Technical Specifications

Atellica CI Analyzer

The Atellica® CI* Analyzer addresses big challenges—
all in a compact 1.9 m^2 footprint

siemens-healthineers.com/atellica-ci-analyzer

**Product availability varies by country.*

SIEMENS Healthineers

Technical Specifications

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Description	Integrated chemistry and immunoassay analyzer. Chemistry and immunoassay technologies share no major components to help maximize test throughput while minimizing laboratory footprint.
Test Throughput	Up to 1120 tests per hour (up to 600 photometric, 400 IMT, 120 immunoassay)
User Interface	Integrated software with intelligent monitoring of supplies, consumables, and common laboratory tasks from the home screen dashboard. User interface includes onboard tools to assist with laboratory accreditation and simplifies training to optimize the user experience with guided workflows, lab evaluation suite, and customizable dashboard.
Walkaway Time	2 hours

Sample Handling

Validated Sample Types	Serum, plasma, amniotic fluid, urine, whole blood (assay-specific), CSF, and other
Sample Integrity Control	Liquid-level sensing, clot/clog detection, bubble detection, short-sample detection; hemolysis, icterus, and lipemia
Auto-repeat	Automatic repeat testing from the original and diluted samples
Sample Dilution	Assay-dependent; can be auto-diluted and repeated when results extend linearity
Auto-reflex Testing	Configurable; additional tests based on results of first test or test mix
Sample Carryover Prevention	Chemistry uses precision wash system. Immunoassay uses disposable sample tips to eliminate carryover.
Sample Volume per Test	2–100 µL of sample (varies by assay)

Reaction Area

Reaction Cuvettes	CH dilution cuvettes (64 reusable cuvettes: four segments with 16 cuvettes each) CH reaction ring segments (clinical chemistry = 130 reusable cuvettes, 10 segments, 13 cuvettes) IM incubation ring holds 56 cuvettes.
Reaction Temperature	CH: 37°C ±0.3°C, IM: 37°C ±0.4°C
Chemistry Reaction Detection	Reaction area: photometer, LED light source with 11 fixed wavelengths (340, 410, 451, 478, 505, 545, 571, 596, 658, 694, 805 nm). Linearity: 0–3.0 AU. Resolution: 0.0001 AU.
Chemistry Assay Calculations	Endpoint (EPA), rate reaction (RRA), 2-point rate (2PA), sample blank correction
Immunoassay Reaction Detection	Photomultiplier tube
Immunoassay Reaction Formats	Sandwich, competitive, and antibody-capture/antigen-bridge formats
Assay Time	Chemistry and immunoassay: 1–54 minutes, assay-dependent
Assay Technology	CH: Integrated Multisensor Technology (IMT, electrolytes), photometric, and turbidimetric IM: chemiluminescence testing methodology using advanced acridinium ester technology

Reagent Handling

Reagent Compartments	CH: one tray (70 positions), refrigerated, temperature-controlled compartment 4–12°C IM: 20 primary, 20 ancillary reagent positions with refrigeration and humidity control, continuous and automatic mixing to maintain particle suspension, temperature-controlled compartments 4–10°C
Reagent Packs	CH: 50 mL dual-well reagent containers (2 x 25 mL each); 95–2100 tests per pack IM: ReadyPack® cartridge: 50–200 tests per pack
Reagent Integrity Control	Reagent pack barcode identification: automatic pack/well tracking, notification of inventory, calibration and control validity, onboard stability, low and expired reagents, detection of reagent bubbles
Onboard Stability	CH: up to 6 months (assay-dependent) IM: up to 3 months (assay-dependent)
Dispensing System	CH: one probe with liquid-level sensing and crash detection IM: one probe with liquid-level sensing and crash detection
Barcode-labeled Packs	Yes
Average Reagent Volume	10–100 µL per test, assay-dependent
Open Channels	CH only: available. Configurable to assay specifications with ability to copy Atellica CH assays and configure per laboratory needs.

