

# tech guide

Clinical Chemistry and Integrated Analyzers

## Advanced Instruments

Norwood, Mass  
781-320-9000  
aicompanies.com

## Alfa Wassermann Diagnostic Technologies

West Caldwell, NJ  
800-220-4488  
www.alfawassermannus.com

## Awareness Technology

Palm City, Fla  
772-283-6540  
www.awaretech.com

1. What is the brand name of your company's clinical chemistry or integrated analyzer?	A <sub>10</sub> O Advanced Automated Osmometer	ACE Excel Clinical Chemistry System	ChemWell-T
2. What is the latest version of your named clinical chemistry or integrated analyzer; what year was this version first released to market (US, OUS)?	2012	2012	Model 4620, 2014.
3. Specify the authorizing agency, type, and year of the product's regulatory authorizations.	Exempt, 2012.	FDA 510(k), 2012.	CE mark; NRTL ISO 13485:2016 certification.
4. What are the dimensions of the named product?	22.8 inches x 23.6 inches x 20.5 inches	33 inches x 28 inches x 26 inches	15.75 inches x 20.5 inches x 19.7 inches
5. What is the intended use or primary function of the product?	Measures the osmolality of body fluids in a clinical setting. Used to diagnose and treat body fluid disorders.	In vitro diagnostic use to quantify constituents of blood and other fluids.	Clinical diagnosis and monitoring of patient samples via processing of general chemistries and turbidimetric assays.
6. What types of specimen/sample does the product employ?	Plasma, serum, stool, urine, whole blood, and more.	Plasma, serum.	Plasma, serum, stool, urine, whole blood.
7. What types of diseases, conditions, or analytes do tests performed on the analyzer detect?	Osmolality testing can help: evaluate body's water balance, investigate hyponatremia, detect toxins, monitor electrolyte balance, monitor effectiveness of treatment or condition adversely affecting person's osmolality.	Electrolytes, enzymes, general chemistries, and homogeneous immunoassays.	Many available tests for diseases of the blood, cholesterol, diabetes, gout, and more.
8. Under ideal conditions, what is the time to first result; how are the test results made available?	Test time is 180 seconds. Results can be saved, printed, or exported via USB/ethernet connection.	Approximately 9 minutes for basic metabolic panel; approximately 14 minutes for comprehensive metabolic panel; results available by printout, onscreen, and via a laboratory information system.	Time to first result varies. A single test with a short incubation may be completed in less than 5 minutes. Results are displayed immediately on acceptance and can be printed or exported to file.
9. What are the product's maximum capacity and throughput under ideal conditions?	Processes 20 samples in less than 1 hour.	Performs 165 tests per hour; 285 tests per hour with ion-selective electrode.	Performs 100 tests per hour.
10. Briefly describe any automation or connectivity features or options.	Draws samples directly from primary tubes, self-cleans between tests, and scans sample barcode IDs. Includes programmable QC alerts, LIS connectivity, onboard Levey-Jennings charts, touch-screen operation, and allows STAT tests.	Closed tube sampling; remote access via internet connectivity.	Imports and exports data via file share with a laboratory information system; sample barcode reader; automated reagent and sample sensing and pipetting; real-time assay quality control based on user programming. Instrument diagnostics include error messaging and user-initiated self testing.
11. What is the typical training time for the product?	2 hours.	4.5-day in-house training course.	2 to 3 days.
12. What types of technical support are available?	24/7 hotline phone and email support available. Service contracts available for purchase. Installation, training, and validation services available for purchase.	Customer solution center provides 24-hour coverage, 365 days a year.	Phone, email, video conferencing, onsite technical support (with contract).
13. What capabilities, features, or accessories distinguish this product from others on the market (limit 350 characters, with spaces)?	Reliable high-throughput osmolality testing of patient samples to drive efficiency. Delivers results with the security, connectivity, quality control, and ease of use to maximize productivity and keep the busiest clinical chemistry labs in compliance.	Internet connectivity; closed-tube sampling; stat interrupt capability; onboard sample and reagent refrigeration; onboard reagent inventory management; ready-to-use reagents; self-contained analyzer, requiring no external water source or waste drainage; award-winning support.	Small footprint, easy to maintain, open system, preprogrammed example tests, runs chemistry and turbidity tests, continuous loading, customizable racks, ion-selective electrode optional.

