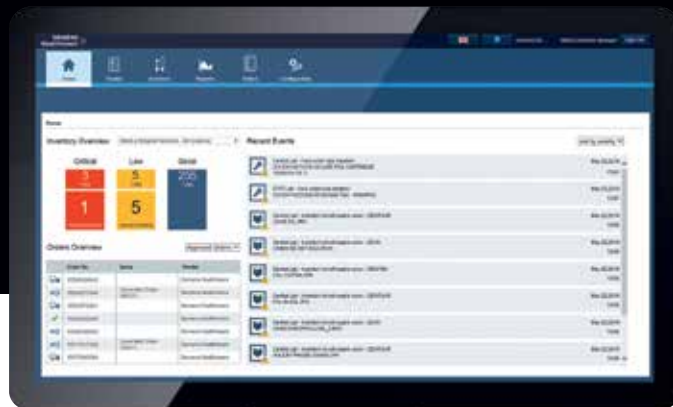


Atellica Inventory Manager

The right materials at the right time—
automated, real-time control of reagents
and consumables across multiple locations

siemens-healthineers.com





Siemens Healthineers is digitalizing healthcare to help you decrease cost, save time, and improve inventory quality.

With Atellica Inventory Manager, you can:

- Gain total inventory control across multiple locations using cloud-based software and no-touch RFID tracking of reagents and consumables.
- Analyze inventory usage over time to better predict demand, reduce waste, and automate order processes.

Say Goodbye to Manual Inventory Management

Ordering materials and tracking usage manually is time-consuming, costly, and prone to error and variability.

Up to
50%

Average amount of a laboratory's annual operating budget that is spent on reagents and consumables.¹ Even small inventory errors can increase costs for the lab.

>620
hours

Annual time it takes staff to perform manual inventory management in a two-hospital, multi-lab setting.² Atellica® Inventory Manager reduces manual inventory processes.

>75%
savings

RFID inventory management may save over 75% of the costs of manual inventory management.³

Atellica Inventory Manager can provide savings⁴ by reducing:

- Staff resources required for inventory management
- On-hand inventory (holding costs)
- Waste due to expiring products
- Emergency shipments
- Send-out services

Saving Time and Money



“Without Atellica Inventory Manager, our lab would be a little more chaotic. Now we do our inventory and ordering with the push of a button, saving us a significant amount of time.”

“The biggest benefits to us are improved staff utilization, standardized order processes, and reduction of inventory stocks.”

Dr. Oliver Colhoun, Medical Director,
Klinikum Frankfurt Höchst, Germany

Quality Begins with Inventory

Quality inventory management processes are required by accreditors and mandated in established regulatory guidelines. Atellica Inventory Manager supports good laboratory practices by:

- Reducing the risk of downtime that can affect patient and clinical outcomes by providing an uninterrupted flow of needed materials
- Lowering the possibility of human error and variability with a standardized and centralized ordering process
- Providing traceability of reagents and consumables, from ordering to consumption*
- Optimizing stock levels at all times at multiple lab locations for total inventory control

*Siemens Healthineers eCommerce is required. Siemens Healthineers eCommerce is not available in all countries. Please contact your local representative for availability.



One Process for All Inventory

One-click Check-in

Save time with RFID-prelabeled Siemens Healthineers reagents and consumables that allow for one-click check-in.†

Print labels to track third-party consumables and nonlabeled products.



Instant Quality Information

Check-in† provides access to product names, lot numbers, delivery dates, and expiration dates that are tracked by the system to help maintain documentation and testing quality.

Intelligent Order Management

Set ordering rules according to preference: by frequency, critical stock level threshold, and automatic reorder proposals.

Atellica Inventory Manager can approve orders automatically, or review and approve with one click.

Once an order is submitted, view real-time shipping status updates.*



Discard-and-done Check-out

Check out items by simply discarding empty boxes. The system's antennae detect discarded RFID-labeled boxes and automatically update inventory levels.

Reconcile stock in minutes with the handheld RFID scanner.

*Siemens Healthineers eCommerce is required. Siemens Healthineers eCommerce is not available in all countries. Please contact your local representative for availability.

4 †Availability of Siemens Healthineers RFID prelabeled reagents and consumables varies by country.

For Any Location at Any Time

Oversee all reagents and consumables across multiple lab locations!



Hospitals



Reference Labs



Clinics



Research Facilities

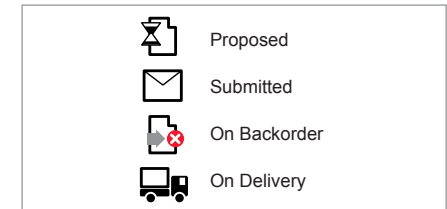
With One Simple System

Access the cloud-based web application using any Internet-connected device.



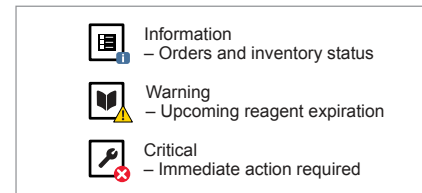
Simplified software

Review at-a-glance dashboards showing inventory status of all lab locations.



