0.005–0.015 × 10 ³ /μL), ≤20.0% (0.016–0.030 × 10 ³ /μL), ≤15.0% (0.031–0.050 × 10 ³ /μL)	WBC count: ≤ 10.0% (0.031–0.050 × 10 ³ /μL); RBC count: 40.0% (0.003–0.050 × 10 ⁶ /μL); TNC count: ≤ 10.0% (0.031–0.050 × 10 ³ /μL)	—
Accuracy for body fluid	WBC count: r = 0.9 or more and slope within 1±0.3; RBC count: r = 0.8 or more and slope within 1±0.3	WBC count: r = 0.9 or more; RBC count: r = 0.8 or more; TNC count: r = 0.9 or more	—
Automated differential performed for body fluids	yes (2-part differential)	yes (2-part differential)	—
Tests available for research use only	—	—	—
Differential methods used	fluorescent flow cytometry	fluorescent flow cytometry	direct current
Analytical measurement range:	WBC: 0.04–440.00 × 10 ³ /μL/RBC: 0.02–8.60 × 10 ⁶ /μL Hb: 0.1–26.0 g/dL/PLT: 2–5,000 × 10 ³ /μL Hct: 0.2–74.5%/RET: —	WBC: 0.03–440,000 × 10 ³ /μL/RBC: 0.01–8.60 × 10 ⁶ /μL Hb: 0.1–26.0 g/dL/PLT: 2–5,000 × 10 ³ /μL Hct: 0.1–75.0%/RET: 0.00–30.00%	WBC: 0.20–99.9 × 10 ³ /μL/RBC: 0.01–7.0 × 10 ⁶ /μL Hb: 0.1–25.0 g/dL/PLT: 5–999 × 10 ³ /μL Hct: 0.2–60.0%/—
Precision:	WBC: <3.0%/RBC: <1.5% Hb: <1.0%/PLT: <4.0% Hct: <1.5%/RET: within ±20% or ±0.30	WBC: ≤3%/RBC: ≤1.5% Hb: ≤1.0%/PLT: ≤4% Hct: ≤1.5%/RET: ≤15%	WBC: <3.5%/RBC: <2.0% Hb: <1.5%/PLT: <6.0% Hct: <2.0%/—
Accuracy:	—	WBC: within ±3% or ±0.20 × 10 ³ /μL/RBC: within ±2% or ±0.03 × 10 ⁶ /μL Hb: within ±2% or ±0.2 g/dL/PLT: within ±5% or ±10 × 10 ³ /μL	WBC: within ±3% or ±0.20 × 10 ³ /μL/RBC: within ±2% or ±0.03 × 10 ⁶ /μL Hb: within ±2% or ±0.2 g/dL/PLT: within ±5% or ±10 × 10 ³ /μL Hct: ±3% or ±1.0 HCT/—
Interfering substances:	• WBC/RBC • Hemoglobin/Platelets • Hematocrit/Reticulocytes • Automated differential	no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 996 mg/dL for hemolysis, more/no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 996 mg/dL for hemolysis, more no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, more/no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 996 mg/dL for hemolysis, more no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 996 mg/dL for hemolysis, more/no significant interference up to 39.4 mg/dL for bilirubin C, 37.4 mg/dL for bilirubin F, 1,010 mg/dL for hemolysis, more	cold agglutinins, platelet clumps, cryoprotein, cryoglobulin, fibrin, giant platelets (>1 M/μL)/cold agglutinins, severe microcytosis, fragmented RBCs, leukocytosis (>100,000/μL), giant platelets (>1 M/μL) severe lipemia, abnormal protein, leukocytosis (>100,000/μL)/platelet clumps, pseudothrombocytopenia, giant platelets, severe microcytosis, fragmented RBCs, fragmented leukocytes, cryoprotein, cryoglobulin cold agglutinins, severe microcytosis, fragmented RBCs, leukocytosis (>100,000/μL), severe diabetes, uremia, spherocytosis/—
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour	60/60	100/100	70/70
• Max. No. of slides processed per hour if stainer included	—	75	—
FDA-cleared or -approved sample container types (besides potassium EDTA)	none	none	none
Min. specimen volume open mode/Closed mode/Microsample capability	25 μL/25 μL/yes	300 μL/1 mL/yes	16 μL/—/yes
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online	demographics, results, flags/10,000 results	demographics, results, flags/100,000	demographics, results, flags/10,000