Beckman Coulter	Binding Site	Carolina Liquid Chemistries	Diatron
Brea, Calif 800-526-3821 www.beckmancoulter.com	San Diego 800-633-4484 www.us.bindingsite.com	Greensboro, NC 877-722-8910 contactsales@carolinachemistries.com www.carolinachemistries.com	Budapest, Hungary 36 1-436-9800 www.diatron.com
DxC 700 AU chemistry analyzer	Optilite special protein analyzer	CLC 6410 instrument family (CLC 800, CLC 1600, CLC 6410).	P500
2017	2015	CLC 800; 2016.	OUS, 2015; US, 2016.
FDA 510(k), 2016; CE mark.	FDA 510(k), 2015.	FDA 510(k); CLIA categorization as instrument family.	TUV CE mark, 2015; FDA, 2016.
49 inches x 35 inches x 51 inches	24.4 inches x 37 inches x 27.6 inches	CLC 800, 42 inches x 31 inches x 45 inches; CLC 1600, 50 inches x 35 inches x 44 inches; CLC 6410 (varies).	34.6 inches x 27.6 inches x 26 inches
General diagnosis and management of disease state conditions, including diabetes, substance abuse testing, and therapeutic drug monitoring.	Performs tests to diagnose, monitor, and manage patients with plasma cell disorders and immune deficiencies.	Clinical chemistry analyzer.	Diagnosis.
Cerebrospinal fluid, plasma, serum, urine, whole blood.	Cerebrospinal fluid, serum, urine.	Plasma, serum.	plasma, serum, urine, whole blood.
Tests for allergy, bone metabolism, diabetes, immunosuppressant therapy, malnutrition, oncology, specialty proteins, therapeutic drug monitoring, more.	Blood cancers, multiple myeloma, B cell dyscrasias, central nervous system disorders, and immune system disorders.	A variety of analytes, conditions, and diseases.	General chemistry, BMP, CMP, lipids, and special proteins.
First results in 8.5 minutes, 4.5 seconds between tests. Results can be displayed, printed, and transmitted to a laboratory information system.	Typically, 15 minutes to first result and 1 minute for each subsequent result.	Estimated time to first result is 10 minutes; each subsequent test result follows at 15-second intervals.	First results in approximately 7 minutes. Results available via Windows-based software and editable complete A4 patient report.
Performs 800 photometric tests per hour; up to 1,200 tests per hour with ion selective electrode.	Performs 105 to 120 special protein tests per hour.	CLC 800, up to 400 tests per hour; CLC 1600, up to 1200 tests per hour with ion-selective electrode; CLC 6410, up to 6400 tests per hour (four modules).	Performs 420 tests per hour.
Automation connectivity options include Power Express preanalytical automation, DxA 5000 preanalytical automation, Power Link connection to Dxl 600/800. Integrations with clinical informatics include REMISOL Advance, DxONE Product Suite. Built-in analyzer functions include autorepeat with autodilution, advanced QC, advanced calibration.	Optilite redilutes to end result, which means that even highly elevated myeloma samples are resulted without manual intervention. Optilite is bidirectionally interfaced with laboratory information systems.	Discrete, random access, batch, and stat priority; halogen lamp; independent sample and reagent probes; 340–800 nm wavelength barcode scanning of samples.	Intelligent software, high-quality components, multi-functional pipetting arm, user-friendly interface, uninterrupted workflow, inventory management, remote access and diagnostics, and cost-effective operation.
4 days.	1 week user training.	Customized 4-day training at corporate training facility or in customer lab.	1 week.
Field service and hotline; applications support available globally; various service agreement options available.	Global technical support team includes field applications specialists and engineers, and in-house specialists.	Hotline available 8:00 am–8:00 pm ET; validation assistance; affordable after-sales service and support contracts.	Technical support team.
Suitable for mid- to high-volume laboratories, broad menu, intuitive software, stat capability, compatible with preanalytical automation, low maintenance, autorepeat with autodilution capability, built-in quality control program, open channel reagent capability.	Designed to simplify complex processes with enhanced efficiency (minimized reagent usage), optimized workflow (elimination of manual sample dilutions), and trusted results (using one of three methods of antigen excess detection).	Suited for laboratories that have multiple locations requiring analyzers in a variety of sizes; all instruments in the family use the same reagents.	Benchtop, fully automated clinical chemistry system comprised of advanced Windows-based software, state-of-the-art components, and a user-friendly interface. Includes a full range of reagents, controls, and calibrators.

