



GridION Q user manual

V Q_GRD_revC_06Jan2025

This document will help you to install, check and configure the GridION™ Q device.

For Research Use Only

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1. Device information

The GridION Q

The GridION Q is a compact benchtop device designed to run up to five MinION flow cells. Each flow cell is independently addressable, meaning that experiments can be run concurrently or individually. Integrated compute in the GridION enables real-time data streaming and analysis.



Technical specification

Size and weight	220 x 365 x 370 mm, 14.4 kg
Power	650 W
Computer specification	7 TB SSD Storage, 64 GB RAM, Intel i9 CPU for OS and orchestration, GridION accelerator
Pre-loaded software	Linux OS, GridION OS, MinKNOW
Environmental conditions	Designed to sequence at +18°C to +25°C Functional range of electronics +5°C to +40°C

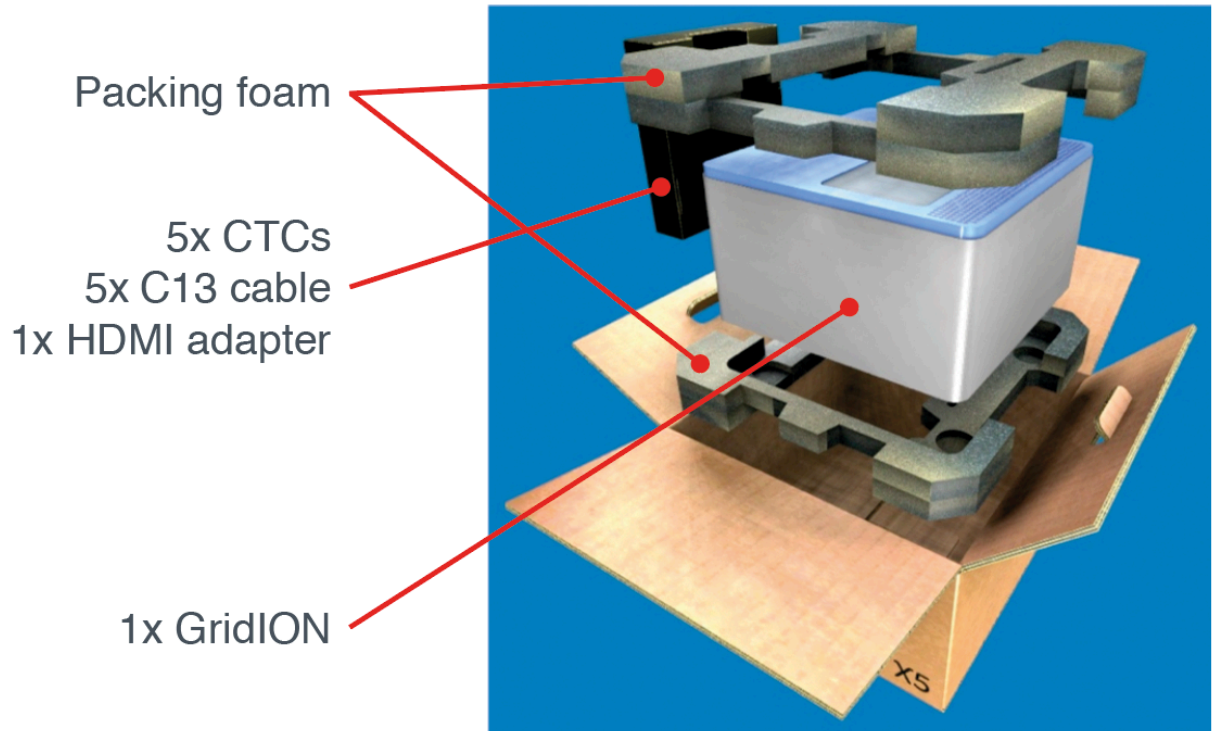
GridION Q information

Further information about the GridION Q can be found in the following documents in the Q-line channel (<https://community.nanoporetech.com/qline/>):

- GridION Q IT requirements
- GridION Q technical specification
- Safety and regulatory information

2. What's in the box

GridION Q packaging



What's in the box

The shipment will contain:

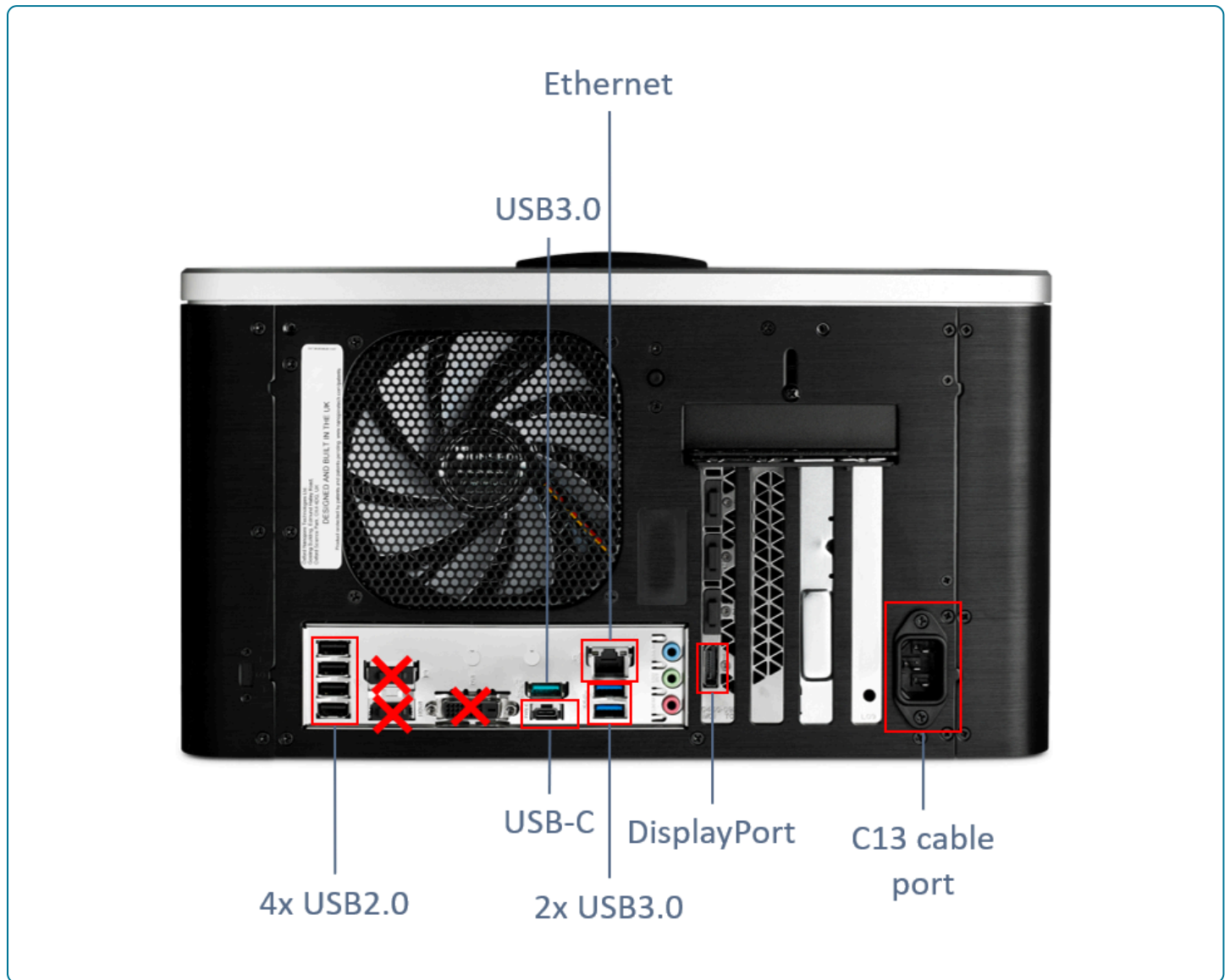
- GridION Q device
- Five country-specific C13 cables
- Five configuration test cells (CTCs)
- DisplayPort to HDMI adapter
- Quick Start Guide



The components of the GridION Q are shown below.



The connections and ports available on the GridION Q are shown below.



3. Installing and powering on the device

Preparing for installation

Before you install the device, the following must be available:

- 1x Ethernet cable (1 Gbps)
- Ethernet port providing outbound-only access to the internet over port 443, and TCP access to AWS eu-west-1 IP ranges listed here for EPI2ME analysis
- Outbound-only access over HTTPS/port 443 to 52.17.110.146, 52.31.111.95, 79.125.100.3 or DNS rule for ping.oxfordnanoportal.com for telemetry feedback
- Outbound-only access over HTTPS/port 443 to 178.79.175.200 and 96.126.99.215 or DNS rule for cdn.oxfordnanoportal.com for software updates
- 1x 1920x1080 monitor (HDMI/DisplayPort compatible)
- 1x appropriate monitor cable
- 1x USB connected keyboard
- 1x USB connected mouse
- Optional: UPS solution with C14 cable