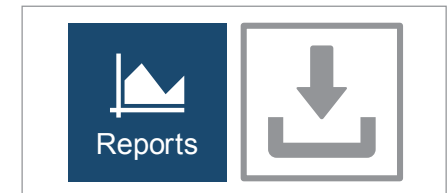
Ordering status

Review shipping status updates so you can proactively address shipping delays and backorders.*



Automated alerts

Receive notifications that indicate stock level, ordering status, expiry warnings, and Atellica Inventory Manager hardware conditions.



Reporting

Generate and save reports for traceability of reagents and consumables, from ordering to consumption.

Technical Specifications

Laboratory Infrastructure Requirements

A laboratory-provided computer or virtual machine is used to communicate between the RFID hardware and the Atellica Inventory Manager Server. This is the only component that requires a high-speed Internet connection. Although there are no known limitations with the use of other software, we recommend using and configuring the laboratory-provided system for Atellica Inventory Manager only. RFID hardware does not require access to the Internet and must reside on the same network as the laboratory computer. This network can be its own private network or belong to the rest of the laboratory network at your discretion. Data is encrypted prior to storage in the Atellica Inventory Manager web application and can be accessed by any computer connected to the Internet.

Laboratory-provided Computer or Virtual Machine (VM) Prerequisites

Minimum System Specifications	RAM: 4 GB minimum
	HDD: At least 10 GB free space/drive
	Processor: 1.2 GHz dual core
	USB ports: Two
Operating System	WINDOWS Enterprise or Ultimate; WINDOWS 10; WINDOWS Server 2012 R2

If the Controller will be a VM in the facility's IT infrastructure, a Client computer with RDP or RDS access to this VM is needed (with the ability to use the Client's USB ports to upload software, access files on the handheld, and configure the handheld device). The person installing the software must have administrator access to both the Client and VM systems.

The facility must install the following software on the Controller: Microsoft.NET Framework 3.5 and 4.5.2 or higher, and JAVA Version 8. Siemens Healthineers will install (administrator rights are required) the following software on the Controller: PostgreSQL 9.6, sLIMController Service, Atellica Inventory Manager Controller Service, Atellica Inventory Manager Client Configuration App, My Mobiler Software, Windows Mobile Device Center, SRS i2i Agent, LCM.i2iManager, Teamviewer

Information about Atellica Inventory Manager for the laboratory IT department. Additional information is available upon request.

Access to the Atellica Inventory Manager web application is protected under the Internet security already used by your facility. Since the laboratory computer is owned by your lab and may be located inside your lab network environment, you are responsible for its security. Internet security provided by your facility should include:

- Firewall settings
- Network security
- Wi-Fi security
- Latest security patches
- Up-to-date virus and malware protection

Unblocked Ports

Internet	Outbound: 443 (connects to https://inventory.siemens-healthineers.com/laboratory site name)
	Outbound: 80 (certificate renewal). Can be restricted to allow access only to http://se.symcb.com/se.crl and http://crl.verisign.com/pca3-g5.crl.
Local Network	Inbound: 12201 and 12203 (RFID Handheld); 30101 (i2i Agent); 5938 (Teamviewer)
	Outbound: 9100 (RFID Printer); 5084 (RFID Reader); 20001 (i2i Agent)

IP Assignments

Hardware	IP Address	MAC Address
Laboratory Computer	Fixed	Yes
RFID Reader	Fixed	Yes
RFID Printer	Fixed	Yes
RFID Handheld	Variable or fixed	Yes

Using DHCP reservation based on the hardware's MAC address is recommended. Static or DHCP reservation IP addressing is required. (DHCP alone may cause connectivity failure.)

Software Specifications

The Atellica Inventory Manager web application is a cloud-based, private, secure website.

Please refer to the Security White Paper for detailed security information.

Atellica Inventory Manager Web Application

Language Supported	English, German, or French [‡]
Internet Connection Protocol	HTTPS
Internet Browser Supported	Internet Explorer 11; Firefox 33 or higher; Chrome version 52 or higher
Min. Display Resolution Required	1024 x 768
<i>Optional eCommerce subscription[§]</i>	

Consumables

RFID Label

Integrated Circuit	NXP U-Code G2iM
Operation Frequency	860–960 MHz
Air Protocol	EPC Class 1 Gen 2, ISO 18 000-6C
Operating Temp.	–40 to 85°C (–40 to 185°F)
Shelf Life	2 years from manufacture date (20°C, 50% RH/68°F, 50% RH)
Other	ESD voltage immunity ±2 kV peak HBM

2000 labels/roll, 1 roll per package.

RFID Printer Ribbon

Width	50 mm (1.96 in.)
Length	450 m (1476 ft)
Color	Black
Operating Temp.	5 to 35°C (41 to 95°F)

Prints up to 500 labels, 1 ribbon per package.

[‡]Under development. Not available for sale. Future availability is not guaranteed.

