

April 2020

# QIAsphere Base User Manual



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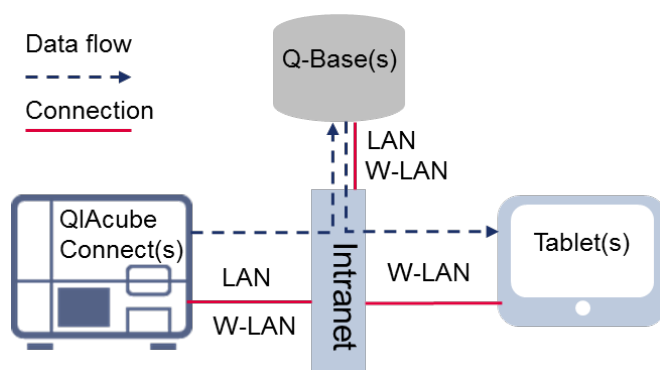
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# 1 Introduction

Before using the QIASphere Base, it is essential that you read this user manual carefully and pay attention to the safety information. The instructions and safety information must be followed to ensure safe operation of the instrument and to maintain the instrument in a safe condition.

QIAGEN brings the QIAcube Connect customer experience to the next level with remote instrument monitoring through the QIASphere Base (an IoT gateway) and the QIAcube Connect tablet application. The gateway can be connected to one or more QIAcube Connect instruments and serves as an interface between the instrument and the QIAcube Connect tablet application.



**Schematic view of connection and data flow between QIASphere Base, QIAcube Connect and a tablet device**

## 1.1 About this user manual

This user manual provides information about the QIAcube Connect in the following sections:

1. Introduction
2. Safety Information
3. General Description
4. Installation Procedures
5. QIAcube Connect App Features
6. Troubleshooting
7. Glossary
8. Appendix A – Technical Details
9. Appendix B – Ordering Information
10. Revision History

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### 1.1.1 Technical assistance

At QIAGEN® we pride ourselves on the quality and availability of our technical support. Our Technical Services Departments are staffed by experienced scientists with extensive practical and theoretical expertise in molecular biology and the use of QIAGEN products. If you have any questions or experience any difficulties regarding the QIAcube Connect or QIAGEN products in general, do not hesitate to contact us.

QIAGEN customers are a major source of information regarding advanced or specialized uses of our products. This information is helpful to other scientists as well as to the researchers at QIAGEN. We therefore encourage you to contact us if you have any suggestions about product performance or new applications and techniques.

For technical assistance and more information, please see our Technical Support Center at **[www.qiagen.com/support/technical-support](http://www.qiagen.com/support/technical-support)** or call one of the QIAGEN Technical Service Departments or local distributors (see back cover or visit **[www.qiagen.com](http://www.qiagen.com)**).

### 1.1.2 Policy statement

It is the policy of QIAGEN to improve products as new techniques and components become available. QIAGEN reserves the right to change specifications at any time.

To produce useful and appropriate documentation, we appreciate your comments on this user manual. Please contact QIAGEN Technical Services.

## 1.2 Intended use of the QIAcube Connect

QIASphere Base enables users to connect the QIAcube Connect App running on a tablet to their QIAcube Connect instrument(s) via local intranet. The QIASphere Base interface manages the instrument data transfer from QIAcube Connect to the QIAcube Connect App. QIASphere Base is connected to the user's intranet, for example via Wi-Fi. Once installed, QIASphere Base does not require regular operation or maintenance activities.

The QIAcube Connect App and QIASphere Base are to be used in a laboratory setting by trained personnel. The QIAcube Connect App and QIASphere Base are intended for molecular biology applications. These products are not intended for the diagnosis, prevention or treatment of a disease.

### 1.3 Requirements for QIAcube Connect users

The table below covers the general level of competence and training necessary for transportation, installation, use, maintenance and servicing of the QIAcube Connect.

<b>Task</b>	<b>Personnel</b>	<b>Training and experience</b>
Delivery	No special requirements	No special requirements
Installation, routine use and maintenance	Laboratory technicians or equivalent	Appropriately trained and experienced personnel familiar with use of computers and automation in general
Servicing	QIAGEN Field Service Specialists only	Trained and authorized by QIAGEN

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## 2 Safety Information

Before installing or using QIASphere Base, it is essential that you carefully read the user manual provided by the hardware supplier Eurotech and pay attention to their safety information. The instructions and safety information in this user manual must be followed to ensure safe operation of the instrument and to maintain the instrument in a safe condition.

The safety information for QIASphere Base (Eurotech – ReliaGATE 10-12) can be found at the following site:

**<https://www.eurotech.com/en/products/iot/multi-service-iot-edge-gateways/reliagate-10-12>**

## 3 General Description

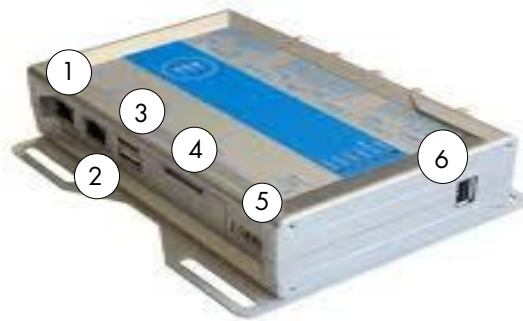
The QIASphere Base hardware enables connection of the QIAcube Connect App running on a tablet to QIAcube Connect instruments via a local intranet connection. The QIASphere Base interface manages the transfer of data from the QIAcube Connect instrument(s) to the QIAcube Connect App on tablet. QIASphere Base can be connected to the intranet via Wi-Fi or LAN. The initial network settings of QIASphere Base are configured via the QIAcube Connect App using a Bluetooth® connection between QIASphere Base and the tablet or via your personal computer

The QIAcube Connect App provides real-time status monitoring of one or multiple QIAcube Connect instrument(s). It also displays the QIAcube Connect run setup including the selected protocol and sample number.

### 3.1 External features of QIAsphere Base



Front view of QIAsphere Base



Rear view of QIAsphere Base



Top view of QIAsphere Base



QIAsphere Base Wi-Fi/ Bluetooth dongle

- |   |  |
|---|--|
| <b>1</b> RJ-45 Ethernet port (ETH 1)<br><b>Note:</b> The ETH1 port can be used to connect QIAsphere Base to your local network (LAN).   | <b>5</b> Power cord socket   |
| <b>2</b> RJ-45 Ethernet port (ETH 0)<br><b>Note:</b> The ETH0 port can be used to configure QIAsphere Base from a personal computer.<br><b>Important:</b> Do not connect to your LAN. | <b>6</b> USB port  |
| <b>3</b> Two USB ports  | <b>7</b> Green LED indicator for Bluetooth on/off (first LED; USER1 LED)   |
| <b>4</b> Service panel (includes micro SD card slot, factory reset button and backup battery)   | <b>8</b> Blue LED indicator for power on/off (last LED; POWER)             |
|   | <b>9</b> Wi-Fi/Bluetooth dongle (to be inserted into one of the USB ports) |

For more details regarding hardware features, refer to the user manual provided by Eurotech:  
<https://www.eurotech.com/en/products/iot/multi-service-iot-edge-gateways/reliagate-10-12>



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## 4 Installation Procedures

This section provides instructions to install QIASphere Base and connect it to the local network.

### 4.1 Site requirements

QIASphere Base must be connected to the same network as the QIAcube Connect instrument and the tablet. QIASphere Base does not need to be located in close proximity to enable proper connection to the QIAcube Connect.

### 4.2 Power requirements

QIASphere Base requires the following power supply: 100–240 V AC, 50/60 Hz

The included power supply transforms the voltage to the operational voltage of 6-36 V DC. Ensure that the voltage rating of the QIASphere Base is compatible with the AC voltage available at the installation site. Mains supply voltage fluctuations are not to exceed 10% of nominal supply voltages.