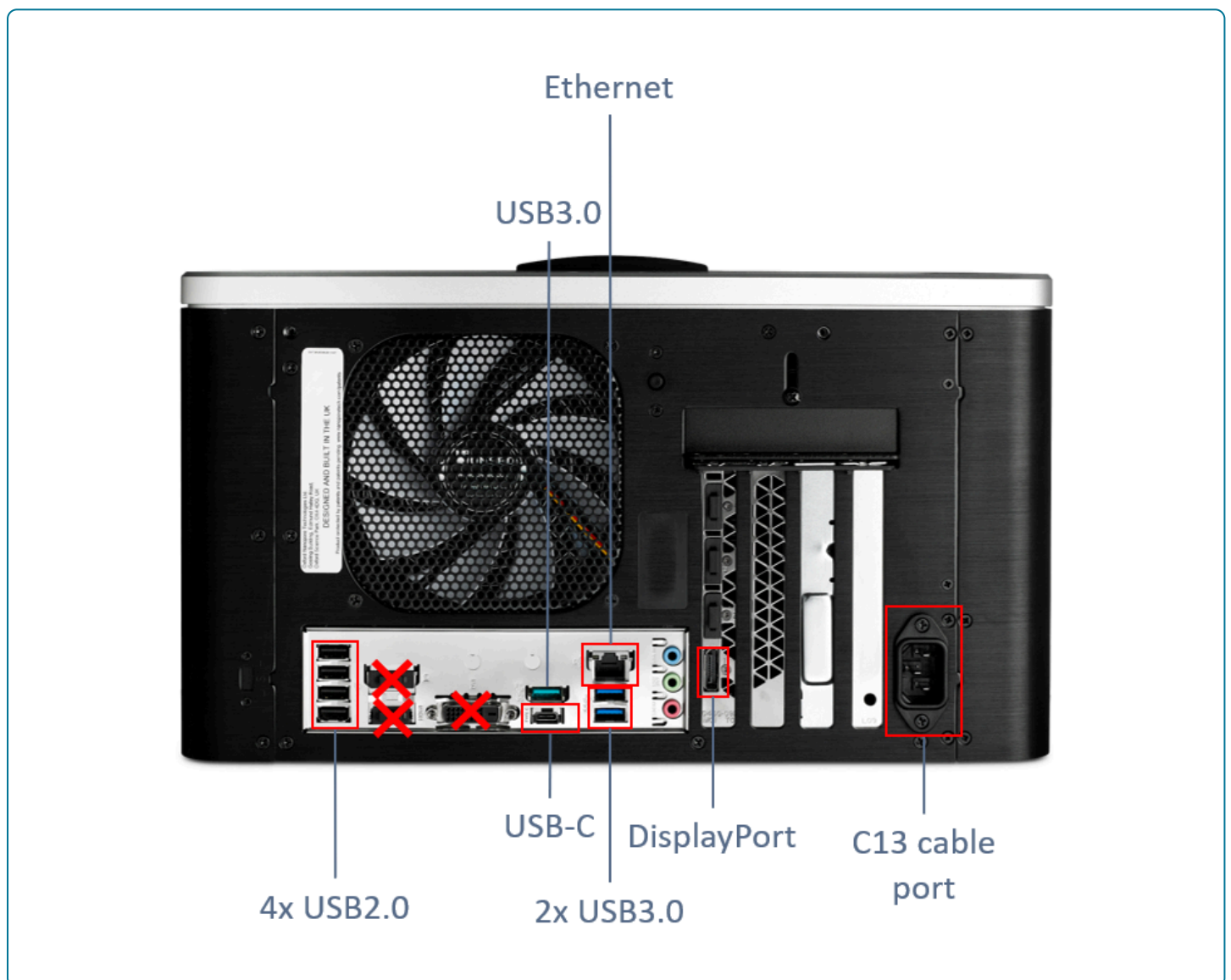
- Optional: optical barcode scanner

Recommended laboratory location

- Place the device on a strong, clean laboratory bench
- Ensure Ethernet and power connectors are in close proximity
- Ensure power socket is easily accessible should a disconnection be required in case of emergency
- Sequencing should be carried out at a room temperature of +18°C to +25°C
- Allow 30 cm clearance to rear and sides of the device
- Do not cover any ventilation grilles
- **WARNING - The rear of the device will heat up during operation**

1 **Unpack the device and place it on the bench where it is to be run.**

2 **Attach all the required cables to the device using the diagram below to assist.**



- 1x Ethernet
- 1x HDMI or DisplayPort to monitor*
- 1x USB for keyboard
- 1x USB for mouse

- 1x C13 cable

*1x DisplayPort to HDMI adapter is provided

- 3 **Connect the power cable to your mains/UPS solution. Use the mains cord supplied, or a suitable approved and rated power cord. Ensure the device is connected to a protective earth mains supply. Turn the power source on.**
- 4 **Press the power button. A blue light will appear in the middle of the button.**



