

Connectivity

Smart and connected

Herasafe and Maxisafe 2030i Biological Safety Cabinets

Connectivity

Check your instrument status in real time

Connectivity features*

The Thermo Scientific™ Herasafe™ and Maxisafe™ 2030i Biological Safety Cabinets (BSCs) have embedded capability to provide cloud-based connectivity. This enables customers to check the BSC status in real time and be alerted to important issues via alarms and alerts. Maintenance requirements are also visible, plus the ability to interrogate the events log.

The BSC is a device with heavy user interaction (similar to a work bench). The user can see alarms/alerts first hand via the touchscreen interface and respond as appropriate. The remote app adds a further dimension of visibility for Lab Managers and Facility Managers who can analyze historical data, manage service requirements and measure product utilization.

1.

Instruments—Shows connected devices with status tile:

- Tile view—shows instrument is connected and online with status summary (front sash position, fan status, airflow and overall instrument health)
- Instrument name can be edited from here by a single click
- Instrument can be interrogated further by a double click

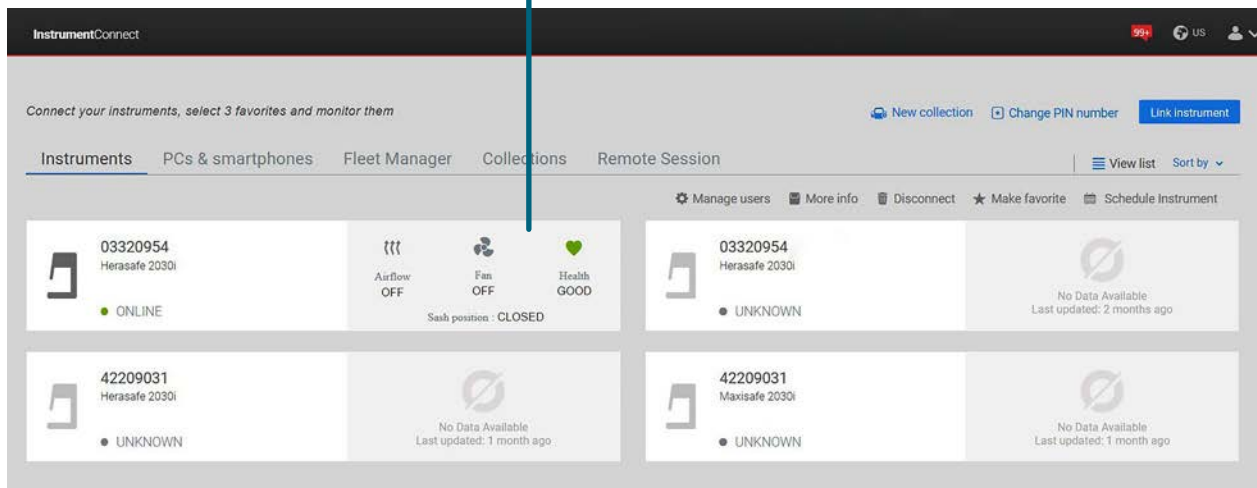
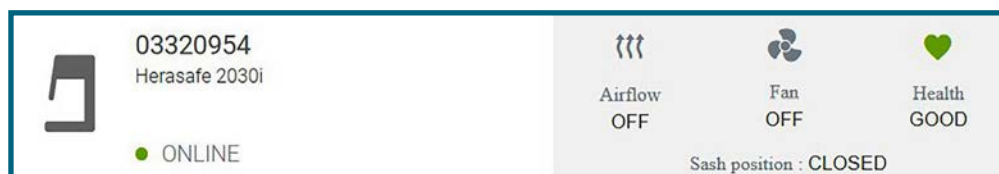


Figure A. Instruments

* The BSC connectivity functionality will be introduced from December 2021. All units displaying the FCC & ICES marked label (see **Figure B**) are connectivity-enabled.

Thermo Fisher Connect cloud services are currently available in the following countries: Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States.