**Important:** The power connector is NOT protected against short circuit. Always include an external fuse to protect the product.

Details about power supply specifications and how to supply power can be found in user manual from Eurotech:

<https://www.eurotech.com/en/products/iot/multi-service-iot-edge-gateways/reliagate-10-12>

### 4.3 Connecting QIASphere Base to your network

#### 4.3.1 Connecting QIASphere Base to your network using QIAcube Connect App on the tablet

This section describes how to initially set up QIASphere Base within your network and ensure the connection to the QIAcube Connect instrument.

**Note:** During the Installation Procedures, the name **QIASphere Base** is abbreviated as **Q-Base** in the QIAcube Connect instrument software and app.

**Note:** If you intend to connect QIAsphere Base to LAN, and your LAN does not support automatic assignment of IP addresses (not supporting DHCP), support from an IT professional might be required.

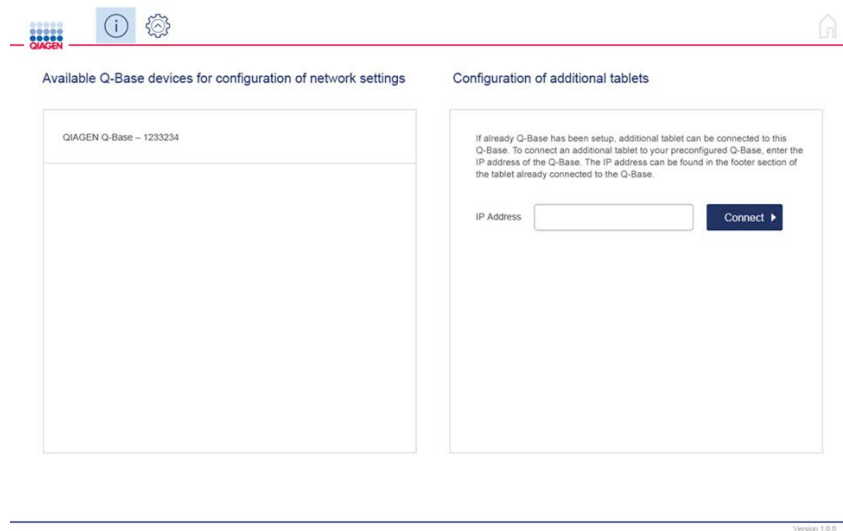
1. Insert the Wi-Fi/Bluetooth dongle into one of the QIAsphere Base USB ports (see Section 3.1, "External features of QIAsphere Base").
2. If you want to connect your QIAsphere Base to a wired network, plug the LAN cable into ethernet port ETH1.

**Important:** Do not use Ethernet port ETH0 for the LAN connection.

3. Power up the QIAsphere Base by plugging the power cord into an appropriate power socket.
4. Turn on the tablet and activate Bluetooth function.
5. Launch the QIAcube Connect App.

Read and accept "Terms and Agreement" to proceed. "Terms and Agreement" only appears during the first launch of the application.

6. On the tablet, press the **Configuration** icon (⚙️) to start Bluetooth scanning for QIAsphere Base devices.



**Note:** For successful Bluetooth communication between QIAsphere Base and tablet, the devices must be within a maximum distance of 10 meters.

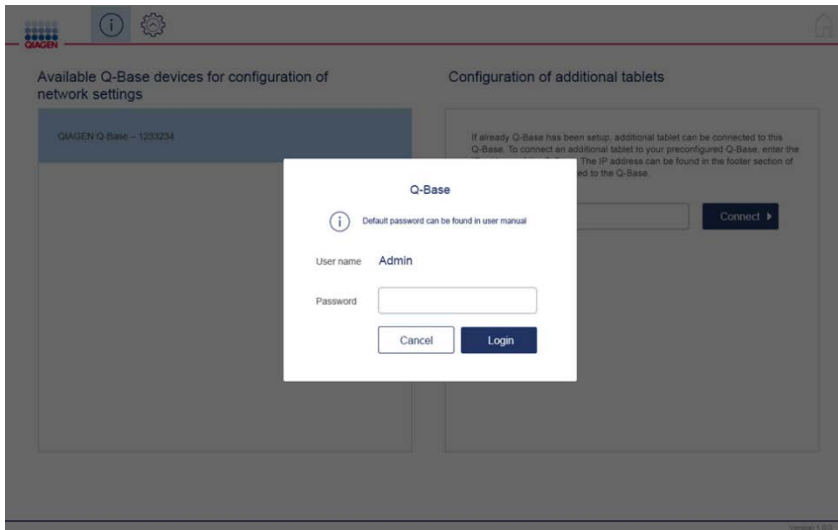
7. After a few seconds, the QIAsphere Base name will be listed under **Available Q-Base devices for configuration of network settings**.

**Note:** If the QIAsphere Base cannot be found, refresh the Bluetooth search by pressing the **Configuration** icon again.

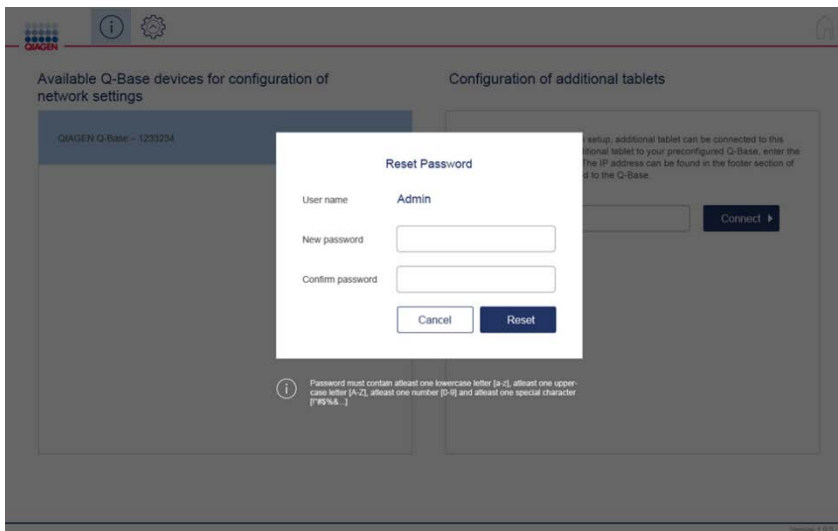
**Note:** QIAsphere Base Bluetooth is automatically turned off after 10 minutes. The USER1 LED is powered off (see Section 3.1, "External features of QIAsphere Base"). To restart the initial

QIAsphere Base configuration, restart the QIAsphere Base by unplugging the power cord for 5 seconds.

8. Select the QIAsphere Base name from the list to pair QIAsphere Base with the tablet.
9. Enter the default login details. The **User Name** is Admin and the **Password** is Qiagen123.



10. The QIAsphere Connect App will prompt you to change the password. Choose a new password according to the password guidelines described by the information box on the screen, and then press **Reset**.



11. Enter the LAN or Wi-Fi settings as described in sections 4.3.1.1 or 4.3.1.2 before proceeding with step 12.

**Note:** Do not press **Finish Configuration** before you have entered the IP address of QIAsphere

Base into the QIAcube Connect instrument. The QIAcube Base IP address can be found in the information panel on the right-hand side of the screen.

12. Switch on the QIAcube Connect instrument and log in as an admin user.
13. On the QIAcube Connect touchscreen, select the **Configuration** tab, and then select the **Q-Base** tab as shown below.

14. Make sure that the box next to **Communication enabled** is checked.
15. Enter the QIAcube Base IP address in the **Q-Base URL** field on the QIAcube Connect touchscreen. The IP address is shown in the QIAcube Connect App (see step 11, above, and

screenshot below). Type the IP address into the field or scan the 2-D barcode (see screenshot below).