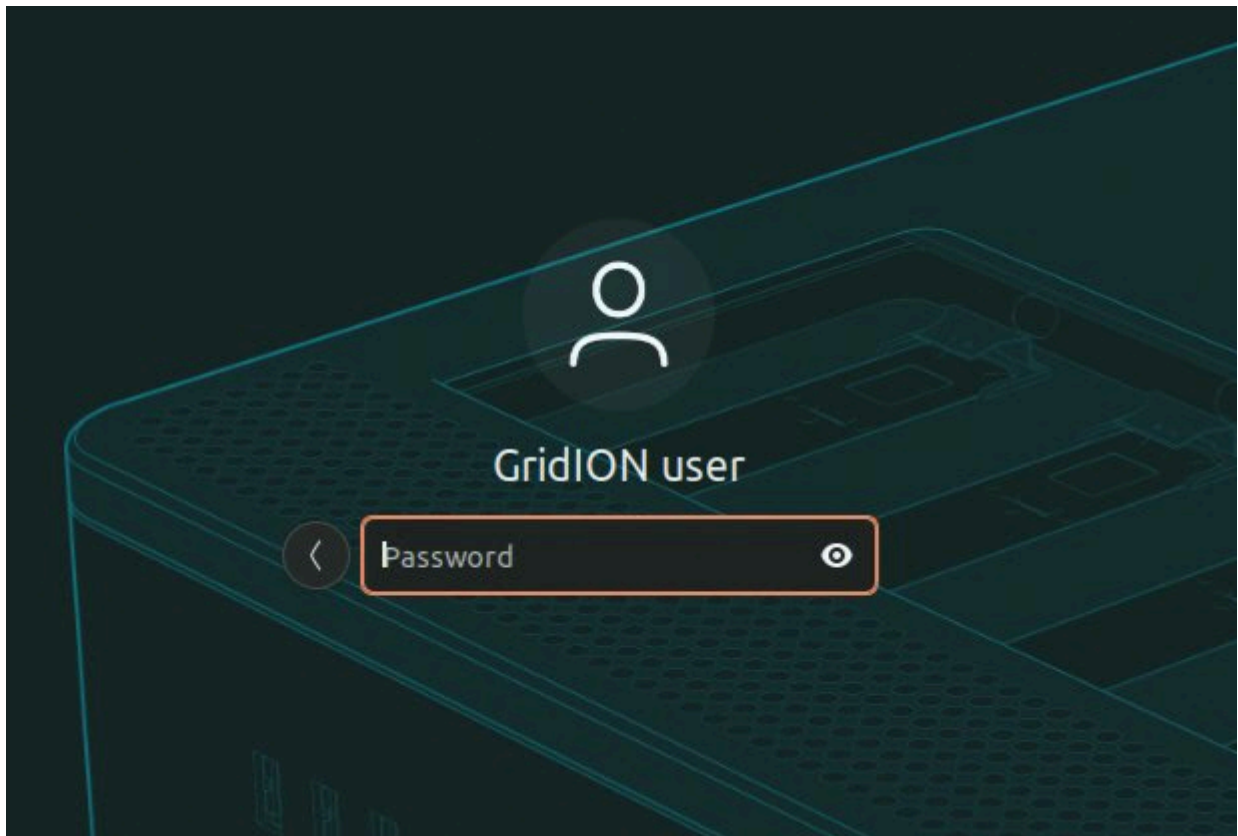
- 5 **You will be prompted for a passphrase every time you power up the Q GridION device. This is to decrypt the hard drive. Enter the passphrase: nanopore**

6 Log into the GridION.

Click on **GridION user**.



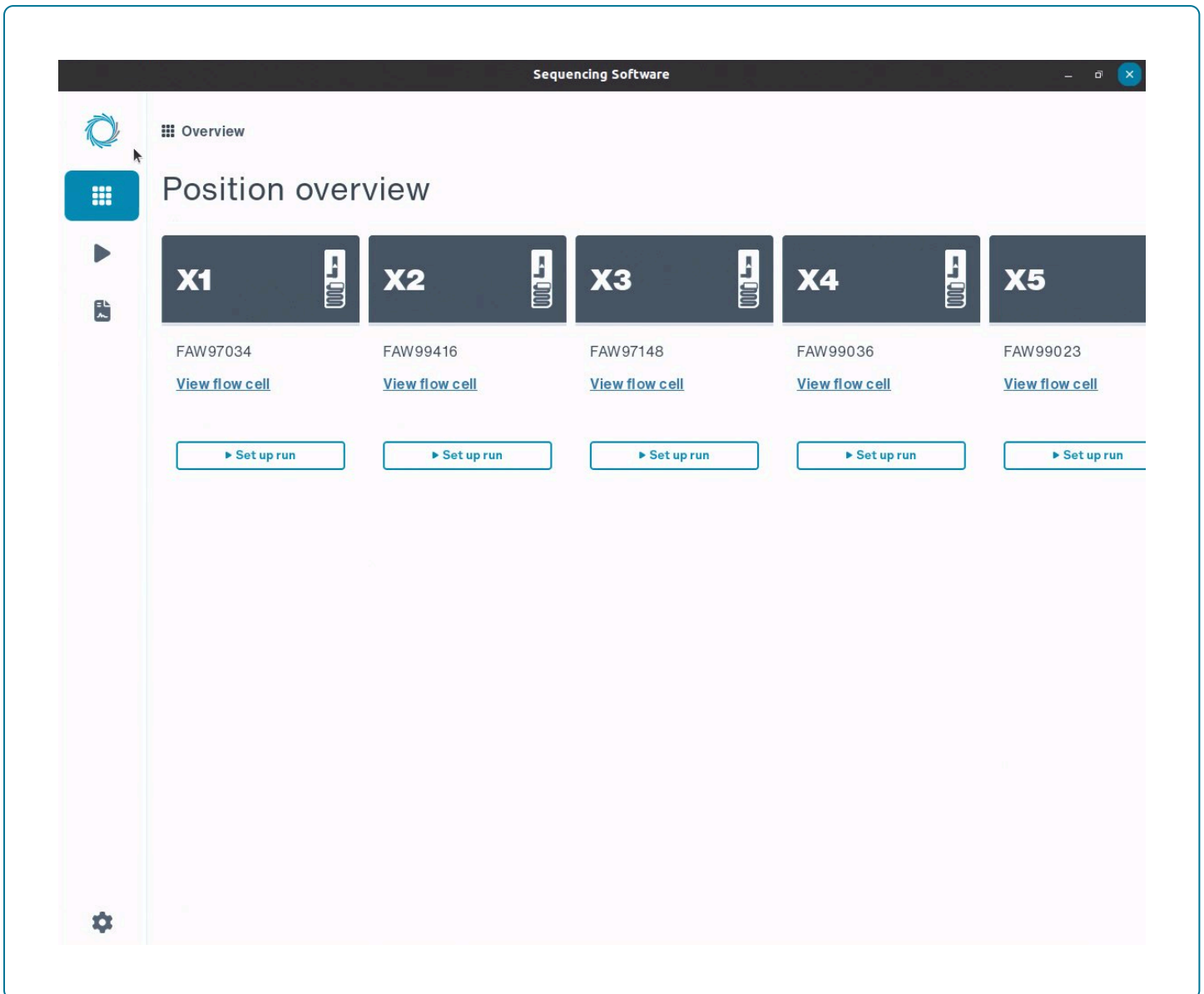
You will be prompted for the password. Enter the password: `grid`