<b>EKF Diagnostics</b>	<b>ELITechGroup</b>	<b>ELITechGroup</b>	<b>ELITechGroup</b>
Boerne, Texas 830-249-0772 www.ekfusa.com	Logan, Utah 855-354-8324 www.elitechgroup.com	Logan, Utah 855-354-8324 www.elitechgroup.com	Logan, Utah 855-354-8324 www.elitechgroup.com
Excel chemistry analyzer	Envoy 500+ chemistry system	Selectra ProM chemistry systems	Selectra ProS chemistry systems
2008	Envoy 500+ launched in 2014; Envoy 500 launched in 2005.	US, 2012.	US, 2012.
FDA 510(k).	FDA 510(k) clearance, 2005	FDA 510(k), 2011.	FDA 510(k), 2011.
15.75 inches x 14.5 inches x 5.5 inches	27 inches x 40 inches x 23 inches	30 inches x 48 inches x 24 inches	36 inches x 30 inches x 24 inches
Measurement of a range of clinical chemistry parameters.	Diagnosis, patient monitoring.	Diagnosis, patient monitoring, therapeutic drug monitoring.	Diagnosis, patient monitoring.
Cerebrospinal fluid, plasma, serum, urine (test dependent); multiple samples can be run.	Plasma, serum, urine, whole blood.	Plasma, serum, urine, whole blood.	Plasma, serum, urine, whole blood.
Albumin, alkaline phosphatase, ALT/SGPT, amylase, AST/SGOT, calcium, chloride, cholesterol, CK (NAC), CK-MB, creatinine, gamma-GT, glucose (hex), glucose (trinder), glyco-hemoglobin, iron (total), magnesium, potassium, phosphorus, more.	Certain kidney, liver, heart, and bone diseases, along with diabetes.	Certain kidney, liver, heart and bone diseases, along with diabetes.	Certain kidney, liver, heart, and bone diseases, along with diabetes.
Time to first result depends on the test procedure and the skill of the end-user.	Time to first results depends on test mix; 3 minutes minimum. Results onscreen, transmitted to LIS (optional), and printed.	Time to first results depends on test mix; 5 minutes minimum. Results onscreen, transmitted to LIS (optional), and printed.	Time to first results depends on test mix; 5 minutes minimum. Results onscreen, transmitted to LIS (optional), and printed.
Throughput is dependent on the test procedure and the skill of the end-user.	52 samples; performs 490 tests per hour.	35 samples; performs 180 tests per hour.	25 samples; performs 140 tests per hour.
Controlled by microprocessor; samples read using flowcell module so reagent consumption optimized; 18-position incubator and PC-style keyboard. Equipped to handle end-point, kinetic, and enzyme immunoassays. Open system accommodates 120 programs; all routine Stanbio chemistry tests are preprogrammed.	Onboard real-time quality control, remote diagnostics, onboard data management, onboard auto inventory (volume determination), automatic rerun, autocalibration, auto shutdown, programmable startup	Onboard real-time quality control, remote diagnostics, onboard data management, configurable result checks provide autoverification, onboard auto inventory (volume determination), automatic rerun, autocalibration, auto shutdown, programmable startup	Onboard real-time quality control, remote diagnostics, onboard data management, configurable result checks provide autoverification, onboard auto inventory (volume determination), automatic rerun, autocalibration, auto shutdown, programmable startup
Use of the analyzer can begin after a review of the operator's manual.	5 days.	3 days.	3 days.
Available via e-mail or a toll-free phone support line, Monday through Friday, 8:00 am–5:00 pm CT.	Monday to Friday, 8:00 am–7:00 pm ET.	Monday to Friday, 8:00 am–7:00 pm ET.	Monday to Friday, 8:00 am–7:00 pm ET.
Preprogrammed to run the range of Stanbio chemistry reagents, but can also be configured to meet the needs of individual laboratories.	One of the fastest benchtop chemistry analyzers with 4-parameter onboard dry ISE; reusable glass cuvettes; small footprint; remote diagnostics; liquid stable, ready-to-use reagents.	TouchPro software with smart icons guides the operator through daily workflow, including configurable daily checklists; ELITech ProServe remote-assist diagnostics and internet-based training; combination of onboard PSID, host-query LIS, and configurable result checks provide autoverification, improved walkaway, and error reduction; liquid-stable, ready-to-use reagents.	TouchPro software with smart icons guides the operator through daily workflow, including configurable daily checklists; ELITech ProServe remote-assist diagnostics and internet-based training; combination of onboard PSID, host-query LIS, and configurable result checks provide autoverification, improved walkaway, and error reduction; liquid-stable, ready-to-use reagents.