The screenshot shows the QIAGEN Q-Base configuration interface. At the top, there's a header with the QIAGEN logo, an information icon, a settings icon, and a home icon. Below the header, there are tabs for 'LAN' and 'WLAN', with 'LAN' currently selected. The main section is titled 'Device network settings'. It contains two radio buttons: 'DHCP' (selected) and 'Static IP Manual'. Below these are three input fields: 'Subnet mask' with the value '255.255.255.0', 'DNS Server' with the value 'Optional', and 'Gateway' with the value '10.100.226.10'. To the right of these fields is a text box with instructions: 'Use the IP address to connect the Q-Base to the QIACube Connect instrument(s). 1. Open the Q-Base tab within the configuration screen of the QIACube Connect instrument. 2. Tick the box 'Enable Communication'. 3. Enter or scan IP address of the Q-Base within Q-Base URL text field. 4. Press Finish Configuration on tablet. 5. Press Apply on QIACube Connect instrument and follow instruction on screen.' Below the instructions is a QR code and the text 'IP Address : 10.100.226.170 or'. At the bottom right, there is a 'Finish Config' button. The footer of the interface shows 'Version 1.0.0'.

**Note:** The IP address shown above is just an example.

16. Once you have entered the QIAsphere Base IP address on the QIACube Connect touchscreen, press **Apply** to continue.
17. Press **Finish Configuration** on the tablet.

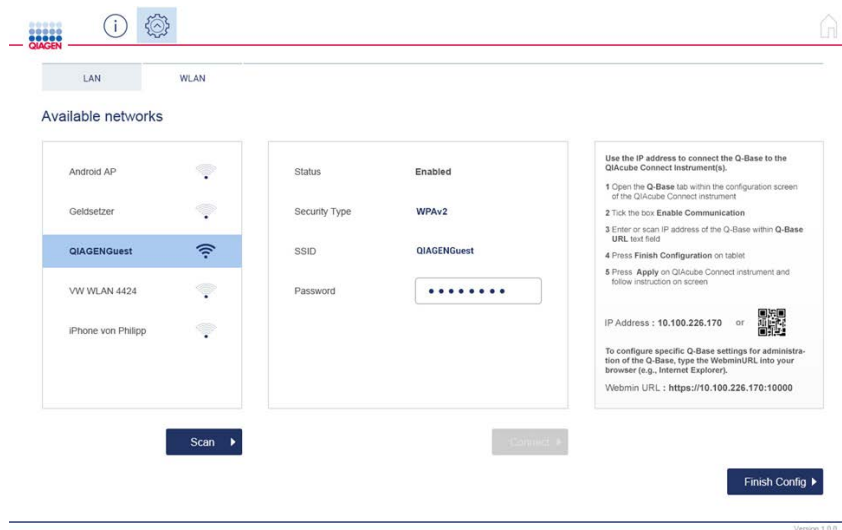
**Important:** If you don't press **Finish Configuration**, the connection will only be established after 10 minutes, automatically.

**Note:** The first time QIAsphere Base is configured for LAN, there may be a delay of approximately 2—4 minutes to reach the provided QIAsphere Base URL through the tablet app.

18. **Optional:** Wait for 10 seconds and press **Test** on the QIACube Connect touchscreen to test for a functional connection.
19. Reboot the QIACube Connect instrument to start the connection and receive the instrument status.

#### 4.3.1.1 Connecting to WLAN/Wi-Fi

**Note:** QIAsphere Base only supports connection to Wi-Fi networks with visible SSIDs and WPA2.



1. Press the **WLAN** tab in the QIAsphere Connect App to configure the Wi-Fi connection.
2. Select the desired Wi-Fi network from the list of **Available networks**.
3. Once selected, enter the Wi-Fi password in the **Password** field.  
**Note:** The server, SSID and security type details will be automatically filled.
4. Press **Connect**.
5. Proceed with step 12 in Section 4.3.1 (page 12).

### 4.3.1.2 Connecting to LAN (static IP or DHCP)

- LAN Connection with static IP

**Note:** If you intend to connect QIAsphere Base to a LAN that does not support automatic assignment of IP addresses (i.e., does not support DHCP), you might require additional support from an IT professional.

QIAsphere

LAN WLAN

Device network settings

☐ DHCP ☒ Static IP Manual

IP Address: 10.100.226.170

Subnet mask: 255.255.255.0

DNS Server: Optional

Gateway: 10.100.226.10

Connect

Use the IP address to connect the Q-Base to the QIAsphere Connect instrument(s).

1. Open the **Q-Base** tab within the configuration screen of the QIAsphere Connect instrument.
2. Tick the box **Enable Communication**.
3. Enter or scan IP address of the Q-Base within **Q-Base URL** text field.
4. Press **Finish Configuration** on tablet.
5. Press **Apply** on QIAsphere Connect instrument and follow instruction on screen.

IP Address: 10.100.226.170 or

To configure specific Q-Base settings for administration of the Q-Base, type the WebminURL into your browser (e.g., Internet Explorer).

Webmin URL: <https://10.100.226.170:10000>

Finish Config

Version 1.0.0

**Note:** When entering details into the screen above, **Static IP Manual** is selected by default.

1. In the **IP address** field in the QIAsphere Connect App, enter the IP address that should be used for the QIAsphere Base.
2. In the **Subnet mask** field, enter the subnet mask that should be used for the QIAsphere Base.
3. **Optional:** Enter the DNS server in the **DNS server** field.
4. **Optional:** In the **Gateway** field, enter the IP address of the gateway.
5. Press **Connect**.
6. Proceed with step 12 in Section 4.3.1 (page 12).

- **LAN connection using DHCP**

The screenshot displays the QIAsphere Base configuration interface. At the top, there is a navigation bar with a QIAsphere logo, an information icon, a settings icon, and a home icon. Below this, there are tabs for 'LAN' and 'WLAN'. The 'LAN' tab is selected, and the section is titled 'Device network settings'. On the left, there are two radio buttons: 'DHCP' (unselected) and 'Static IP Manual' (selected). Below these are input fields for 'IP Address', 'Subnet mask', 'DNS Server' (with an 'Optional' label), and 'Gateway'. A 'Connect' button is located below these fields. On the right, there is a text box with instructions: 'Use the IP address to connect the Q-Base to the QIAsphere Connect Instrument(s).', followed by a numbered list of steps (1-5) and fields for 'IP Address' and 'Webmin URL'. At the bottom right, there is a 'Finish Config' button. The version 'Version 1.0.0' is visible at the bottom right of the interface.

1. To use DHCP-configured LAN, select **DHCP** in the **Device network settings** area of the QIAsphere Connect App.

**Note:** When using DHCP-configured LAN, the network settings for QIAsphere Base will be obtained automatically from the DHCP server. No further input is required.

2. Proceed with step 12 in Section 4.3.1 (page 12).

#### 4.3.2 Connecting QIAsphere Base to your network using personal computer

This section describes how to initially set up QIAsphere Base within your network and ensure the connection to your QIAsphere Connect instrument, without using Bluetooth.

**Note:** During the Installation Procedures, the name **QIAsphere Base** is abbreviated as **Q-Base** in the Q-Base Administration Portal and QIAsphere Connect instrument software.

**Note:** If you intend to connect QIAsphere Base to your LAN, and your LAN does not support automatic assignment of IP addresses (not supporting DHCP), you might require support from an IT professional.

1. To connect your QIAsphere Base to a wired network, plug the LAN cable into ethernet port ETH1.

To connect your QIAsphere Base to a wireless network, insert the Wi-Fi/Bluetooth dongle into one of the QIAsphere Base USB ports (see Section 3.1, "External features of QIAsphere Base").