7 Double-click the sequencing software icon located on the desktop.



- 8 You will be taken to the Position overview page, displaying the connected flow cells or CTCs.



4. Shutting down

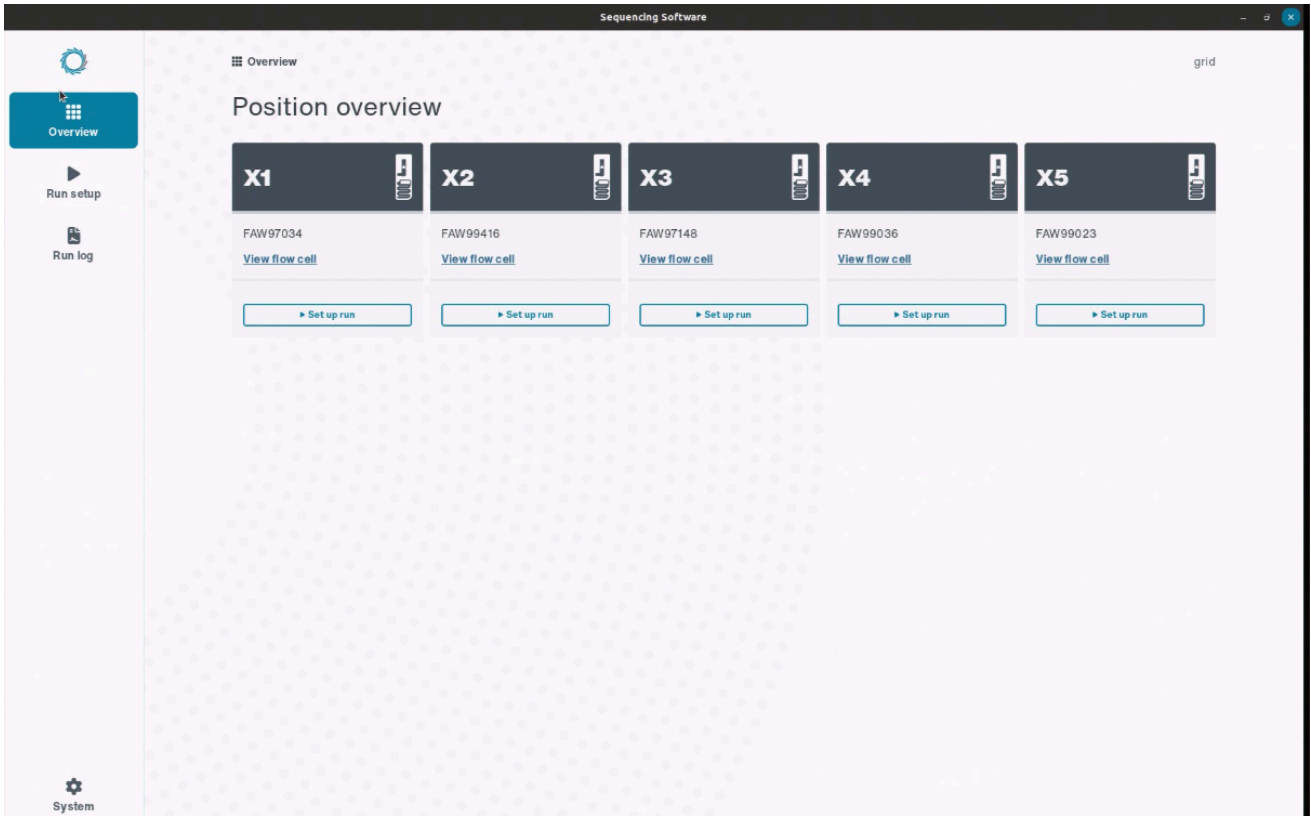
Shutting down the GridION Q

The GridION's computer requires a stepwise, processed shut down, otherwise there may be problems e.g. when recognising flow cells.