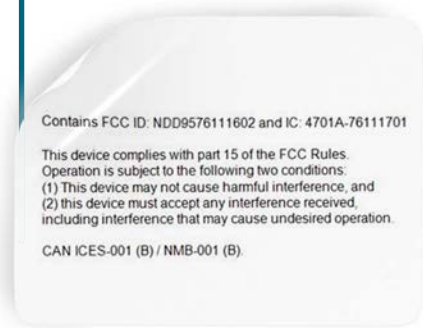


Figure B. Label to identify if BSC is connectivity-enabled

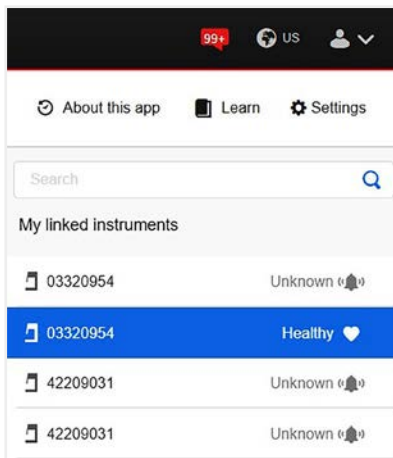


Figure C. Instrument status of connected BSCs is always visible

2.

Data plate—Shows:

- Model
- Serial number
- Operating hours running total
- Energy consumption (real time)
- Solenoid on/off
- Lights on/off
- Receptacles on/off
- Firmware versions
- Certification—Last certified and days remaining
- UV lights—Total run time/ time remaining
- HEPA filter—Total run time/ time remaining

Thermo Fisher Connect™				
<p>◀ 03320954 BSC</p>				
Data plate				
Asset name 03320954	Asset model Herasafe 203...	Serial number 03320954	Operating hours 562d 16h	Energy consumption 10.0 watts
Solenoid OFF	Lights OFF	Receptacles OFF	UI firmware version 50164801-625	Add-on board firmware 50151927C
Main board firmware 50155736K				
Certificate				
Last certification 12/Jul/2021		Days left 327d		
UV light				
Total time 0h		Time left 333d 8h		

Figure D. Data plate

3.

Dashboard—Visually indicates whether the BSC is set running, in standby mode or off. This helps to measure utilization of equipment within the laboratory and serves as a check to ensure operators are using the BSC in the most efficient mode. While it is likely that alarms will be dealt with by the user when present, it is useful to see remotely if there remains an unaddressed issue. Alerts indicate an issue which might not be urgent but must be addressed. Remote notification of alerts improves efficiency by enabling advanced scheduling or ordering of needed items.

Summary card—Replicates the touchscreen interface by means of showing the sash position and airflow status. A green heart is displayed if all conditions are OK.

- Is the BSC in use, in standby mode or off?

Active alarms/ alerts—Shows clearly on the dashboard any alarms/ alerts which remain active and need attention.

- Does the BSC have any active alarms?
- Does the BSC have any current alerts?

Event log—Sequentially lists all events for review. Can be filtered by type.

Captures a time stamped record of all events. Events can be sorted and reviewed from the mobile app and prove useful for detecting trends when troubleshooting. Events include all alarms, alerts, notifications, secure mode access, on/off, UV disinfection successfully completed,

and service interventions. Simply being able to check when the last UV disinfection was carried out, saves time and brings efficiency to a busy lab.

- Device alarm
- Device alert
- Secure service mode entered
- Scheduled service completed
- HEPA filters replaced
- UV light bulbs replaced

- UV disinfection completed/ aborted

Event status—Adjacent to each listed event shows whether still active or cleared.

The BSC application also sends push notifications/ reminders in some instances. This is based on actions which can usefully be managed remotely.