2. Use a LAN cable to directly connect QIASphere Base to your personal computer using ETH0 (see Section 3.1, “External features of QIASphere Base”).

**Important:** Do not use Ethernet port ETH0 for the LAN connection.

3. Power up the QIASphere Base by plugging the power cord into an appropriate power socket. Wait for 20 seconds. Then open a web browser (e.g., Chrome™ or Mozilla® Firefox) on your personal computer and open the Q-Base Administration Portal by entering this URL:  
<https://172.16.0.1>.

**Note:** Use a recent browser. Older browsers (like Internet Explorer®) may not correctly display all features of the QIASphere Base Administration Portal.

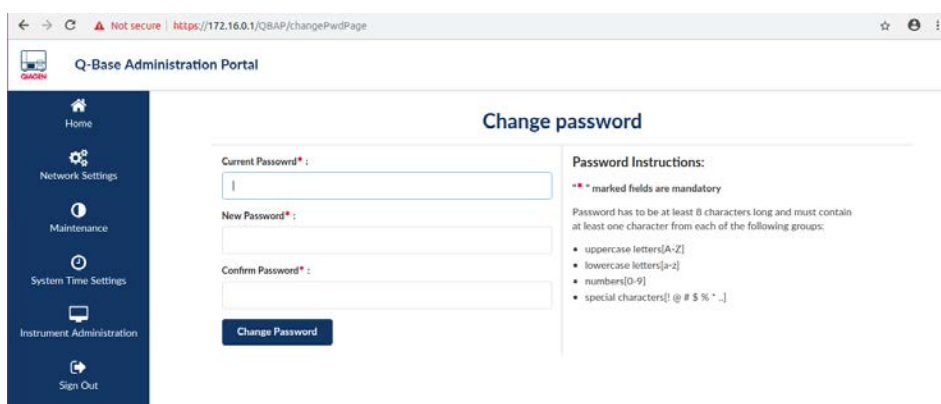
**Note:** QIASphere Base uses a self-signed certificate for the https connection. Therefore, the browser may issue a security warning. Ignore the warning or add an exception to access the QIASphere Base configuration.

The screen shown below will appear on the personal computer.



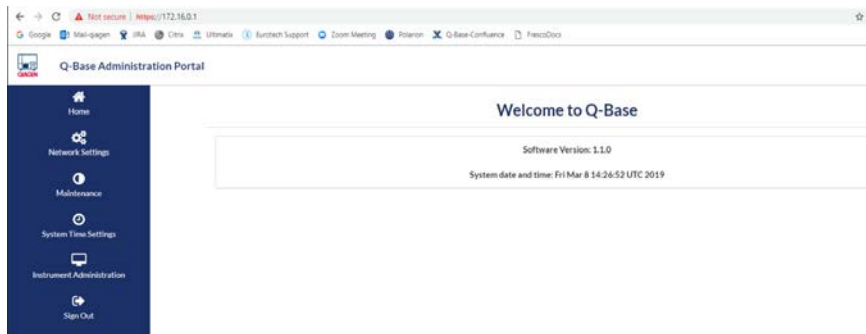
The screenshot shows a web browser window with the address bar displaying "https://192.168.8.105". The page title is "Q-Base Administration Portal". On the left, there is a dark blue sidebar with icons for Home, Network Settings, Maintenance, System Time Settings, Instrument Administration, and Sign In. The main content area has a "Login" heading. Below it, there are two input fields: "User Name:" and "Password:". A "Sign In" button is located below the password field.

4. Enter the **User Name:** Admin and **Password:** Qiagen123.
5. The **Change password** screen appears as shown below. Choose a new password according to the provided password guidelines, and then press **Change Password**.

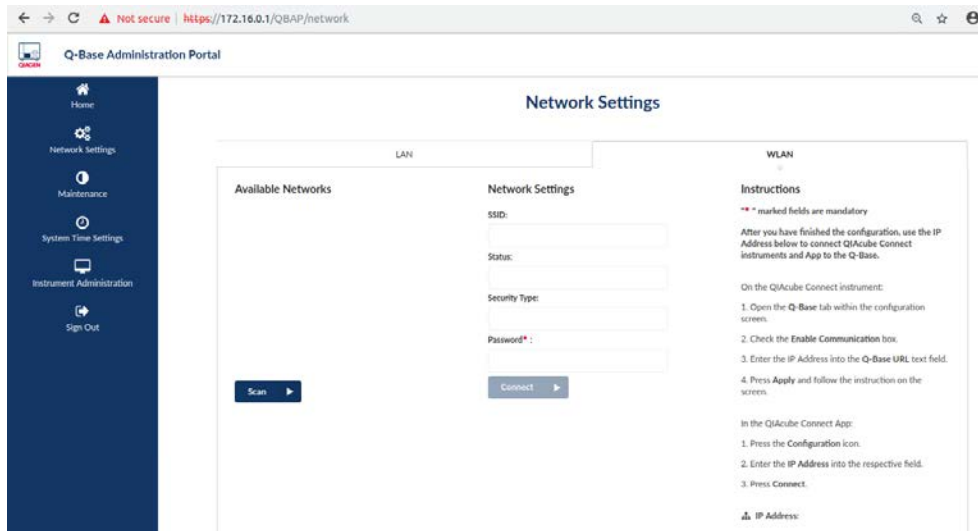


The screenshot shows a web browser window with the address bar displaying "https://172.16.0.1/QBAP/changePwdPage". The page title is "Q-Base Administration Portal". On the left, there is a dark blue sidebar with icons for Home, Network Settings, Maintenance, System Time Settings, Instrument Administration, and Sign Out. The main content area has a "Change password" heading. Below it, there are three input fields: "Current Password\*", "New Password\*", and "Confirm Password\*". A "Change Password" button is located below the confirm password field. To the right of the input fields, there is a "Password Instructions:" section. It states: "\*\* \* marked fields are mandatory". It also states: "Password has to be at least 8 characters long and must contain at least one character from each of the following groups:". The groups are listed as: uppercase letters[A-Z], lowercase letters[a-z], numbers[0-9], and special characters[! @ # \$ % ^ & \* - \_].

6. Once the password is changed successfully, you will be redirected to the main page of the Q-Base Administration Portal.



7. Select **Network Settings** from the menu on the left-hand side.
- Note:** You will not be able to change any other QIAsphere Base settings while you are connected via ETH0 port. To access other settings, finish the network setup and then access the Q-Base Administration Portal through your local network, as described in Section 4.5.
8. Enter the LAN or Wi-Fi settings as described in sections 4.3.2.1 or 4.3.2.2 before proceeding with step 11.



9. Switch on the QIAcube Connect instrument and log in as an admin user.
10. On the QIAcube Connect touchscreen, select the **Configuration** tab, and then select the **Q-Base** tab as shown below.

The screenshot shows the QIAcube Connect Configuration screen with the Q-Base tab selected. At the top, there are icons for Setup, Tools, Configuration, Network, and Logout. Below these are tabs for System, Users, Protocols, Settings, LAN, Wi-Fi, and Q-Base. The Q-Base tab is active, showing a 'Communication enabled' checkbox which is checked. Below this is a 'Q-Base URL:' label and a text input field containing '10.100.57.137'. To the right of the input field is a 'Test...' button. At the bottom right of the main content area is an 'Apply' button. At the very bottom of the screen, it says 'User: Admin Admin'.

11. Make sure that the box next to **Communication enabled** is checked.
12. Enter the QIASphere Base IP address in the **Q-Base URL** field on the QIAcube Connect touchscreen (marked in red in the screenshot below).