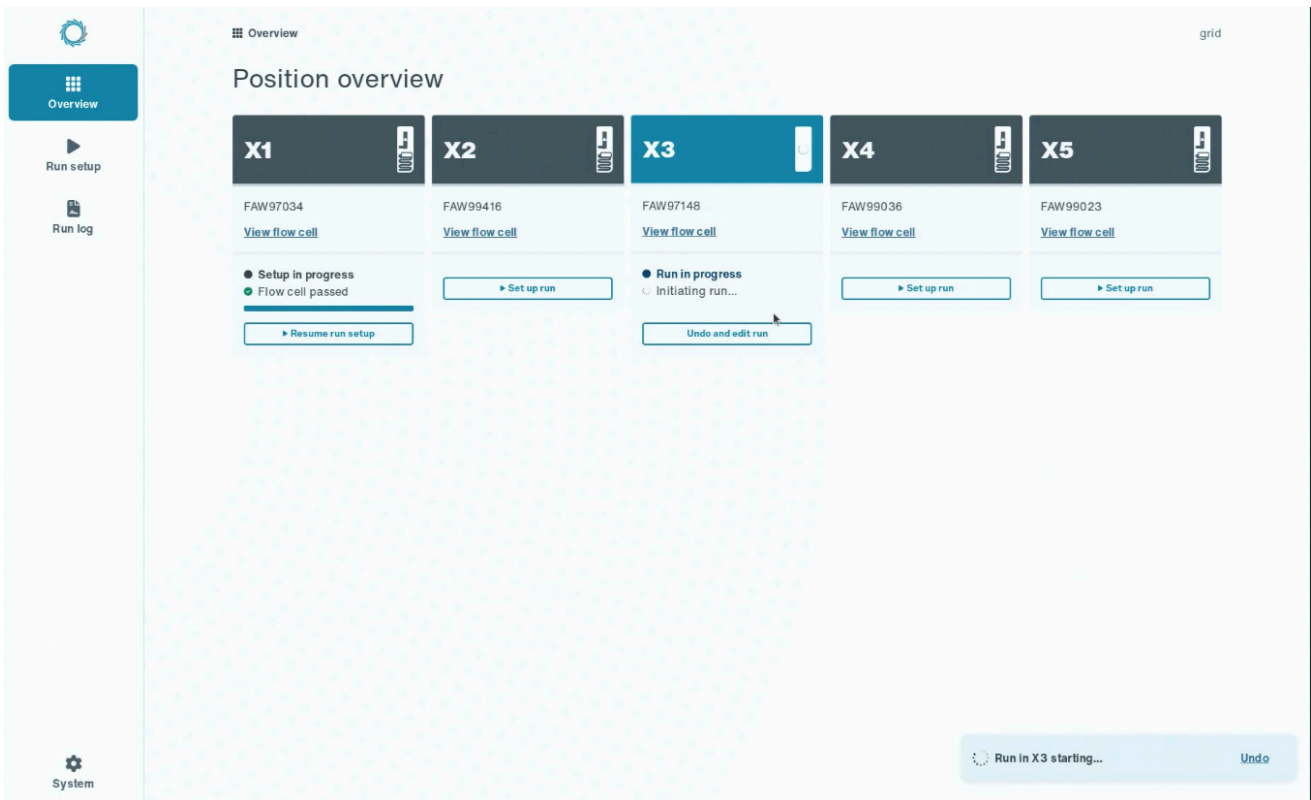
Follow the instructions in this section to ensure you do not face errors with your GridION Q from incorrectly shutting down your device.

- 1 Make sure that none of the flow cells are running an assay.

