

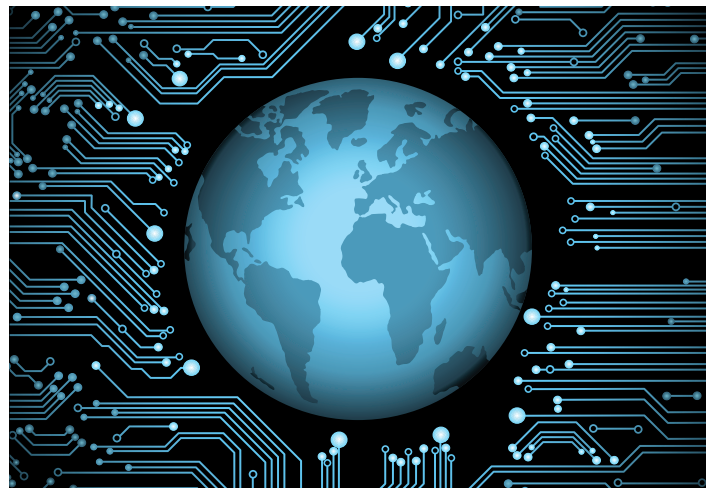
Remote Monitoring and Diagnostics Service FAQs

The Remote Monitoring and Diagnostics Service helps to improve instrument uptime by enabling our service personnel to remotely diagnose and proactively respond to your instrument issues. The service was developed for laboratories interested in maintaining a high level of instrument performance by reducing troubleshooting time through immediate, remote instrument testing.

When the service is turned on, instrument and computer performance data are sent to a secure central system on a periodic basis, where our service support team can monitor the instrument's critical operating parameters. Remote monitoring helps maintain peak performance and provides peace of mind that your unit is functioning according to the manufacturer's specifications.

Features

- Enables remote diagnostics and troubleshooting from almost anywhere in the world with direct access to service engineers
- Protectively monitors for deviations in instrument performance, informs user, and initiates service
- Reports historical performance data



Benefits

- Helps improve instrument uptime
- Decreases time for troubleshooting and diagnosis
- Increases first-time fixes
- Provides version control for software and firmware
- Helps decrease total cost of instrument ownership

What is the Remote Monitoring and Diagnostics Service?

The Remote Monitoring and Diagnostics Service is a real-time, remote instrument-monitoring service that helps you maximize system uptime and improve productivity by:

- Notifying our service engineers and the Remote Service Center support team when a situation is developing or exists that could lead to instrument problems or failure. This proactive monitoring allows us to take action before you experience unscheduled instrument downtime.
- Utilizing remote monitoring and diagnostics tools to help get a failed instrument up and running as quickly as possible. A remote service engineer will work to identify the problem and correct it. If a field service engineer (FSE) must be dispatched to your site, this service helps to ensure that they arrive with the right parts to get your instrument repaired quickly.

Will experimental or sample data be sent from the instrument?

No. The Remote Monitoring and Diagnostics Service only monitors instrument functions, not sample or experimental results.

How is the Remote Monitoring and Diagnostics Service turned on?

For most instruments, the Remote Monitoring and Diagnostics Service is a feature that can be turned on in the user settings of the software. See the instrument user guide for detailed instructions. In addition, during installation or routine maintenance, your FSE can turn the service on or off at your request. For more information and to get set up with remote monitoring, please contact technical support at thermofisher.com/contactus.

How are computer viruses avoided?

Remote monitoring relies on virus protection systems installed on the instrument's computer. Users are responsible for having virus protection in place.

How secure is the data flow?

All communication between the instrument and the Thermo Fisher Scientific server is kept secure using Secure Sockets Layer (SSL) encryption—the same method banks use to secure online transactions. SSL also helps ensure that each message is received without changes or errors during transmission. The instrument utilizes the Axeda™ platform and Axeda ServiceLink applications for SSL encryption. The Axeda platform and applications have undergone independent testing and validation, achieving security certification from Verisign™ Security Services.

How is the Remote Monitoring and Diagnostics Service turned off?

This feature can be turned on or off according to the instructions in the instrument user guide, by a FSE at your request, or with assistance from our technical support team.

Are there costs associated with the Remote Monitoring and Diagnostics Service?

No. This feature is included with your instrument warranty or with the AB Assurance or AB Complete service plans.

Which instruments include the Remote Monitoring and Diagnostics Service?

The Remote Monitoring and Diagnostics Service is currently available for many Applied Biosystems™ genetic analysis instruments and real-time PCR systems, Invitrogen™ flow cytometers, and the Ion Torrent™ family of sequencers.

What does Thermo Fisher Scientific do with the instrument data collected by remote monitoring?

Remote monitoring allows us to provide better technical support and more comprehensive information to service engineers in advance, reducing the time needed to repair an instrument. It allows us to proactively schedule service visits and to improve our planned maintenance programs by identifying parts that need to be replaced periodically. The data are also used to improve the quality of our systems through failure analysis and to improve our ability to accurately resolve instrument problems remotely through phone support.

For IT professionals

Does the IP address of the instrument need to be visible on the internet?

The IP address of the remote monitoring agent does not need to be visible from outside the local area network. If a web browser on the instrument computer can access port 443 at drm.appliedbiosystems.com, then the agent will be able to communicate with the Thermo Fisher Scientific server.

Does the instrument or instrument computer need a fixed IP address?

No. A static IP is not required; the instrument may be assigned an IP address via DHCP.

Does the remote monitoring agent require a virtual private network (VPN)?

No. Communication through firewalls and proxy servers minimizes the cost and time needed for establishing a VPN between the equipment and the service provider. Persistent connection is not required between the remote monitoring agent and the Thermo Fisher Scientific server.

How are proxy servers or firewalls affected?

For the remote monitoring agent to work properly, your firewalls and proxies must allow outbound HTTPS communication via port 443.

Does the remote monitoring agent need to have access to the local security domain?

The remote monitoring agent runs on the instrument or on the computer that is linked to the instrument, and does not require access to the local security domain to operate. Security information is needed only to enable authenticated communication through certain types of proxy servers.

Does the remote monitoring agent need to be started each time the computer is rebooted?

No. The remote monitoring agent runs in the background of the operating system and restarts automatically when the computer is rebooted.

Does the remote monitoring agent use industry-recognized security and communication protocols?

Yes. The remote monitoring agent utilizes HTTPS via TLS 1.2 for secure communications.

Will the remote monitoring agent affect my network?

Communication between the remote monitoring agent and the Thermo Fisher Scientific server presents minimal impact on network bandwidth—typically less than adding another workstation user with a web browser. The remote monitoring agent sends information only periodically or when the equipment is reporting a problem. Communication to the Thermo Fisher Scientific server is initiated by the remote monitoring agent.

Find out more at
thermofisher.com/instrumentservices

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