<b>Fujirebio</b>	<b>Horiba Medical</b>	<b>Horiba Medical</b>	<b>Mindray North America</b>
Malvern, Pa (844) 544-3787 www.fujirebio.com	Irvine, Calif (888) 903-5001, 949-250-4811 medical-marketing.us@horiba.com www.horiba.com"	Irvine, Calif (888) 903-5001,949-250-4811 medical-marketing.us@horiba.com www.horiba.com"	Mahway, NJ 425-881-0361; a.chen@mindray.com www.mindraynorthamerica.com
Lumipulse G1200	Pentra C400 chemistry system	Yumizen C1200 chemistry system	BS-480
"OUS, 2008; US, 2016."	Pentra C400, 2014.	2020	N/A
TUV CE mark, 2011; FDA 510(k), 2016.	FDA 510(k); Health Canada licensed; CE mark.	FDA 510(k) cleared, Health Canada licensed.	CE mark, FDA 510(k).
57 inches x 47 inches x 31.5 inches	48 inches x 12 inches x 17 inches	43 inches x 48 inches x 33 inches	45 inches x 46 inches x 28 inches
Diagnosis, patient monitoring, drug monitoring.	Benchtop, used to screen and monitor patients for a variety of disease states in the physician office, small clinic, pain management clinics, reference labs, and rural hospitals.	Used to screen and monitor patients for a variety of disease states in the large clinic, pain management clinics, reference labs, and rural and community hospital laboratories.	Clinical diagnosis, including IVD, drug of abuse, electrolytes, and general chemistry.
Plasma, serum, urine, cerebrospinal fluid, other.	Plasma, serum, urine.	Plasma, serum, urine.	Serum, urine, whole blood (HgbA1c).
Allergy, cardiac markers, fertility, immune response, infectious diseases, metabolic disorders, neurodegenerative diseases, oncology, thyroid disorders, more.	Complete chemistry menu including tests for CMP; BMP; lipid, hepatic, renal, and anemia panels; diabetes; TDMs; DAUs and adulterants; vitamin D, immunoglobulins and rheumatoid factor; C3/C4; insulin; hsCRP.	Complete chemistry menu including tests for CMP; BMP; lipid, hepatic, renal, and anemia panels; diabetes; TDMs; DAUs and adulterants; vitamin D, immunoglobulins and rheumatoid factor; C3/C4; insulin; hsCRP.	Hyperlipidemia, diabetes, kidney function, liver function, drugs of abuse monitoring, electrolytes imbalance.
First results in 30 minutes. Results available onscreen, printed, and via online transmission.	Time to complete: CMP 11 minutes, BMP 8 minutes, lipid panel 11 minutes, CMP/lipid panel 12 minutes, BMP/lipid panel 11 minutes.	Time to complete: CMP 12 minutes, BMP 12 minutes, lipid panel 12 minutes, CMP/lipid panel 12 minutes, BMP/lipid panel 12 minutes.	Time to first result varies depending on assay. Results available onscreen, printed, and via LIS bidirectional transmission.
Time to result is 30 minutes for all assays; performs 120 tests per hour.	420 tests per hour including ISEs; 60 samples random continuous access; 52 onboard reagents; R1/R2 in same cartridge takes up less space; 40 open channels.	1200 tests per hour including ISEs; 84 samples random continuous access; 41 onboard reagents; program 100 applications; autoloader capacity 65 samples.	90 sample capacity, 400 T/H photometric tests, up to 560 T/H test with ISE.
Able to connect to lab automation track systems; auto power-on; available replenishment of samples, reagents, and consumables on the fly.	Completely automated system with lot and calibration monitoring, test countdown, onboard realtime QC. Barcoded host query walkaway capabilities. Onboard IFUs and user's manual. Auto-validation.	Optional autoloader. Clot and cap/ crash detection. Liquid level sensing probes. Reagent and calibration expiry date monitoring, test countdown, onboard real-time QC monitoring. Auto-validation.	Real-time sample carousel status, automatic liquid level sensing, auto- probe collision and recovery, clot detection, built-in maintenance procedures recording and logs
1 day.	Three days in Irvine, Calif, and two days on site.	Four days in Irvine, Calif, and four days on site.	Operation training 2 to 3 days.
Monday to Friday, 8:30 am-5:30 pm ET.	24/7/365 phone support; onsite Monday-Friday 8:00 am - 5:00 pm; weekends and evenings by contract.	24/7/365 phone support; onsite Monday-Friday 8:00 am - 5:00 pm; weekends and evenings by contract.	Hotline, service department, built-in operation manual.
Unitized immunoreaction cartridge eliminates open-bottle stability concerns and reduces reagent waste; 30 minute time to result for all assays; uninterrupted productivity by replenishing samples, reagents, and consumables on the fly.	The power of a floor model in a benchtop analyzer, 33% faster than other benchtop analyzers. No water, drain, or special electrical required. Comprehensive menu; open system. Disposable cuvettes reduce exposure to BBP. Connects to Horiba Lite Data Management System for consolidated patient reports. LIS connectivity.	Optional autoloader for more workflow efficiencies. Micro-sampling; important for pediatric and geriatric patients. No water system needed for reaction carousel; eliminates bacterial growth and potential for flooding. Fastest throughput in its class. Japanese built; better than industry standard MTBSF.	Dry heat, glass cuvettes, software driven maintenance procedures, patented bubble detection, waterfall probe cleaning, horizontal and vertical collision protection. Suitable for R1, R2, R3, R4 reagent components.