[§]Siemens Healthineers eCommerce capability varies by country.

Hardware Specifications**

RFID Reader	
Weight	0.83 kg (1.8 lb), including power supply
Dimensions (H x W x D)	196 mm (7.7 in.) x 150 mm (5.9 in.) x 43 mm (1.7 in.)
Frequency (UHF Band)	Global: 902–928 MHz (maximum, supports countries that use a part of this band) EU: 865–868 MHz; U.S.: 902–928 MHz
Air Protocols	EPC global UHF Class 1 Gen2, ISO 18000-6C
Ethernet Interface	10/100BASE-T
Host Interface Protocol	LLRP
Operating Temp.	–20 to +55°C (–4 to +131°F)
Power Supply	Power adapter: universal 100–240 VAC, ~50/60 Hz Optional POE Injector: refer to the POE Injector section below.

Supports up to four antennas, can be wall-mounted.

Power Over Ethernet Injector (Optional)	
Weight	0.23 kg (0.5 lb)
Dimensions (H x W x D)	198 mm (7.8 in.) x 56 mm (2.2 in.) x 41 mm (1.6 in.)
Standards	IEEE 802.3af
Ethernet Interface	10/100/1000BASE-T
Max. Output Power	16.8 W at 48 V
Operating Temp.	0 to 40°C (32 to 104°F)
Power Supply	Universal AC input: 100–240 VAC, ~50/60 Hz

POE Injector is optional to supply power to the RFID Reader for distances up to 100 m (328 ft).

RFID Antenna	
Weight	1.13 kg (2.5 lb), including 6 m (20 ft) antenna cable
Dimensions (H x W x D)	295 mm (10.2 in.) x 295 mm (10.2 in.) x 50 mm (1.32 in.) with mounting bracket and screws
Frequency Range	865–956 MHz
Gain	6.0 dBiL
Polarization	LHCP or RHCP
3db Beamwidth	65° (horizontal and vertical), reads up to 4.8 m (15 ft)
Max. Power	2 watts
Axial Ratio	1.5 dB
Operating Temp.	–25 to +70°C (–13 to +158°F)

RFID Handheld	
Weight	23.4 oz (665 g), including hand strap
Dimensions (H x W x D)	164 mm (6.45 in.) x 75 mm (2.95 in.) x 211 mm (8.31 in.)
Display	4.0 inch capacitive; WVGA; color
Battery	PowerPrecision+ Li-Ion 5200 mAh with fast charging support
Data Capture Options	RFID, 1D laser scanner, 2D imager
RFID Power Output	0 dBm to +30 dBm
RFID Frequency Range	865–928 MHz††
RFID Standards Supported	EPC Class 1 Gen2; EPC Gen2 V2; ISO-18000-63
Wireless Communication	802.11 a/b/g/n/ac/d/h/i/k/r/lw
Wireless Security	WEP, WPA/WPA2 PSK, WPA/WPA2 Enterprise
Operating System	Android v8.1.0 (Oreo)
Operating Temp.	–20 to +50°C (–4 to +122°F)
Ethernet Cradle	Single-slot cradle with spare battery charger 4-slot charge-only cradle with 4-slot battery charger 4-slot Ethernet cradle with 4-slot battery charger 5-slot charge-only cradle 5-slot Ethernet cradle

Handheld Ethernet connection can be wireless (recommended) or wired via the charging cradle.

RFID Printer	
Weight	15 kg (33 lb)
Dimensions (H x W x D)	GL408e: 305 mm (12 in.) x 271 mm (10.75 in.) x 455 mm (17.91 in.) CL4NX: 321 mm (12.63 in.) x 271 mm (10.67 in.) x 457 mm (17.99 in.)
Printing Method	Thermal transfer
Ethernet Interface	10BASE-T/100BASE-TX
Operating Temp.	0 to 40°C (32 to 104°F)
Power Supply	Universal auto-ranging, 100–240 VAC ±10%, 50/60 Hz
Power Consumption	At peak: 180 W/190 VA (Print ratio 30%) Standby: 19.5 W/40 VA
Required Minimum Clearance	GL408e: 305 mm (12 in.) above and to the right of the printer CL4NX: 258 mm (10.2 in.) above and 233 mm (9.2 in.) on the left and right to allow for printer maintenance activities

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.

††Specific regional and country settings supported upon country selection.

At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey toward expanding precision medicine, transforming care delivery, and improving patient experience, all made possible by digitalizing healthcare.

An estimated 5 million patients globally benefit every day from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics, and molecular medicine, as well as digital health and enterprise services.

We are a leading medical technology company with over 120 years of experience and 18,000 patents globally. Through the dedication of more than 50,000 colleagues in 75 countries, we will continue to innovate and shape the future of healthcare.

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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.

References:

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2. 2016 data provided from a hospital with a central lab, microbiology lab, and serology and hematology lab.
3. Using RFID for the management of pharmaceutical inventory. Decision Support Systems Journal. 2011;51:842-52.
4. Based on interviews with Klinikum Frankfurt Höchst.

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