Integrated Multisensor Technology (IMT) for Na^+, K^+, Cl^- (CH only)

Assay Time	18 seconds
Sample Volume	25 µL produces three results
Sample Dilution	Automatic 1:10; automatic monitoring for bias with every patient result
Calibration	Automatic calibration
Priming	Automatic priming cycle
A-LYTE™ Integrated Multisensor Technology Cartridge Use Life	Up to 5000 samples or 14 days

Calibration/QC

Auto-calibration	Automatic calibration orders generated by test definition for CH and IM assays.
Calibration Review	Graphical display of calibration curves for a minimum of 20 different reagent lots and 20 reagent packs for each assay with autovalidation.
Auto-QC	Automatic QC orders generated by test definition for CH and IM assays. Quality control testing can be automatically ordered by day, time, panel, test count, control material, and with calibration orders.
Quality Control Review	Advanced QC package with graphical display of QC in real time, including patient moving averages, Levey-Jennings plots, Westgard rules, RiliBÄK rules; up to 125,000 control results can be stored; autovalidation, archivable to removable media.
QC/Calibration Material	QC and calibration materials are tracked in the software by test definition and sequence number. Includes onboard stability and interval expiration.
Laboratory Evaluations	Patent-pending assay evaluation suite. Provides onboard support for precision testing, automatic and manual measuring interval verification studies, QC parallel and reagent lot-to-lot testing.

Maintenance

Daily	Hands-on: <5 minutes; automated: ≤30–45 minutes
Weekly	Hands-on: <4 minutes; automated: up to 75 minutes
Monthly	Hands-on: <5 minutes
As Needed	Refer to online help for additional periodic maintenance.
Logs	Operator, Maintenance, LIS, and Audit Trail logs monitor activities via the software. Monthly approvals, stored on the system, printable, exportable, and formatted for inspections.

General Specifications

Power Requirements	Voltage: 200–240 VAC, current: 24 A, frequency: 50/60 Hz 5.0 m power cord with IEC 60309 (6H) 30A/250V 2P+E plug (OUS) or NEMA L6-30 plug (U.S.) IEC 60309 (6H) 30A/250V 2P+E receptacle required (must be supplied by the facility).
Power Consumption	2.2 kW
Water Input Requirements	Incoming pressure 5–30 psi at 10–30°C
Water Quality Requirements	Special reagent water (SRW) required: • Resistivity: ≥10 MΩ/cm • Bacteria: ≤50 CFU/mL • Total organic carbon: ≤500 ppb A 0.22 micron filter is required at the output stage of the laboratory. An additional 0.22 micron filter is required before the input to the water supply.
Maximum Water Consumption	Up to 25 liters of water per hour at maximum instrument capacity.
Drain Requirements	76.2 mm (3 in.) drain is recommended to handle minimum of 100 L/hour (1.7 L/min).
Dimensions†	(H) 1600 mm, (W) 2034 mm, (D) 934 mm = <1.9 m^2
Weight	760 kg (1675.5 lb)
Compliance	Complies with international environmental, health, and safety standards, including CE and RoHS.
Noise Emission	Complies with NC-43 noise control specification. Average sound pressure of <65 dBA 1 m from analyzer.
Processing Heat Output	7500 BTU/hr
Ambient Temperature	18–30°C (64–86°F)
Ambient Humidity	20–80% noncondensing
Altitude	Up to 2000 meters
Floor Load-bearing Requirement	400 kg/m^2, seismic anchoring available
Overvoltage Classification	Category II
Pollution Classification	Degree 2
Removable Media	USB

†Dimensions with Rack Handler.

Atellica Portfolio of Laboratory Products

Engineered by Siemens Healthineers to deliver control and simplicity so you can drive better outcomes.

Address staff shortages and burnout, make patient care more predictable, and empower the lab to be more agile in today's changing world—all critical aspects in today's evolving healthcare landscape. That's the promise of our Atellica® portfolio of laboratory products.

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.

We are a team of 66,000 highly dedicated employees across more than 70 countries passionately pushing the boundaries of what's possible in healthcare to help improve people's lives around the world.

Not available for sale in the U.S. Product availability may vary from country to country and is subject to varying regulatory requirements. Please contact your local representative for availability.

Siemens Healthineers Headquarters
Siemens Healthcare GmbH
Henkestr. 127
91052 Erlangen, Germany
Phone: +49 9131 84-0
siemens-healthineers.com

Legal Manufacturer
Siemens Healthcare Diagnostics Inc.
Laboratory Diagnostics
511 Benedict Avenue
Tarrytown, NY 10591-5005
USA
Phone: +1 914-631-8000

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