Nova Biomedical	Ortho Clinical Diagnostics	Ortho Clinical Diagnostics	Radiometer America
Waltham, Mass 781-894-0800 www.novabiomedical.com	Raritan, NJ 800-828-6316 www.orthoclinicaldiagnostics.com	Raritan, NJ 800-828-6316 www.orthoclinicaldiagnostics.com	Brea, Calif 800-736-0600 https://www.radiometeramerica.com
Stat Profile Prime Plus	Vitros XT 7600 integrated system	Vitros XT 3400 chemistry system	ABL800 Flex series
2018	OUS, 2018; US, 2018.	OUS, 2020; US, 2020.	Enhanced with AQUIRE connectivity, 2015.
CE mark, 2017; FDA 510(k), 2018; FDA 510(k) for point-of-care use, 2020.	FDA 510(k), 2018; CE mark, 2018.	FDA 510(k) instrument family, 2019; CE mark, 2019.	FDA 510(k), CE mark.
18 inches x 14 inches x 16 inches	68 inches x 110 inches x 34.9 inches	52.6 inches x 58 inches x 34.2 inches	22 inches x 28 inches x 21 inches
Performs more than a dozen blood chemistry assays on capillary, heparinized arterial, and venous whole blood.	Fully automated and integrated clinical chemistry and immunoassay test system that utilizes XT MicroSlides. For diagnostic testing, patient monitoring, and therapeutic drug monitoring.	Fully automated clinical chemistry test system that utilizes XT MicroSlides. For diagnostic testing, patient monitoring, and therapeutic drug monitoring.	Automated benchtop analyzer intended for in vitro testing in acute care and laboratory settings. Measures pH, blood gas, electrolyte, metabolite, and oximetry parameters.
Arterial, mixed venous, venous, or heparinized whole blood.	Cerebrospinal fluid, plasma, serum, urine, whole blood, *amniotic fluid. (*Not commercially available in US.)	Cerebrospinal fluid, plasma, serum, urine.	Whole blood.
Quantitative determination of more than 20 blood chemistry parameters, including PO2 PCO2 pH Hct tHb Na Cl K TCO2 iCa iMg Glu Lac BUN Creat SO2% COHb O2HB MetHb HHb Oxygen Index (OI) estimated Plasma Volume (ePV).	More than 100 immunoassay and clinical chemistry tests on a single platform including those for general chemistries, infectious disease, anemia, bone disease, cardiac, diabetes, drugs of abuse, therapeutic drug monitoring, toxicology, oncology, fertility, thyroid disease, sepsis, and liver, renal, and pancreatic function.	More than 50 clinical chemistry tests on a single platform including those for general chemistries, anemia, bone disease, cardiac, diabetes, therapeutic drug monitoring, toxicology, and liver, renal, and pancreatic function.	Quantifies patient blood acid/base balance, hemoglobin status, and partial pressure of carbon dioxide and oxygen. Analyzes electrolyte balance including chloride, ionized calcium, potassium, sodium. Measures metabolite concentrations including glucose, lactate, creatinine, and total bilirubin.
Results available onscreen and printed.	First result for potentiometric: ~2.5 minutes; colorimetric: ~6 minutes; immuno-rate: ~8 minutes; microtip: ~8-16 minutes; microwell: ~16-73 minutes. Real-time results data stream to LIS available.	First result for potentiometric: ~2.5 minutes; colorimetric: ~6 minutes; immuno-rate: ~9 minutes. Real-time results data stream to LIS available.	Time to result between 80 and 135 seconds depending on parameters tested. Results available onscreen, printed, or logged on AQUIRE data manager and transmitted to laboratory information system.