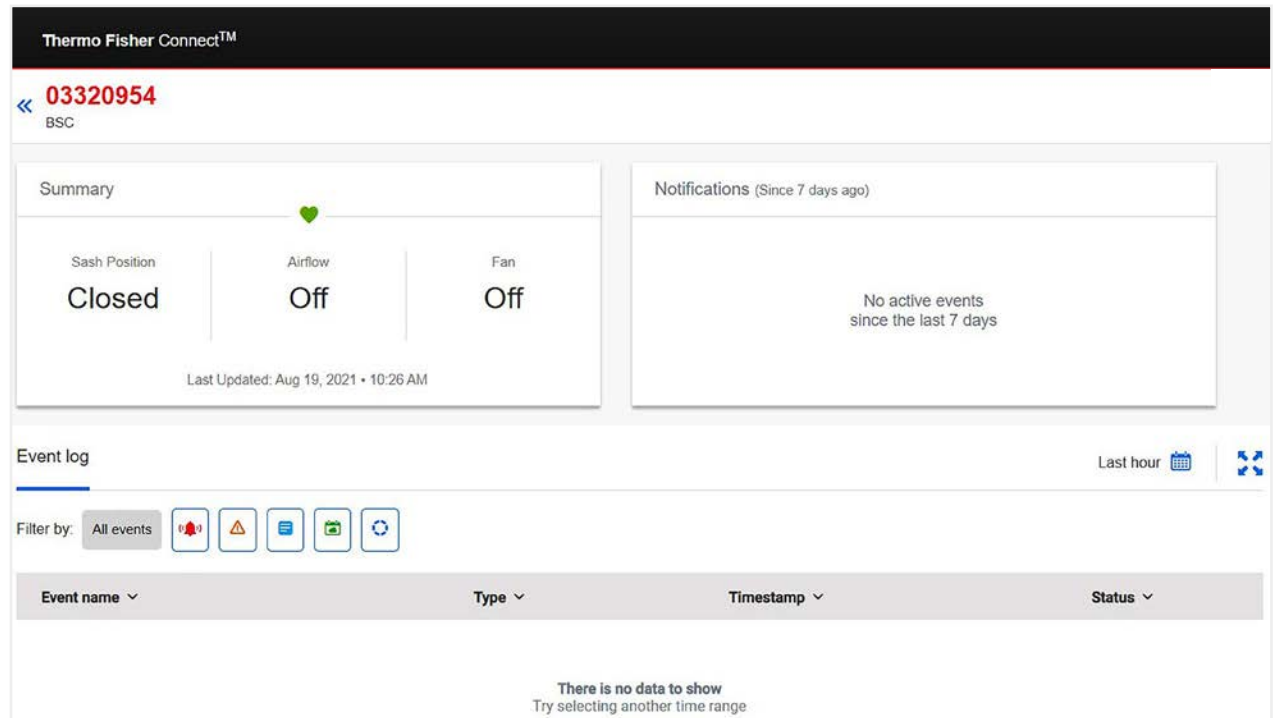


Figure E. Dashboard

4.

Push notifications/ reminders:

Allow time to schedule the next preventative maintenance service without impacting work patterns with un-scheduled down time. Similarly, notifications that the HEPA filters and UV bulbs are reaching the end of serviceable life allow sufficient time for ordering replacements without impacting day-to-day running of the laboratory.

- Maintenance service due
- HEPA filter change required
- UV light replacement required

EMAIL



Your filter is nearing the end of its life and should be replaced soon. Please contact service for assistance.

