

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.

siemens-healthineers.com





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

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 and m	Product Specifications	
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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 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 validity tracking and flagging; reagent expired/reagent low flagging Onboard Stability Up to 60 days, depending on assay	Predilution Tray	120 dilution cuvettes
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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 analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone checking; substrate depletion check; results available as completed analysis (IMA) methodologies; prozone	Average Reagent Volume	80–120 μL per test, assay-dependent
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 40,000 photometric tests average; over 100,000 photometric tests with use of concentrated reagents Reagent Integrity Control Bar-code reagent identification; automatic inventory tracking and flagging; reagent expired/reagent low flagging Onboard Stability Up to 60 days, depending on assay	Reaction Area	
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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 Integrity Control Bar-code reagent identification; automatic inventory tracking and flagging; calibration and control validity tracking and flagging; reagent expired/reagent low flagging Onboard Stability Up to 60 days, depending on assay	Reaction Bath	Inert fluorocarbon oil circulation system, 37°C
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Point Forwarding 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; reagent expired/reagent low flagging Onboard Stability Up to 60 days, depending on assay	Reaction Times	3, 4, 5, and 10 minutes; extended reaction times 15 and 21 minutes
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; reagent expired/reagent low flagging Onboard Stability Up to 60 days, depending on assay	Automatic Correction	Sample blank, cuvette blank, measurement point change, sample volume change in re-assay
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Reagent TrayTwo trays (R1: 60 and R2: 56 positions), refrigerated between 6–13°C (43–55°F)Onboard Reagent Capacity56 photometric assaysOnboard Test Capacity40,000 photometric tests average; over 100,000 photometric tests with use of concentrated reagentsReagent Containers20, 40, 70 mL reagent wedgesReagent Integrity ControlBar-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 flaggingOnboard StabilityUp to 60 days, depending on assay	Assay Technology	Potentiometric, photometric, turbidimetric
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 Handling	
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 Tray	Two trays (R1: 60 and R2: 56 positions), refrigerated between 6–13°C (43–55°F)
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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	Onboard Test Capacity	40,000 photometric tests average; over 100,000 photometric tests with use of concentrated reagents
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 Containers	20, 40, 70 mL reagent wedges
	Reagent Integrity Control	validity tracking and flagging; reagent onboard stability tracking and flagging; reagent expired/reagent
Reagent Dilutions Capability to dilute concentrated reagents onboard	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

At Siemens Healthineers, we pioneer breakthroughs in healthcare. For everyone. Everywhere. By constantly bringing breakthrough innovations to market, we enable healthcare professionals to deliver high-quality care, leading to the best possible outcome for patients.

Our portfolio, spanning from in-vitro and in-vivo diagnostics to image-guided therapy and innovative cancer care, is crucial for clinical decision-making and treatment pathways. With our strengths in patient twinning, precision therapy, as well as digital, data, and artificial intelligence (AI), we are well positioned to take on the biggest challenges in healthcare. We will continue to build on these strengths to help fight the world's most threatening diseases, improving the quality of outcomes, and enabling access to care.

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