Tests 40 to 60 samples per hour.	Continuous load and unload of 150 reagent and 90 sample positions. XT MicroSlides onboard test capacity of up to 16,780 tests and maximum theoretical throughput with XT slides up to 1,320 tests per hour.	Continuous load and unload of 97 reagent and 80 sample positions. XT MicroSlides onboard test capacity of up to 10,680 tests and maximum theoretical throughput with XT slides up to 1,130 tests per hour.	18 to 24 samples per hour to measure up to a full panel of 18 stat parameters along with reporting additional derived parameters.
Automated, true liquid quality control; continuously monitors status and performance of all analytical components (including sensors, reagents, calibrators, sample integrity, software, and electronics); auto calibration.	Connectable to Vitros Automation Solutions and e-Connectivity interactive system management for remote support. Single-use sampling tips eliminate carryover; detection of hemolysis, icterus, and turbidity; auto-reflex dilution.	Connectable to Vitros automation solutions and e-Connectivity interactive system management for remote support. Single-use sampling tips eliminate carryover; detection of hemolysis, icterus, and turbidity; auto-reflex dilution.	FLEXQ module enables automated scanning/mixing of blood samples. AQM system automatically performs pre-scheduled and real-time quality checks, initiates corrective actions without manual intervention, and documents activities for compliance.
About 1 hour for primary operator training on operation, maintenance, troubleshooting, and set-up, performed at installation.	General operator training 8 hours; go live training 12 hours; remote training programs available.	General operator training 5 hours; go live training 12 hours; remote training programs available.	2 hours (customizable to location's requirements).
"24/7/365 technical hotline support; analyzer installation; onsite corrective maintenance within 8 business hours of call; multilevel technical support plans available for an annual fee."	Phone hotline support 24/7/365; onsite technical and service support; remote support and troubleshooting.	Phone hotline support 24/7/365; onsite technical and service support; remote support and troubleshooting.	Dedicated technical support team by phone or email; onsite support with service engineer and clinical application specialists; online customer care portal.
Zero-maintenance microsensor cartridge technology in a miniaturized sensor card format. Clot block flow path; individual cartridges for sensors, calibrators, and liquid quality control; non-lysing cooximeter. Broad menu including iMg, BUN, creatinine, non-lysing CO-oximetry, ePV, Oxygen Index.	Ortho Care #1 ranking by Service Trak for superior service and support. First pass yield of 96.5% ensures right result the first time. Detects and mitigates the impact of sample quality on results. No water or drain required; self-contained onboard waste management eliminates special requirements for off-board plumbing.	Ortho Care #1 ranking by Service Trak for superior service and support. Detects and mitigates impact of sample quality on results. No water or drain required; self-contained onboard waste management eliminates special requirements for off-board plumbing.	Reliable results from low volume blood samples (as low as 35 ul with micromode); automated quality control; automatically scan and link operator, patient, and sample ID using Radiometer's 1st automatic solution; interference-protected glucose, lactate, and creatinine results; advanced optical system ensures high-quality co-oximetry results.