Analyzer performs delta checks	yes	yes	no
Parameters for which flags may appear	flags for all reportable parameters deemed abnormal per lab's protocol, more	—	WBC histogram, RBC histogram, platelet histogram, error flags
• Flagging client selectable	combination of client and vendor selectable	combination of client and vendor selectable	no
Analyzer recognizes and holds test results	yes, for potential test rerun	yes, for potential test rerun (parameters for flags to hold samples defined by client or vendor)	yes, for potential test rerun (parameters for flags to hold samples defined by vendor)
Scattergram display uses cell-specific color	yes	yes	no
Histogram display uses color with thresholds	yes	no	yes
LIS interface formats supported	ASTM 1381, ASTM 1394-97	ASTM 1394-91, ASTM 1381, data processing system	ASTM 1381, HL7 version 2, ASTM E1394-97
• Middleware interface	yes (can use company's middleware or Data Innovations)	yes (can use company's middleware or Data Innovations)	yes (can use company's middleware or third-party middleware)
• Information transferred to LIS via middleware or LIS interface	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, host query for patient demographics and orders	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, host query for patient demographics and orders	numeric results, flagged results, histograms, scatterplots, patient demographics, patient orders, host query for patient demographics and orders
Analyzer transmits LOINC codes for results to LIS or middleware	yes	yes	yes
Lab automation system or workcells to which analyzer has a direct interface	none	Beckman Coulter, Siemens, Thermo Fisher, Roche, Abbott, Yaskawa	none
Barcode symbologies read on specimen tube	Codabar, Code 39, Code 128, ITF, NW-7, ISBT 128, more	Codabar, Code 39, Code 128	Codabar, Code 39, Code 128, ITF, NW7, ISBT 128, JAN/EAN/UPC
• Analyzer allows barcode placement per CLSI standard Auto02-A2	yes	yes	yes (supports QR codes)
No. of onboard reagents required for standard specimen analysis	4	9	2
• Reagents ready to use/Reagent tracking method	yes/RFID, barcode reader	yes/RFID, barcode reader	yes/RFID, barcode reader
Time required for analyzer maintenance	2 min. daily; 15 min. weekly	20 min. daily	2 min. daily; 15 min. weekly
Onboard diagnostics for troubleshooting	yes	yes	yes
• Manufacturer can perform diagnostics via remote access	yes	yes	yes
Warranty provided/Cost of annual service contract (24 h/7 d)	one-year warranty/—	one-year warranty/—	one-year warranty/—
Distinguishing analyzer features (supplied by company)	6-part WBC differential including immature granulocyte for smaller labs; BeyondCare Quality Monitor for Hematology standard on all models	modular and scalable; BeyondCare Quality Monitor for Hematology standard on all models	BeyondCare Quality Monitor provides automatic daily QC upload and continuous calibration verification; QC lock-out functionality
*based on August 2025 survey deadline			
Note: a dash in lieu of an answer means company did not answer question or question is not applicable	†also marketed by McKesson, Henry Schein	†also marketed by Roche, McKesson, Henry Schein	†also marketed by McKesson, Henry Schein