The screenshot shows the Q-Base Administration Portal Network Settings page. On the left is a sidebar with links: Home, Network Settings, Maintenance, System Time Settings, Instrument Administration, and Sign Out. The main content area is titled 'Network Settings' and has two tabs: LAN and WLAN. The LAN tab is selected, showing 'Available Networks' (QIAGuest, QIAGuest, Q-Base Test 3) and 'Network Settings' (SSID: Q-Base Test 3, Status: Enabled, Security Type: WPA2, Password: \*\*\*\*\*). There are 'Scan' and 'Connect' buttons. The WLAN tab is also visible, showing 'Instructions' and a list of steps. The final step in the instructions, '3. Press Connect', is circled in red, and below it, the IP address '192.168.6.105' is also circled in red.

**Note:** The IP address shown above is just an example.

13. Once you have entered the QIASphere Base IP address, press **Apply** to continue.
14. **Optional:** Press **Test** on the QIAcube Connect touchscreen to test for a functional connection.
15. Reboot the QIAcube Connect instrument to start the connection and receive the complete instrument data.

16. Connect your tablet to the QIAsphere Base (refer to section 4.4).
17. In the browser: Select **Sign Out** on the left-hand side.
18. Close the browser.
19. Remove the cable between ETH0 and your PC.

#### 4.3.2.1 Connecting to WLAN/Wi-Fi

**Note:** QIAsphere Base only supports connection to Wi-Fi networks with visible SSIDs and WPA2.

1. Press the **WLAN** tab of the Q-Base Administration Portal to configure the Wi-Fi connection.
2. Press **Scan** to search for available Wi-Fi networks.
3. Select the desired Wi-Fi network from the list of **Available networks**.
4. Once selected, enter the Wi-Fi password in the **Password** field.

**Note:** The server, SSID and security type details will be automatically filled.

5. Click **Connect**.
6. Proceed with step 10 in Section 4.3.2 (page 19).

#### 4.3.2.2 Connecting to LAN (static IP or DHCP)

- **LAN Connection with Static IP**

**Note:** If you intend to connect QIAsphere Base to a LAN that does not support automatic assignment of IP addresses (i.e., does not support DHCP), you might require additional support from an IT professional.

The screenshot shows the 'Q-Base Administration Portal' with a sidebar on the left containing links for Home, Network Settings, Maintenance, System Time Settings, Instrument Administration, and Sign Out. The main content area is titled 'Network Settings' and has two tabs: 'LAN' and 'WLAN'. The 'LAN' tab is active, showing 'Lan Settings' with two radio buttons: 'DHCP' and 'Static IP Manual' (which is selected). Below these are input fields for 'IP Address \*', 'Subnet mask \*', 'DNS Server: optional', and 'Default Gateway:'. The 'IP Address' field contains '10.100.224.160', 'Subnet mask' contains '255.255.255.0', and 'Default Gateway' contains '10.100.224.255'. A 'Connect' button is at the bottom of the form. To the right of the form, there is an 'Instructions' section with text and numbered steps for connecting to the Q-Base Base and the QIAsphere Connect App. At the bottom right, it shows 'IP Address: 10.100.224.160'.

**Note:** When entering details into the screen above, **Static IP Manual** is selected by default

1. In the IP address field, enter the IP address that should be used for the QIAsphere Base.
2. In the **Subnet mask** field, enter the subnet mask that should be used for the QIAsphere Base.
3. **Optional:** Enter the DNS server in the **DNS server** field.
4. **Optional:** In the **Gateway** field, enter the IP address of the gateway.
5. Press **Connect**.
6. Proceed with step 10 in Section 4.3.2 (page 18).

- **LAN connection using DHCP**

1. To use DHCP-configured LAN, select **DHCP** in the **network settings** area.

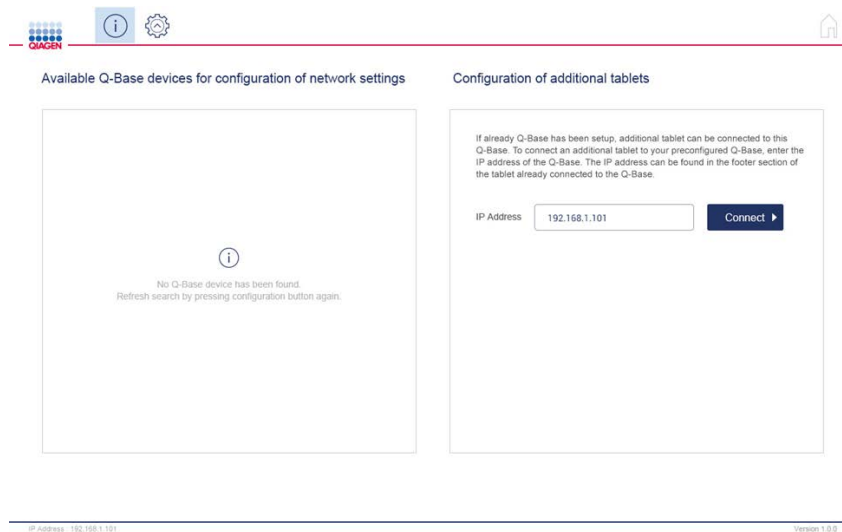
**Note:** When using DHCP-configured LAN, the network settings for QIAsphere Base will be obtained automatically from the DHCP server. No further input is required. It takes some seconds to get configured and connected.

2. Proceed with step 10 in Section 4.3.2 (page 18).

The screenshot shows the 'Q-Base Administration Portal' with a sidebar on the left containing links to Home, Network Settings, Maintenance, System Time Settings, Instrument Administration, and Sign Out. The main content area is titled 'Network Settings' and has two tabs: 'LAN' and 'WLAN'. The 'LAN' tab is selected, showing 'Lan Settings' with radio buttons for 'DHCP' (selected) and 'Static IP Manual'. Below these are input fields for 'IP Address' (10.100.226.160), 'Subnet mask' (255.255.255.0), 'DNS Server' (optional), and 'Default Gateway' (10.100.226.255). A 'Connect' button is at the bottom of the LAN settings. To the right, under 'Instructions', there are steps for connecting the QIAsphere Base to the Q-Base, including opening the Q-Base tab, checking 'Enable Communication', entering the IP address into the 'Q-Base URL' field, and pressing 'Apply' and 'Connect'. At the bottom of the instructions, it shows 'IP Address: 10.100.226.160'.

## 4.4 Connecting additional tablets to an existing QIAsphere Base

Multiple tablets can be connected to one QIAsphere Base.



1. In the QIAcube Connect App, press the **Configuration** icon (⚙️).
2. Enter the IP address of the existing QIAsphere Base.  
**Note:** The QIAsphere Base IP address can be found in the QIAcube Connect App of the first configured tablet in the bottom-left corner of the screen.
3. Press the **Connect** icon.
4. Press the tablet's **Home** button to receive the first data.

## 4.5 Administration of QIAsphere Base via the Q-Base Administration Portal

QIAsphere Base administration can be performed through the Q-Base Administration Portal via a secure https connection, using an internet browser on a personal computer that is connected to the local network.

**Note:** The name **QIAsphere Base** is abbreviated as **Q-Base** in the Q-Base Administration Portal.

**Note:** It is not possible to change the Network Settings of QIAsphere Base while connected through your local network. To change the network configuration, follow the processes described in Section 4.3.