## Randox Laboratories

Kearneysville, WV  
304-728-2890  
www.randox.com

## Roche Diagnostics

Indianapolis  
800-428-5076  
www.diagnostics.roche.com

## Siemens Healthineers

Erlangen, Germany  
888-826-970  
usa.siemens.healthcare.co

## Siemens Healthcare Diagnostics

Tarrytown, NY  
914-631-8000  
www.siemens-healthineers.com

Randox RX series	Cobas Pro integrated solutions	Atellica CH 930 analyzer	Dimension EXL 200 integrated chemistry system
Randox RX imola, 2006.	2020	US, 2017.	Updated, 2020.
CE mark; FDA 510(k); Health Canada Licenced; TGA certificate; CFDA; KSA SFDA; MFDS; ANVISA.	CE mark, 2018; FDA 510(k) 2019.	FDA 510(k), 2017.	FDA 510(k), 2008, 2013; CE mark 2010.
27 inches x 38 inches x 23 inches	56 inches x 188 inches x 48 inches	53.7 inches x 58.7 inches x 45.5 inches	56 inches x 49 inches x 41 inches
Clinical chemistry suitable for mid- to high-volume laboratories. Primary functions include diagnosis and monitoring of patient samples.	Fully automated, integrated clinical chemistry and immunoassay platform for diagnostic testing, patient monitoring, therapeutic drug monitoring, and viral load monitoring.	Diagnosis, patient monitoring.	Diagnosis, patient monitoring, therapeutic drug monitoring.
Plasma, serum, urine.	Cerebrospinal fluid, plasma, serum, urine, whole blood.	Cerebrospinal fluid, plasma, serum, urine, whole blood (assay-specific).	Cerebrospinal fluid, plasma, serum, urine, whole blood.
More than 100 unique, high-performing assays. Testing capabilities and analyzer detection profile can be broken down by autoimmune disease, metabolic, bone profile, cardiac, diabetes, electrolytes, hemolytic anemia, inflammation and infection, lipids, neonatal screening, neurological disorders (CSF), and more.	More than 175 clinical chemistry and immunoassay tests, including anemia, cardiac function, diabetes, infectious disease, oncology, sepsis, and toxicology.	Tests for diabetes, drugs of abuse/toxicology, general chemistry, immunosuppressant drugs, specific proteins, specimen validity, and therapeutic drug monitoring.	More than 100 general chemistry and immunoassays, including tests for anemia, bone metabolism, cardiac function, diabetes, fertility, oncology, therapeutic drug monitoring, thyroid disease, and toxicology.
First result in 9 minutes. Results retrievable via various search options, can be downloaded and printed or transmitted to LIMS.	First result in 11 to 12 minutes for basic and comprehensive metabolic panels; 10 to 11 minutes for stat cardiac and critical-care assays; 18 to 27 minutes for routine immunoassays.	Full comprehensive metabolic panel in 10 minutes or less.	Time to first result is assay-dependent, and varies from less than 1 minute to 32 minutes.
Performs 400 photometric tests and up to 560 tests per hour including ISE.	Holds 300 samples at one time; maximum throughput of 900 tests per hour for ion selective electrode tests; 1,000 tests per hour for chemistries; 300 tests per hour for immunoassays.	Performs up to 1800 tests per hour: 1200 photometric chemistry tests, 600 integrated multisensor technology tests.	Performs 440 photometric chemistry tests, 187 integrated multisensor technology tests, or 167 heterogeneous immunoassay tests per hour.
On-board reagent inventory management system; integrated barcode reader for samples and reagents with LIMS connectivity, stat capabilities and advanced QC software automatically generating Levy-Jennings charts, calibration curves and more.	Connectable to Roche (Cobas 8100 and CCM) and selected third-party automation systems. Automatic dilutions, reflex testing, onboard troubleshooting.	Intelligent sample routing, auto deployment of QC and calibrations, auto validation, data management including diagnostics IT, Atellica Data Manager, Atellica Process Manager, Atellica Inventory Manager, connects to Aptio Automation.	Connectivity available to VersaCell X3, Aptio automation, and Atellica IT systems; performs tests in random order; automated reagent preparation, reflex testing, reruns, and dilutions; automated hemolysis, icterus, and lipemia measurements.
Average time for basic user training is 3 days.	Key operator training typically 4.5 days, in Indianapolis; training for additional operators conducted at customer site.	Training time varies based on configuration.	3 days at customer site.
1-year warranty on all new analyzers. Global customer and technical support 24/7 with onsite response time within 24 hours.	24/7/365 telephone support; onsite technical and service support; remote support and troubleshooting; onboard user assistance.	Phone support, remote support services, guardian program proactive monitoring, system care services, PEPconnect education platform.	Phone hotline support 24/7; onsite technical and service support; remote troubleshooting.
Cost-effective, random access, small footprint, benchtop clinical chemistry analyzer delivering consistent high-quality results. Capable of performing 560 tests per hour boosting intuitive software, stat capabilities, and extensive testing menu with direct HbA1c testing capabilities.	Automatic calibration for selected chemistries, reduced maintenance, modular concept, stat assays for cardiac and critical care tests.	Sample management with Atellica Sample Handler, integrated decapping, Atellica Magline Transport system, high sample throughput, high sample load capacity, micro-volume sampling, automatic calibration and QC, barcode read multi-camera vision system, extensive menu, auto sample volume check.	Integrates general chemistry tests with immunoassays; eliminates sample splitting between general chemistry tests and immunoassays; automated onboard immunosuppressant drug assays; ready-to-use reagents and automated calibration, control, and system check procedures.

**Sysmex America**

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www.sysmex.com/us

**Thermo Fisher Scientific**

Waltham, Mass  
781-467-9749;  
cascadion.info@thermofisher.com  
www.thermofisher.com/cascadion

