Technical Specifications

Atellica IM Analyzers

Atellica IM 1300 Analyzer and Atellica IM 1600 Analyzer

siemens-healthineers.com/atellicasolution

The Atellica® IM 1300 Analyzer (mid-volume) and the Atellica® IM 1600 Analyzer (high-volume) have the same footprint and use proven acridinium ester (AE) technology. Engineered to be highly reliable for high productivity within a small footprint, these immunoassay analyzers feature built-in temperature control, automatic quality control (QC) when connected to the Atellica® Sample Handler, workflow enhancements to reduce operator intervention, and a broad and expanding menu across disease states. The Atellica IM analyzers use the same reagents and consumables in every configuration for streamlined inventory management and consistent patient results, no matter where the samples are tested.

Up to four Atellica IM analyzers can be connected in Atellica® Solution to accommodate immunoassay testing volume.

Atellica Solution

Flexible, scalable, automation-ready immunoassay and clinical chemistry analyzers engineered to deliver control and simplicity so you can drive better outcomes

Experience the power of Atellica Solution, featuring patented bidirectional magnetic sample transport technology, the flexibility to create over 300 customizable configurations, and a broad assay menu with proven detection technologies.

SIEMENS Healthineers

Technical Specifications

Product Specifications

Description	Immunoassay analyzer with chemiluminescence testing methodology using advanced acridinium ester technology
Test Throughput	Atellica IM 1300 Analyzer: up to 220 tests per hour;* Atellica IM 1600 Analyzer: up to 440 tests per hour*
Walkaway Time	Atellica IM 1300 Analyzer: up to 7.5 hours; Atellica IM 1600 Analyzer: up to 5 hours

Sample Handling

Validated Sample Types	Serum, plasma, amniotic fluid, urine, whole blood (assay-specific)
Sample Integrity Control	Liquid-level sensing, clot detection, bubble detection, short-sample detection. Hemolysis, icterus, and lipemia checks applied when connected to the Atellica® Chemistry Analyzer.
Auto-repeat	Automatic repeat testing from the original sample
Sample Dilution	Assay-dependent; can be auto-diluted and repeated when results extend linearity
Auto-reflex Testing	Will perform additional tests based on results of first test or test combination
Sample Carryover Prevention	Disposable sample tips eliminate sample carryover
Sample Volume per Test	10 to 100 µL of sample (varies by assay)

Reaction Area

Reaction Cuvettes	Total of 160 cuvette positions: 89 positions in the outer ring and 71 in the inner ring
Reaction Temperature	37°C
Reaction Detection	Photomultiplier tube (PMT)
Assay Reaction Formats	Sandwich, competitive, and antibody-capture formats
Assay Times	10–54 minutes, assay-dependent
Assay Technology	Chemiluminescence testing methodology using advanced acridinium ester technology

Reagent Handling

Reagent Compartments	42 primary and 35 ancillary reagent positions with refrigeration in a single refrigerated tray at 4–8°C and humidity control Continuous and automatic mixing to maintain particle suspension
Reagent Packs	ReadyPack® cartridge: 50 to 200 tests per pack
Reagent Integrity Control	Reagent pack barcode identification; automatic tracking and notification of inventory, calibration and control validity, onboard stability, low and expired reagents, detection of reagent bubbles
Onboard Stability	4–90 days, assay-dependent
Reagent Inventory Management	Automatic tracking and notification of remaining tests, onboard stability and expiration, calibration, and storage conditions for each pack
Dispensing System	Three probes with liquid-level sensing
Barcode-labeled Packs	Yes

Calibration/QC

Calibration Interval	Assay-dependent up to 90 days, tracked by software
Calibration Review	Graphical display of calibration curves from a minimum of 20 different reagent lots and 20 reagent packs for each assay
Auto-QC	Automatic, user-defined, assay-specific quality control (when connected to Atellica Sample Handler)
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; from 125,000 to 65,000 control results can be stored; archivable to removable media
QC Material	QC material is auto-loaded, tracked, and stored in a 60-position covered and refrigerated compartment and automatically deployed to analyzers when QC is scheduled (when connected to Atellica Sample Handler)