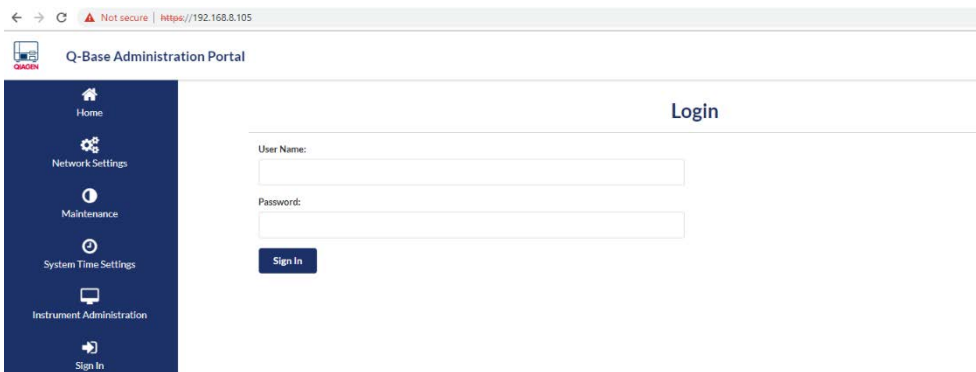
To use the Q-Base Administration Portal, proceed as follows:

1. Open a web browser on the personal computer (e.g., Chrome or Firefox).  
**Note:** Use a recent browser. Older browsers (like Internet Explorer) may not correctly display all features of the Q-Base Administration Portal.
2. Enter "https://" followed by the QIASphere Base IP address into the address field and press **Enter**.

Example: https://192.168.1.10

**Note:** The QIASphere Base IP address can be found in the bottom-left corner of the screen of the QIAcube Connect App.

**Note:** QIASphere Base uses a self-signed certificate for the https connection. Therefore, the browser may issue a security warning. Ignore the warning or add an exception to access the QIASphere Base configuration.

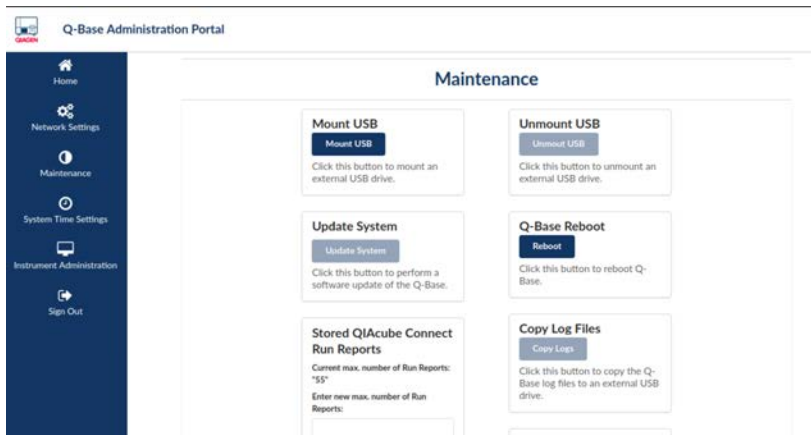


3. Enter the login id and the password that was set during initial QIASphere Base set up (Section 4.3).
4. You can now access the Maintenance features, System Time Settings and Instrument Administration via the sidebar on the left.

### 4.5.1 Save log files

To save log files from QIAsphere Base, follow the instructions below:

1. Select **Maintenance** from the sidebar.



2. Insert a USB stick into a QIAsphere Base USB port.
3. Click **Mount USB** and then click **Copy Log Files**.
4. The log files will be copied onto the USB stick.
5. Click **Unmount USB** before removing the USB drive.

### 4.5.2 Change admin password

To change the QIAsphere Base login password, select **Maintenance** from the sidebar, enter the password into the **Old Password** field. Enter the new password, re-type the password in the **Confirm Password** field and click the **Submit** button.

### 4.5.3 Reboot of QIAsphere Base

Click the **Reboot** button to reboot the QIAsphere Base.

**Note:** If you are using the Wi-Fi/Bluetooth dongle, the QIAsphere Base may not be able to use Wi-Fi and Bluetooth after the reboot. This can be resolved by restarting the QIAsphere Base manually (unplug the power cord for a few seconds). We suggest not to use the **Reboot** button when the Wi-Fi/Bluetooth dongle is used.



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#### 4.5.4 Update QIASphere Base software

New versions of software for QIASphere Base can be downloaded from the following site:  
**[www.qiagen.com](http://www.qiagen.com)**.

Follow the steps below to update the software.

1. Prepare a USB stick by copying the newest rpm file from our webpage into the main folder.
2. Insert the USB stick into the QIASphere Base USB port.
3. Select **Maintenance** from the sidebar.
4. Click **Mount USB Drive**.
5. Click the **Update System** button.
6. Wait until the **Update system** button is disabled. This indicates that the update process is complete.
7. Click **Unmount USB before** disconnecting the drive from QIASphere Base.

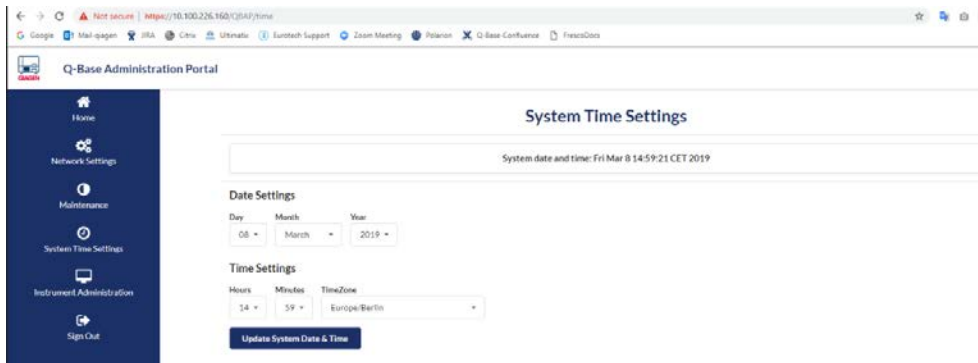
#### 4.5.5 Change number of QIAcube Connect Run Reports stored on the QIASphere Base

The number of run reports (report files) can be configured from 1–60 per the QIAcube Connect instrument.

This will affect the number of Run Reports viewable in the QIAcube Connect App. Older Run Reports will still be available on the instrument itself. For more information on Run Report storage on the instrument, please refer to the QIAcube Connect instrument user manual.

1. Select **Maintenance** from the sidebar.
2. **Current max. number of run reports** will be displayed.
3. Enter a value from 1–60 in the **Enter new max. number of run reports** field.
4. Click the **Update** button.

#### 4.5.6 System time settings

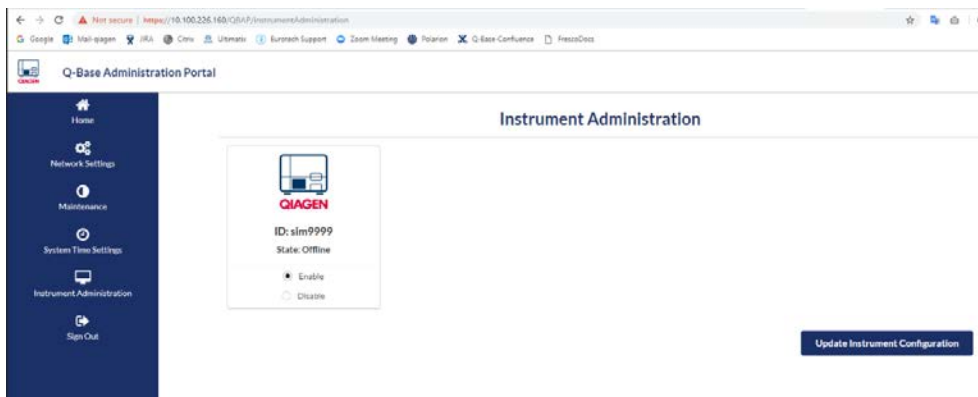


1. Select **System Time Settings** from the sidebar of the QIAsphere Base Administration Portal.
2. Use **Date Settings** and **Time Settings** to change the date and time and to select a time zone.
3. Press **Update System Date & Time** button.

#### 4.5.7 Instrument Administration

If a QIAcube Connect instrument shall no longer be visible in the app, e.g., because it is no longer connected to the QIAsphere Base, it can be disabled in the **Instrument Administration** function.