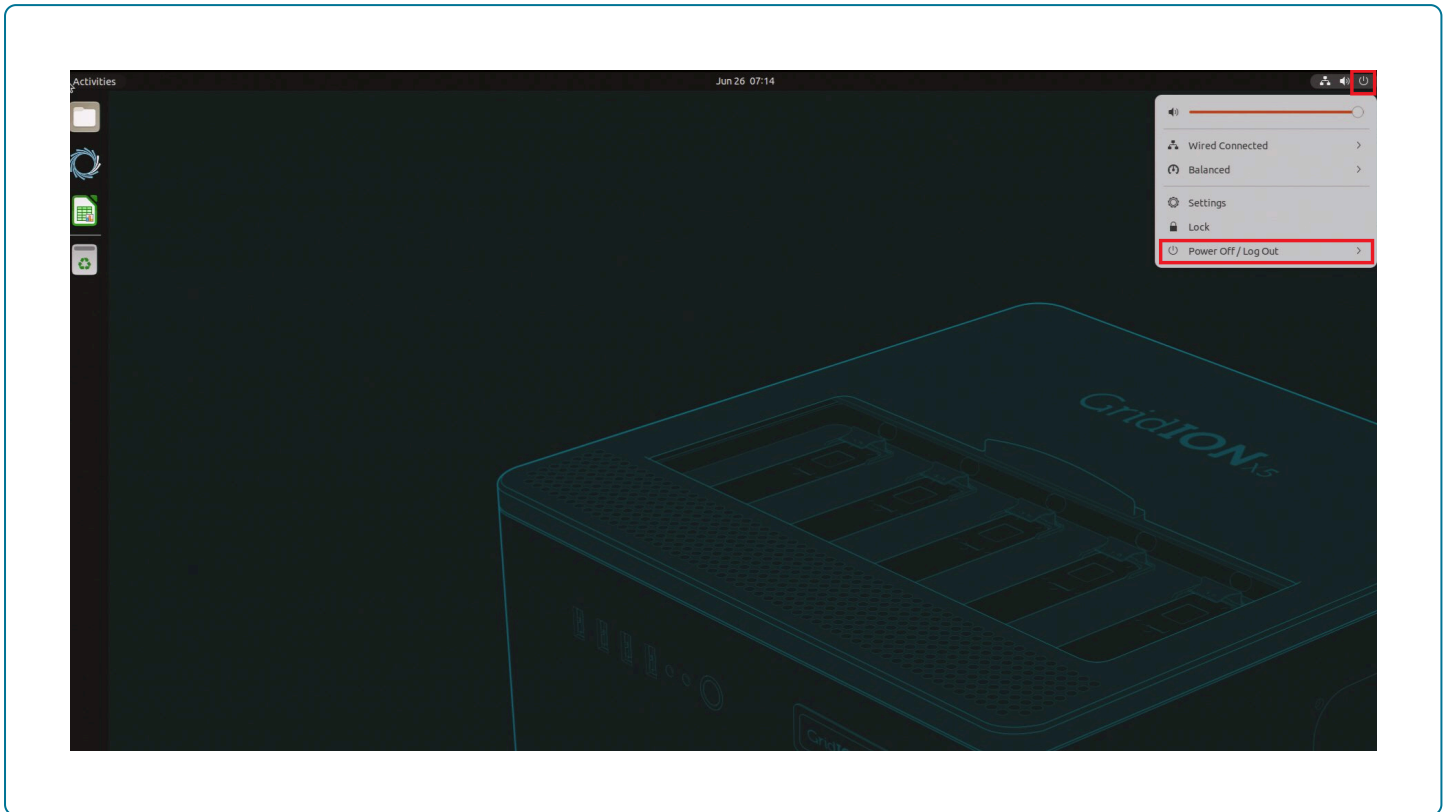
If no assays are running, you will see no status underneath the flow cell positions.



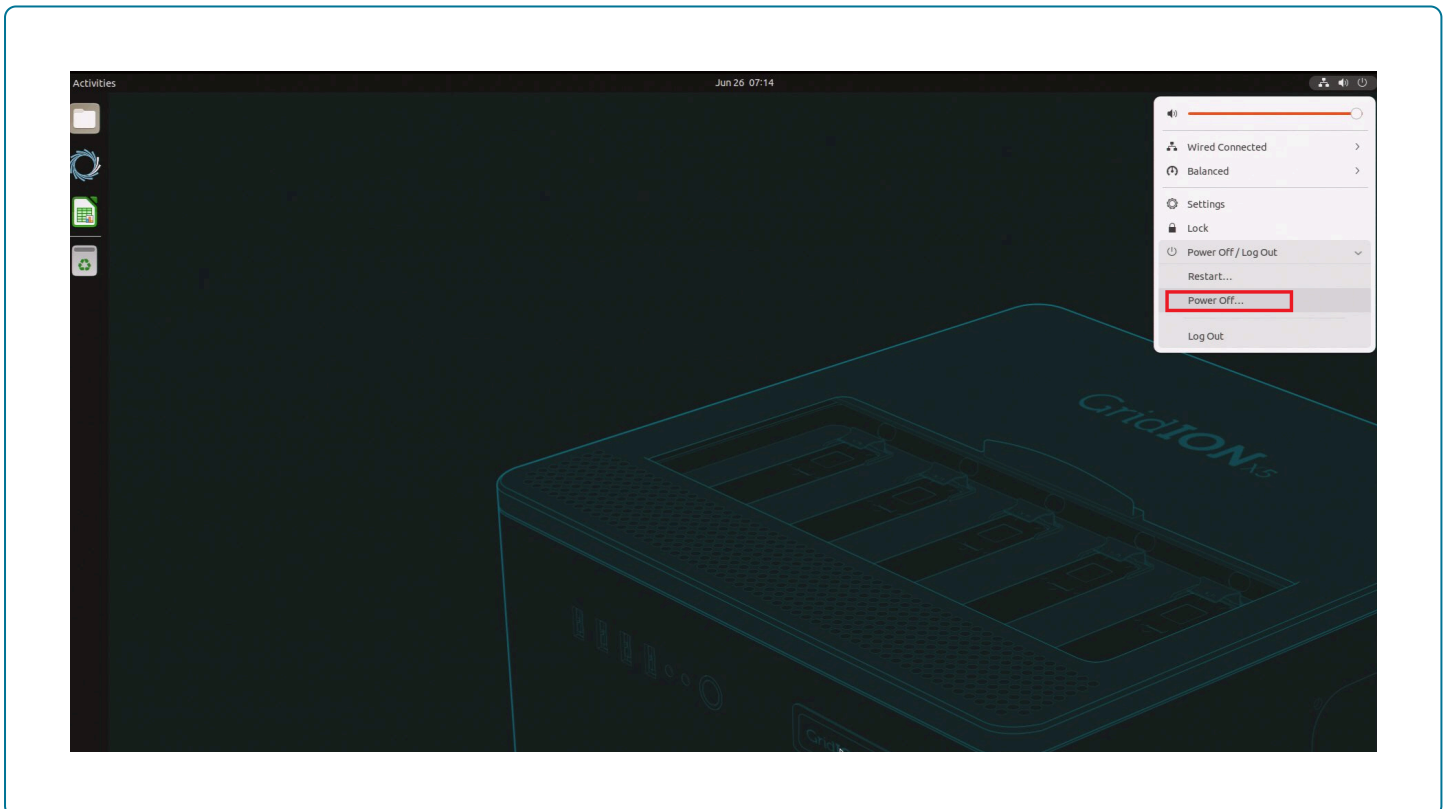
If an assay is running, you will see "Run in progress" underneath individual positions.