Part 10 of 10	Sysmex Corp. Madelaine Dintelman communications@sysmex.com Lincolnshire, IL 888-879-7639 www.sysmex.com
Name of analyzer	XW-100†
Analyzer application	diagnostic use
Dimensions of analyzer (H × W × D)/Analyzer footprint	13.8 × 7.3 × 18.1 in./—
Country where analyzer was designed/Manufactured	Japan/Japan
First year analyzer was sold in U.S./Approximate No. of units installed in U.S.* First year analyzer sold outside U.S./Approximate No. of units installed outside U.S.* Foreign locations where company markets analyzer Human languages (other than English) supported by analyzer	2018/>500 — — —
Analyzer list price • Analyzer acquisition options Training included with purchase/Total time for basic training per operator	\$7,150 purchase yes/—
• Follow-up training available	yes (no extra charge)
Parameters that analyzer tests and reports	%&# lymphocytes, %&# neutrophils, Hb, Hct, MCV, PLT, RBC, WBC
Types of testing FDA cleared or approved for analyzer Types of body fluids FDA cleared or approved for analysis on analyzer Analytical measurement range for body fluid Precision for body fluid Accuracy for body fluid Automated differential performed for body fluids	— — — — — —
Tests available for research use only	—
Differential methods used	direct current with hydrodynamic focusing for all parameters except hemoglobin, which is measured photometrically
Analytical measurement range:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes
Precision:	• WBC count/RBC count • Hemoglobin/Platelets • Hematocrit/Reticulocytes
Accuracy:	• WBC count/RBC count
Interfering substances:	• WBC/RBC
	• Hemoglobin/Platelets
	• Hematocrit/Reticulocytes
	• Automated differential
Throughput: max. CBCs per hour/Max. CBCs with differentials per hour • Max. No. of slides processed per hour if stainer included FDA-cleared or -approved sample container types (besides potassium EDTA) Min. specimen volume open mode/Closed mode/Microsample capability	— — — —/15 µL/no
Types of patient data archived/Max. No. of archived patient data accessible when analyzer online Analyzer performs delta checks Parameters for which flags may appear	none/— no —
• Flagging client selectable Analyzer recognizes and holds test results	no no
Scattergram display uses cell-specific color Histogram display uses color with thresholds	no no
LIS interface formats supported • Middleware interface	— —
• Information transferred to LIS via middleware or LIS interface	—
Analyzer transmits LOINC codes for results to LIS or middleware	no
Lab automation system or workcells to which analyzer has a direct interface	—
Barcode symbologies read on specimen tube	proprietary barcodes
• Analyzer allows barcode placement per CLSI standard Auto02-A2	no
No. of onboard reagents required for standard specimen analysis • Reagents ready to use/Reagent tracking method	2 —
Time required for analyzer maintenance Onboard diagnostics for troubleshooting • Manufacturer can perform diagnostics via remote access	15 min. daily no no
Warranty provided/Cost of annual service contract (24 h/7 d)	—
Distinguishing analyzer features (supplied by company)	CLIA-waived CBC; simple operation

**based on August 2025 survey deadline*

Note: a dash in lieu of an answer means company did not answer question or question is not applicable

†also marketed by McKesson

All information is supplied by the companies listed. The tabulation does not represent an endorsement by the CAP.

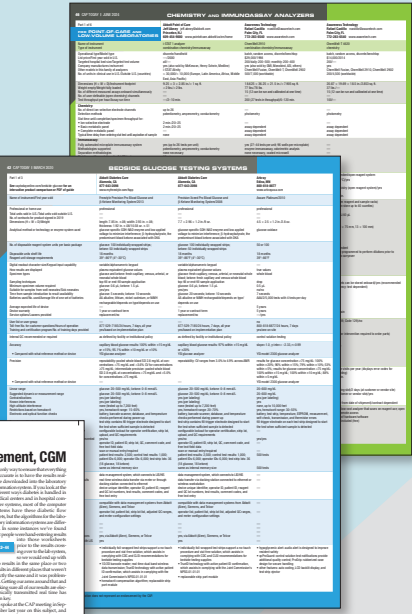
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