Alifax Test 1	Alifax Roller 20-PN	Alifax Roller 20-MC	Thermo Scientific Cascadion SM Clinical Analyzer
2009	2013	2013	OUS, 2018; US, 2020
FDA 510(k), 2009; TUV CE mark, 2009.	FDA 510(k), 2013; TUV CE mark, 2013.	FDA 510(k), 2013; TUV CE mark, 2013.	CE mark, 2018; FDA Class II Exempt with special controls, 2020; Health Canada Licensed, 2020; Brazil ANVISA Registered, 2020.
23.6 inches x 20 inches x 19.7 inches	17.7 inches x 9.5 inches x 17.7 inches	17.7 inches x 9.5 inches x 17.7 inches	55.1 inches x 88.6 inches x 37.8 inches
Diagnosis and patient monitoring.	Diagnosis and patient monitoring.	Diagnosis and patient monitoring.	Measurement of small molecule analytes by fully automated liquid chromatography-tandem mass spectrometry (LC-MS/MS).
Whole blood.	Whole blood.	Whole blood.	Plasma, serum, whole blood.
Measures inflammation in the body.	Measures inflammation in the body.	Measures inflammation in the body.	25-Hydroxy vitamin D3, D2 and total (EU, US, CA, BR); Immunosuppressive drugs (EU only).
First result in 5 minutes, thereafter every 20 seconds. Results can be printed and transmitted to a laboratory information system.	First result in 5 minutes, thereafter every 30 seconds. Results can be printed and transmitted to a laboratory information system.	First result in 4 minutes, thereafter every 18 seconds. Results can be printed and transmitted to a laboratory information system.	First result in approximately 30 minutes; subsequent results approximately every 2 minutes thereafter.
Performs 180 tests per hour.	Performs 120 tests per hour.	N/A	Holds 60 uncapped primary sample tubes or sample cups; throughput of up to 25 samples per hour.
Automated system for measuring Erythrocyte Sedimentation Rate. Internal barcode reader to assure correct sample identification. Bi-directional interface to a laboratory information system.	Automated or manual system for measuring erythrocyte sedimentation rate. Internal barcode reader for correct sample identification and keypad used with manual mode to input sample ID. Bidirectional interface to a laboratory information system.	Manual system for measuring erythrocyte sedimentation rate. Keypad to input sample identification. Bidirectional interface to a laboratory information system.	Bidirectional host-query LIS interface allows for automated order processing. Other features include priority sample capability, foam and clot detection, probe alignment check, and liquid level sensor.
3 hours.	2 hours.	1 hour.	3-day key operator training.
Phone technical assistance is available 24 hours per day, 7 days per week. Onsite assistance performed by service team.	Phone technical assistance is available 24 hours per day, 7 days per week. Onsite assistance performed by service team.	Phone technical assistance is available 24 hours per day, 7 days per week. Onsite assistance performed by service team.	Phone hotline support; dedicated regional onsite service and support; active remote access support enabling predictive support.
Fully automated ESR analyzer for samples collected in Ethylenediaminetetraacetic Acid (EDTA) tubes. Samples are placed in the same racks as hematology analyzers. Temperature controlled at 37 degrees C. Automatic internal washing. No additional reagents or consumables. Instrument easy to load, walkaway technology.	ESR analyzer with automatic mode and manual mode for samples collected in Ethylenediaminetetraacetic Acid (EDTA) tubes. Sample test volume is 175ul, temperature controlled at 37 degrees C. Automatic internal washing. No additional reagents or consumables. Instrument easy to load, walkaway technology.	ESR analyzer with manual mode for samples collected in Ethylenediaminetetraacetic Acid (EDTA) tubes. Sample test volume is 50ul, temperature controlled at 37 degrees C. No additional reagents or consumables. Instrument easy to use, walk away technology.	Fully automated, random access LC-MS/MS system, measuring analytes directly for enhanced accuracy. Designed for quick and easy implementation and walkaway operation, with no specialized LC-MS/MS knowledge needed.





# Autoimmune Diagnostics

For over 30 years, KRONUS has provided specialized immunoassay test kits to medical professionals at the world's most respected laboratory facilities. Our current product offering encompasses test kits for measurement of the following:

## NEUROIMMUNOLOGY

- Aquaporin-4 Autoantibody (AQP4Ab)
- Acetylcholine Receptor Antibody (AChRab):
  - Binding Antibody
  - Blocking Antibody
- Voltage-Gated Calcium Channel Antibody: P/Q-Type

## ISLET CELL AUTOIMMUNITY

- Glutamic Acid Decarboxylase Antibody (GADAb)
- Zinc Transporter 8 Autoantibody (ZnT8Ab)
- IA-2 Autoantibody (IA-2Ab)
- Insulin Autoantibody (IAA)

## THYROID

- TSH Receptor Antibody (TRAb)

## ADRENAL AUTOIMMUNITY

- 21-Hydroxylase Antibody (21-OHAb)

To obtain additional information on **KRONUS'** unique line of laboratory test kits, please call us toll-free at **800 4 KRONUS** or email us at [kronus@kronus.com](mailto:kronus@kronus.com).

## ALSO AVAILABLE FOR RESEARCH APPLICATIONS

- Acetylcholine Receptor Antibody: Ganglionic (gAChRab)<sup>†</sup>
- Voltage-Gated Calcium Channel Antibody: N-Type (N-VGCCAb)<sup>†</sup>
- GAD/IA-2/ZnT8 Antibody Screen<sup>†</sup>
- Titin Antibody (TitinAb)<sup>†</sup>
- Voltage-Gated Potassium Channel Antibody (VGKCAb)<sup>†</sup>

<sup>†</sup> For Research Use Only.  
Not For Use in Diagnostic Procedures.



Your Source for Sensitive  
Autoimmune Diagnostics

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