1. Select **Instrument Administration** from the sidebar of the Q-Base Administration Portal.
2. A list of instruments connected to the QIAsphere Base is displayed.
3. Remove individual instruments by selecting the **Disable** button next to the respective instrument icon.
4. Press **Update Instrument Configuration**.



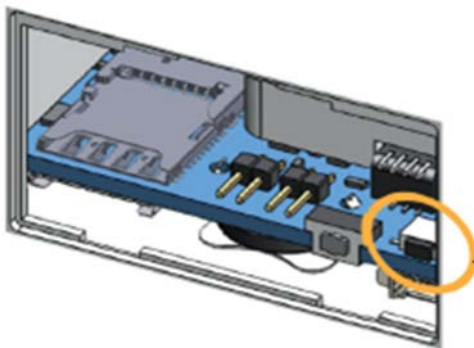
## 4.6 Factory reset of QIAsphere Base

If required, QIAsphere Base can be reset to the original factory settings.

**Note:** When performing a factory reset, all existing data including log files and settings will be deleted. The QIAsphere Base password will be reset to the default password ("Qiagen123"). The QIAsphere Base will be rebooted and will start with the first-time configuration (Section 4.3). The USER1 LED (refer to point 7 in Section 3.1, page 8) will blink during the factory reset, and will turn off when the factory reset is complete.

**Note:** If you are using the Wi-Fi/Bluetooth dongle, the QIAsphere Base may not be able to use Wi-Fi and Bluetooth after the reboot. This can be resolved by restarting the QIAsphere Base manually (unplug the power cord for a few seconds).

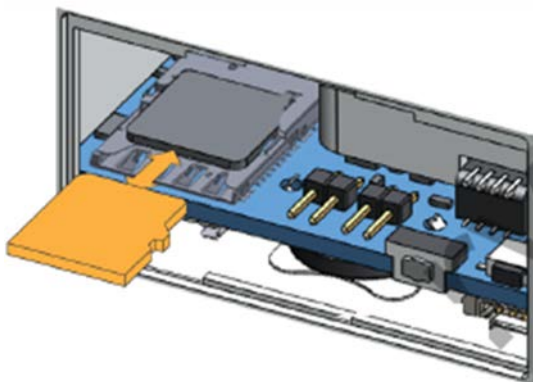
Press the reset button on the service panel for at least 10 seconds to perform the factory reset.



## 4.7 Insert/remove the microSD card

To insert the microSD card, push it into the holder with the contacts facing down.

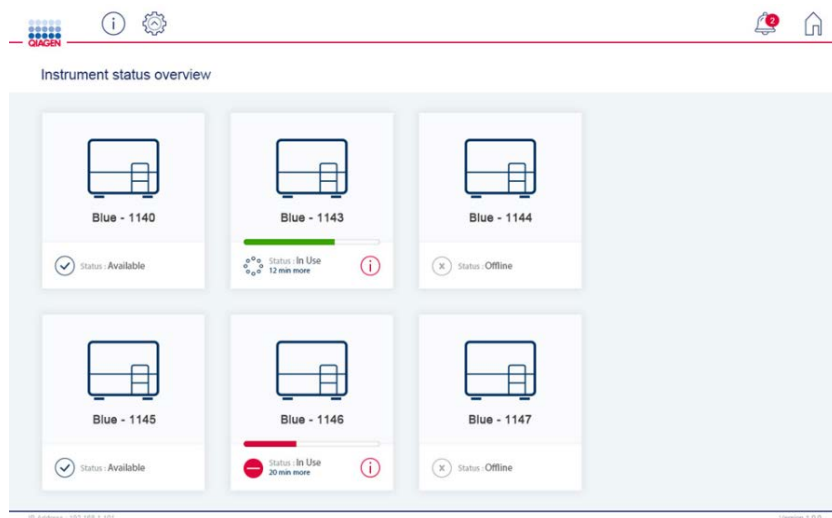
**Note:** A 32 GB microSD card is already in place upon delivery.



## 5 QIAcube Connect App Features

### 5.1 Instrument status

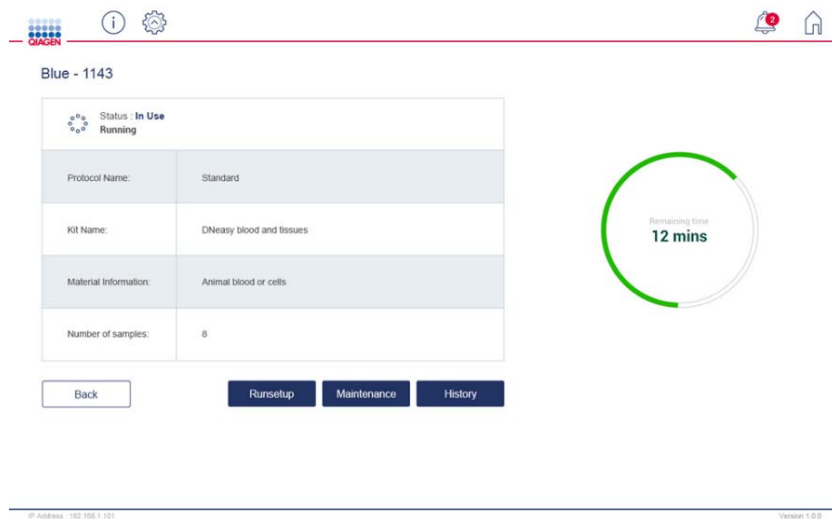
The QIAcube Connect App allows you to view the current status of the QIAcube Connect instrument. If multiple instruments are configured, the app home screen will show an overview of instrument status for each instrument.



Three possible instrument statuses can be displayed:

- **Offline:** the QIAcube Connect instrument is not connected to QIAsphere Base (e.g., instrument is switched off).
- **Available:** the QIAcube Connect instrument is connected to QIAsphere Base but is currently not operating.
- **In Use:** the QIAcube Connect instrument is connected to QIAsphere Base, and is operating.

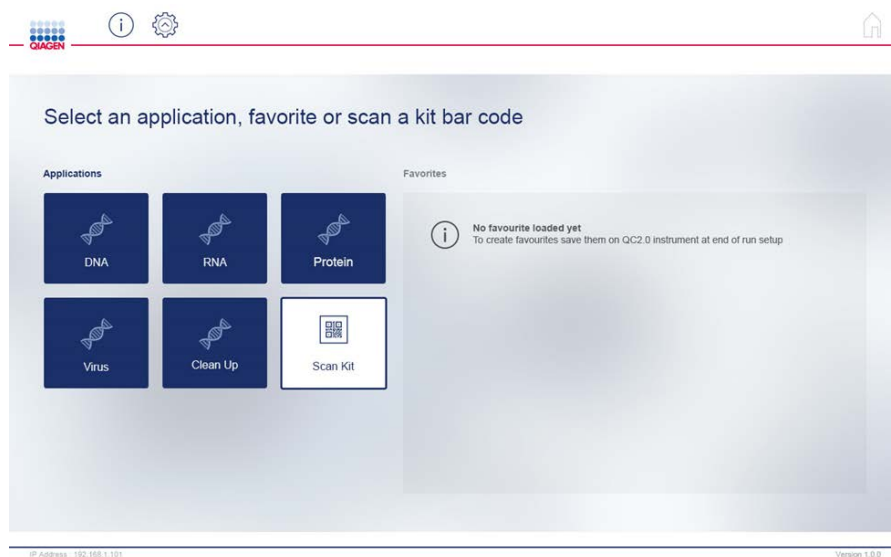
Select an instrument icon to open the detailed instrument screen.



The status information is automatically updated every 20 seconds.