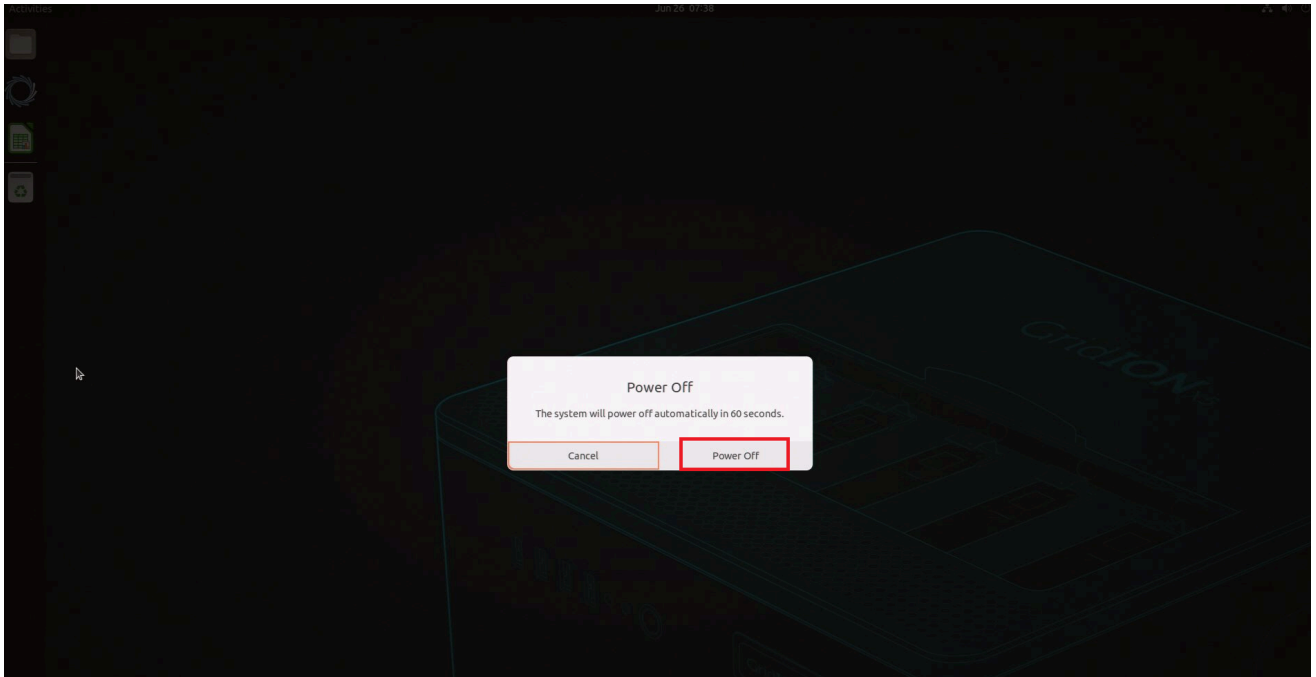
- 2 Close the sequencing software. In the top right corner of the screen, click the power button, then click "Power Off/Log Out"



- 3 Click "Power Off".



Then confirm by clicking **Power Off** in the dialog box. If not clicked, the device will automatically power off after 60 S.



- 4 Turn off the device at the mains supply, if you are using mains power.