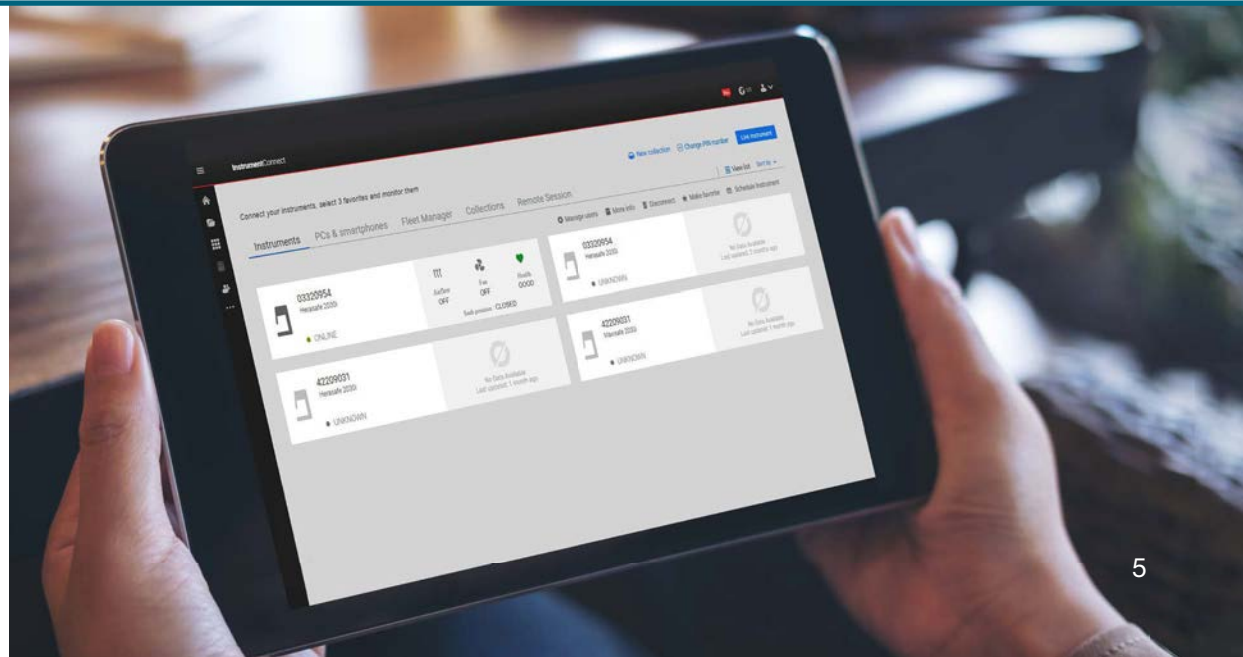


Thermo Fisher Connect Platform and data security

Thermo Fisher Connect Platform is part of our full suite of digital capabilities with a secure, cloud-based data storage, scientific analysis apps and peer collaboration tools. Thermo Fisher Scientific employs the latest security tools to safeguard the confidentiality, integrity, and availability of data and systems.

Find more information at thermofisher.com/connect

Data security questions are also addressed in the **Connect FAQs** or in the **Security Operations Guide**.



5 easy steps to connect

How to connect your BSC?



Step 1

Create a Thermo Fisher Connect account

- Visit thermofisher.com and select “Connect: Lab, Data, Apps” from the Sign In menu
- Create an account and log in
- Indicate which team members should receive notifications



Step 2

Download the Instrument Connect app, if desired

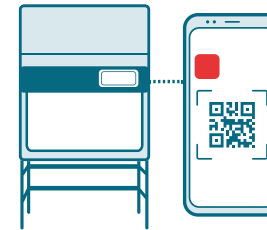
- Add the app to your mobile device from the App Store or Google Play
- Log in with your Thermo Fisher Connect account information



Step 3

Add the BSC to your Wi-Fi network

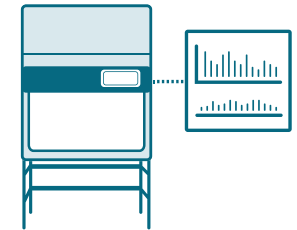
- Follow these prompts on your BSC touchscreen: Settings > Connectivity > Wi-Fi Setup
- Use your login information (network name and password) to connect
- *Password compatibility: Use of ASCII preshared keys (8–63 ASCII characters)*
- *Required wireless signal: –75 dBm (minimum)*



Step 4

Register your BSC on your Connect account

- Open either the Instruments Connect app or web browser
- Follow these prompts on your BSC’s touchscreen: Settings > Connectivity > Instrument Connect
- Scan the QR code shown or passcode (from a web browser) and follow instructions to complete set up



Step 5

Start monitoring

- Monitor instrument status remotely

Learn more at thermofisher.com/bsc

For Laboratory Use. It is the customer’s responsibility to ensure that the performance of the product is suitable for customers’ specific uses or applications.

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