## 5.2 Run setup

Run setup allows preparation of an instrument run using the QIAcube Connect App on the tablet instead of the QIAcube Connect touchscreen. All run setup information will be displayed in the app in the same way as it is displayed on the instrument touchscreen. Run setup allows selection of all protocols, either manually, or by scanning the kit bar code, or by selecting a favorite protocol.



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During run setup, the **Instrument status** function indicates the instrument where the selected protocol can be used together with the status of that instrument.

After the details are entered during run setup, the app will generate a summary as a 2-D bar code which contains all run setup information. The information is transferred to the instrument by scanning the bar code using the 2-D bar code reader of the QIAcube Connect instrument.

### 5.3 Maintenance

The **Maintenance** screen shows the current maintenance status information of the selected instrument.

### 5.4 History

The **History** screen shows the current run history of the selected instrument. It also allows you to view and print report files from previous runs performed on the selected instrument.

### 5.5 In-App notification

In-App notification informs you about certain instrument events, such as “Run finalized” or “Run stopped”. Pressing the bell icon will provide more information about the message and event.

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## 6 Troubleshooting

### 6.1 General information

This section provides information about what to do if an error occurs when using QIASphere Base.

### 6.2 Contacting QIAGEN Technical Services

Whenever encountering a QIASphere Base error, be sure to have the following information at hand:

- Detailed description of the error situation
- QIASphere Base log files (refer to section 4.5.1)

This information will help you and your QIAGEN Technical Service Specialist to deal most efficiently with the issue.

**Note:** Information about the latest software versions can be found at:

**[www.qiagen.com](http://www.qiagen.com)**.

### 6.3 FAQs

#### 6.3.1.1 Why can't I find the QIASphere Base device in the device list during the first installation?

The tablet and QIASphere Base try to connect via Bluetooth. When you switch on QIASphere Base, the Bluetooth module is automatically switched on for 10 minutes. Make sure that Bluetooth is enabled on the tablet and that the installation procedure is started from the QIACube Connect App within 10 minutes by pressing the **Configuration** icon. If QIASphere Base still cannot be found, refresh the Bluetooth search by pressing the **Configuration** icon again.

Make sure that the Wi-Fi/Bluetooth dongle has been inserted as described in Section 4.3.

#### 6.3.1.2 Which network settings are supported by the QIACube Connect and QIASphere Base?

You can use either LAN (Local Area Network) or WLAN (Wireless Local Area Network), which is Wi-Fi Protected Access 2 (WPA2) protected and has a visible SSID. For data exchange, make sure that QIACube Connect and the QIASphere Base tablet are connected to same network.

#### 6.3.1.3 Why can't I see my QIACube Connect instrument in the QIACube Connect App?

For data exchange, make sure that the QIACube Connect, the QIASphere Base and the tablet are connected to the same network. Make sure that the QIASphere Base IP address has been entered



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in the configuration dialog of the QIAcube Connect and that communication has been enabled. For details refer to Section 4.3.

#### **6.3.1.4 Why is the QIAcube Connect App sometimes reacting as if delayed?**

Each time a QIAcube Connect instrument is turned on, all data (e.g., protocol files) will be uploaded to QIASphere Base. During this upload phase, the QIAcube Connect App reaction time is impaired. Wait for 10 minutes and retry.

If you have multiple QIAcube Connect instruments connected, we recommend removing from the instruments any protocols that are not used. This reduces the time required to upload and parse the protocols on the QIASphere Base and will significantly increase the speed of the QIAcube Connect App.

#### **6.3.1.5 Why are not all applications/kits/protocol files visible in the run setup?**

Each time a QIAcube Connect instrument is switched on, all data (e.g., protocol files) will be uploaded to QIASphere Base. During this upload phase, the QIAcube Connect App is not able to show the files that have not yet been uploaded for run setup. Wait for 10 minutes and retry.

#### **6.3.1.6 How can I retrieve a forgotten password?**

If the password is lost, it can be reset by performing a factory reset of QIASphere Base (see Section 4.6, "Factory reset of QIASphere Base").

#### **6.3.1.7 Can the number of run records be changed?**

Yes, the number of run records can be set using the Q-Base Administration Portal. Refer to Section 4.5.5 for details. The default value is 60.

#### **6.3.1.8 What should I do if the QIAcube Connect App freezes?**

Force stop the QIAcube Connect App. Press the button next to the Home button to launch the app list, select the QIAcube Connect App and swipe to the right. Restart the QIAcube Connect App.

#### **6.3.1.9 Why can't I reach the QIASphere Base Administration Portal?**

Make sure that you have successfully placed the QIASphere Base into your network and it has a valid IP address. Then enter `https://IP-address` in your internet browser window ("IP-address" is the

actual IP address of your QIAsphere Base). Make sure to include the "s" in "https:\\". QIAsphere Base uses a self-signed certificate for the https connection. Therefore, the browser may issue a security warning. Ignore the warning or add an exception to access the QIAsphere Base configuration.

## 7 Glossary

Term	Description
DNS	Domain Name Server, which converts a URL name to an IP address. This information is an optional field during the first configuration.
Gateway	IP address of the gateway device/router The user must enter the Gateway address during the first configuration if selecting static IP
IP address	Internet protocol address; this is a unique address assigned to a device to identify the device within a network. The user must enter the IP address during the first configuration if selecting static IP, and this IP address will be assigned to QIAsphere Base.
LAN	Local area network; a wired connection between one or more devices to a particular network.
SSID	Service set identifier; this is the Wi-Fi network's unique name, and is the name devices use to connect to the network.
Subnet mask	Subnet mask is a number that defines a range of IP addresses that can be assigned to a network. The user must enter the subnet mask during the first configuration if selecting static IP.
URL	An alphanumeric name given to a particular device or resource in a connected network; address of the resource in the internet (webserver address).
Wi-Fi/WLAN	A wireless network connecting two or more devices using wireless communication to form a local area network (LAN) within a limited area.
WPA2	Wi-Fi Protected Access 2
Q-Base	QIAsphere Base

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## 8 Appendix A – Technical Details

### 8.1 Technical data

For technical data, refer to the ReliaGATE 10-12 user manual from Eurotech.

**<https://www.eurotech.com/en/products/iot/multi-service-iot-edge-gateways/reliagate-10-12>**

### 8.2 Declaration of Conformity

Name and address of the legal manufacturer:

QIAGEN GmbH  
QIAGEN Strasse 1  
40724 Hilden  
Germany

An up-to-date declaration of conformity can be requested from QIAGEN Technical Services.

### 8.3 Certificates

For certificates, refer to the ReliaGATE 10-12 user manual from Eurotech.

**<https://www.eurotech.com/en/products/iot/multi-service-iot-edge-gateways/reliagate-10-12>**

### 8.4 Waste Electrical and Electronic Equipment (WEEE)

For WEEE details, refer to the ReliaGATE 10-12 user manual from Eurotech.

**<https://www.eurotech.com/en/products/iot/multi-service-iot-edge-gateways/reliagate-10-12>**

### 8.5 FCC Declaration

For the FCC declaration, refer to the ReliaGATE 10-12 user manual from Eurotech.

**<https://www.eurotech.com/en/products/iot/multi-service-iot-edge-gateways/reliagate-10-12>**

## 9 Appendix B – Ordering Information

For more information and an up-to-date list of available protocols, visit [www.qiagen.com](http://www.qiagen.com).

### Ordering Information

Product	Contents	Cat. no.
QIAsphere Base	ReliaGATE 10-12 from Eurotech, including travel adapter from SKROSS (MUV Micro) and SanDisk 32GB Class 4 Micro SD SDHC	9026169

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at [www.qiagen.com](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

## 10 Revision History

Revision	Description
04/2020	Replaced important occurrences of the name <b>Q-Base</b> to <b>QIAsphere Base</b> .

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