**Dependent upon test mix.*

Maintenance

Daily	Automated: ≤33 minutes†‡
Weekly	Automated: ≤42 minutes;† hands-on: 10–15 minutes
Monthly	Hands-on: 10–15 minutes
As Needed	Refer to Online Help for additional periodic maintenance
Maintenance Logs	Automated onboard scheduling, notification, and reporting

General Specifications

Power Requirements	Requires a 4.4 kVA (U.S.)/3.7 kVA (EU) power source; single-phase, 2-pole, 3-wire configuration; with Class III grounding. Will support incoming AC voltage from a nominal line voltage range of 200 to 240 VAC, 50/60 Hz. Main supply voltage fluctuations are not to exceed ±10 percent of the nominal voltage.
Power Consumption	2.9 kilowatts/hour (maximum)
Water Input Requirements	Incoming pressure of 5–30 psi at a temperature of 10–30°C
Water Quality Requirements	Special reagent-grade water Resistivity: ≥10 MΩ–cm Bacteria: ≤50 CFU/mL Total organic carbon (TOC): ≤500 ppb A 0.22 micron filter is required at the output stage of the laboratory water purification system and an additional 0.22 micron filter is required before the input to the water supply for each analyzer
Maximum Water Consumption	Atellica IM 1300 Analyzer: 3.5 liters/hour Atellica IM 1600 Analyzer: 6 liters/hour
Drain Requirements	Minimum of 15 liters (3.96 gallons) per hour per analyzer
Dimensions	150.0 (h) x 145.3 (w) x 116.7 (d) cm; 59.1 (h) x 57.2 (w) x 45.9 (d) inches
Weight	594.7 kg (1308 lb)
Compliance	Complies with international environmental, health, and safety standards, including CE and RoHS
Noise Emission	Average sound pressure level: 65 dBA
Processing Heat Output	4530 BTU/hour
Ambient Temperature	18–30°C (64–86°F)
Ambient Humidity	20–80% noncondensing
Altitude	0–2000 m (6561 feet)
Floor Load-bearing Requirement	351 kg/m^2
Overvoltage Classification	Category II
Pollution Classification	Degree 2
Removable Media	USB

†Daily maintenance is not required on the same scheduled day the analyzer performs the weekly maintenance.
‡Depending on test mix and volume.

Atellica Portfolio of Laboratory Products

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

Tighter control of your lab, simplified workflow, and more time to focus on driving better business and clinical outcomes—that's the promise of our Atellica® portfolio of laboratory products.

Control. Simplicity. Better Outcomes.

At Siemens Healthineers, we pioneer breakthroughs in healthcare. For everyone. Everywhere. Sustainably. As a leader in medical technology, we want to advance a world in which breakthroughs in healthcare create new possibilities with a minimal impact on our planet. By consistently bringing innovations to the market, we enable healthcare professionals to innovate personalized care, achieve operational excellence, and transform the system of care.

Our portfolio, spanning in vitro and in vivo diagnostics to image-guided therapy and cancer care, is crucial for clinical decision-making and treatment pathways. With the unique combination of our strengths in patient twinning,* precision therapy, as well as digital, data, and artificial intelligence (AI), we are well positioned to take on the greatest challenges in healthcare. We will continue to build on these strengths to help overcome the world's most threatening diseases, enable efficient operations, and expand access to care.

We are a team of more than 71,000 Healthineers in over 70 countries passionately pushing the boundaries of what is possible in healthcare to help improve the lives of people around the world.

**Personalization of diagnosis, therapy selection and monitoring, aftercare, and managing health.*

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 Healthineers AG
Siemensstr. 3
91301 Forchheim, Germany
Phone: +49 9191 18-0
siemens-healthineers.com

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

Published by Siemens Healthcare Diagnostics Inc. · CLS-24-3235-76 · QR700006277 · 03-2024 · ©Siemens Healthcare Diagnostics Inc., 2024