



Technical Specifications

ADVIA Chemistry XPT System



The ADVIA® Chemistry XPT System* has been designed to enhance performance and reliability with an intuitive user interface and high throughputs of up to 2400 tests per hour. The system offers simple, continuous operation; timely, reliable results; and powerful, seamless connectivity to keep pace with expanding laboratory demands.

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*Due to local regulations, not all products are available in all countries.

Product Specifications	
System Description	Fully random and continuous access, discrete processing clinical chemistry system with batch run capability
Test Throughput	Up to 2400 tests/hour: 1800 tests/hour photometric, 600 tests/hour ISE
Assays Onboard	59 including 3 ISE (Na, K, Cl)
Sample Handling	
Sample Tubes	5 mL, 7 mL, and 10 mL tubes; 1 mL and 2 mL sample cups; user-defined containers
Sample Tray	84 sample positions, positive sample identification
Validated Sample Types	Serum, plasma, urine, whole blood, and CSF, assay-dependent
Sample Integrity Control	Qualitative check for hemolysis, lipemia, and icterus; clot detection, flagging, and management; short-sample detection, flagging, and management
STAT Handling	84 positions, not dedicated; STAT samples are processed with priority
Auto-repeat Testing	Automatic repeat testing from the retained prediluted sample or original sample
Sample Dilution	Automatic dilution up to 1:5625 from retained prediluted sample or original sample
Auto-reflex Testing	Automatic ability to perform additional tests based on results of first test or test combination
Primary Sample Probe	Liquid-level sensing, crash protection, clot/clog detection, liquid-surface verification
Sample Carryover Prevention	Automated wash; additional automated sample probe washes programmable for greater prevention
Sample Throughput	Up to 200 tubes per hour with ISE use; faster without ISE use
Bar Codes	
Sample Bar Codes	Up to 20 digits; Interleaved 2 of 5, Code 39, Code 128, Codabar A and B, and special characters (.-+/*\$%)
Micro-volume Technology	
Automatic Sample Predilution	Samples typically diluted 1:5 (30 µL sample + 120 µL saline generates up to 15 tests results); retained for auto-repeat, auto-reflex, or auto-dilution until results are available
Predilution Tray	120 dilution cuvettes
Sample Volume per Test	2–30 µL of prediluted sample, equating to 0.4–6.0 µL of original sample per test (varies by assay)
Average Reagent Volume	80–120 µL per test, assay-dependent
Reaction Area	
Reaction Cuvettes	340 reusable, optical-grade plastic cuvettes
Reaction Bath	Inert fluorocarbon oil circulation system, 37°C
Photometer	14 fixed wavelengths (340, 410, 451, 478, 505, 545, 571, 596, 658, 694, 751, 805, 845, and 884 nm)
Light Source	12 V, 50 W halogen lamp, cooled by forced-water circulation
Assay Result Calculations	Endpoint (EPA), rate reaction (RRA), 2-point rate (2PA), constant rate analysis (CRA), and immunoassay analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed
Reaction Times	3, 4, 5, and 10 minutes; extended reaction times 15 and 21 minutes
Automatic Correction	Sample blank, cuvette blank, measurement point change, sample volume change in re-assay
Point Forwarding	Can automatically extend linearity to measure samples over assay range
Assay Technology	Potentiometric, photometric, turbidimetric
Reagent Handling	
Reagent Tray	Two trays (R1: 60 and R2: 56 positions), refrigerated between 6–13°C (43–55°F)
Onboard Reagent Capacity	56 photometric assays
Onboard Test Capacity	40,000 photometric tests average; over 100,000 photometric tests with use of concentrated reagents
Reagent Containers	20, 40, 70 mL reagent wedges
Reagent Integrity Control	Bar-code reagent identification; automatic inventory tracking and flagging; calibration and control validity tracking and flagging; reagent onboard stability tracking and flagging; reagent expired/reagent low flagging
Onboard Stability	Up to 60 days, depending on assay
Reagent Dilutions	Capability to dilute concentrated reagents onboard

Open-system Capability	
Channels	200 assay channels; includes 50 channels for user-defined applications
Ion-selective Electrodes (ISE)	
ISE	Indirect simultaneous measurement of Na ⁺ , K ⁺ , Cl ⁻
ISE Sample Volume	22 µL original sample for all three tests
Electrode Expected Use Life	30,000 samples or 3 months, whichever occurs first
Throughput Rate	Up to 600 tests/hour; 200 tubes/hour
Calibration/QC	
Validated Calibration Interval	Up to 60 days, tracked by software
Auto-calibration	User-defined time interval or with new reagent container
Auto-QC	User-defined test count interval or with auto-calibration
View Calibration	Graphical display of calibration curves
QC Data	Graphical display of QC; real-time QC monitoring; advanced QC package includes Levey-Jennings plots, Westgard rules, and RiliBÄK rules; 125,000 control results can be stored, archivable to removable media
Calibration/Control Tray	61 refrigerated positions for calibrators, controls, and diluents
User Interface/Data Management	
Monitor	22-inch (55.9 cm) diagonal high-resolution LCD touchscreen with adjustable height
Operating System	MICROSOFT WINDOWS 10
System Documentation	Operator manual, quickstart guide, and online help
Data Storage	500,000 active plus 500,000 historical test results; can archive to removable media
Onboard Maintenance Logs	Yes
Host Interface	TCP/IP bidirectional
Host Query	ASTM; system requests work order or batch of work orders from host
Remote Access and Service	Smart Remote Services via 1000BASE-T Ethernet port
General Specifications	
Power Requirements	200–240 V at 50/60 Hz, 3 kVA consumption
Water Requirements	CLSI Clinical Laboratory Reagent Water or equivalent connected directly to a pressurized water source
Maximum Water Consumption	40 liters (10.6 gallons) per hour
Drain Requirements	Minimum of 40 liters (10.6 gallons) per hour
Dimensions	With monitor: 149 (h) x 177 (w) x 99 (d) cm; 59 (h) x 70 (w) x 39 (d) inches Without monitor: 134 (h) x 177 (w) x 99 (d) cm; 53 (h) x 70 (w) x 39 (d) inches
Weight	725 kg (1598 lb)
Compliance	Complies with international environmental, health, and safety standards, including CE and RoHS
Noise Emission	Less than 62 dB
Processing Heat Output	5374 BTU/hour
Ambient Temperature	18–30°C (64–86°F)
Ambient Humidity	20–80% noncondensing

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Product availability may vary from country to country and is subject to varying regulatory requirements. Please contact your local representative for availability.

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