



Oxford Nanopore  
Technologies

# ElysION

# MinION Control Unit

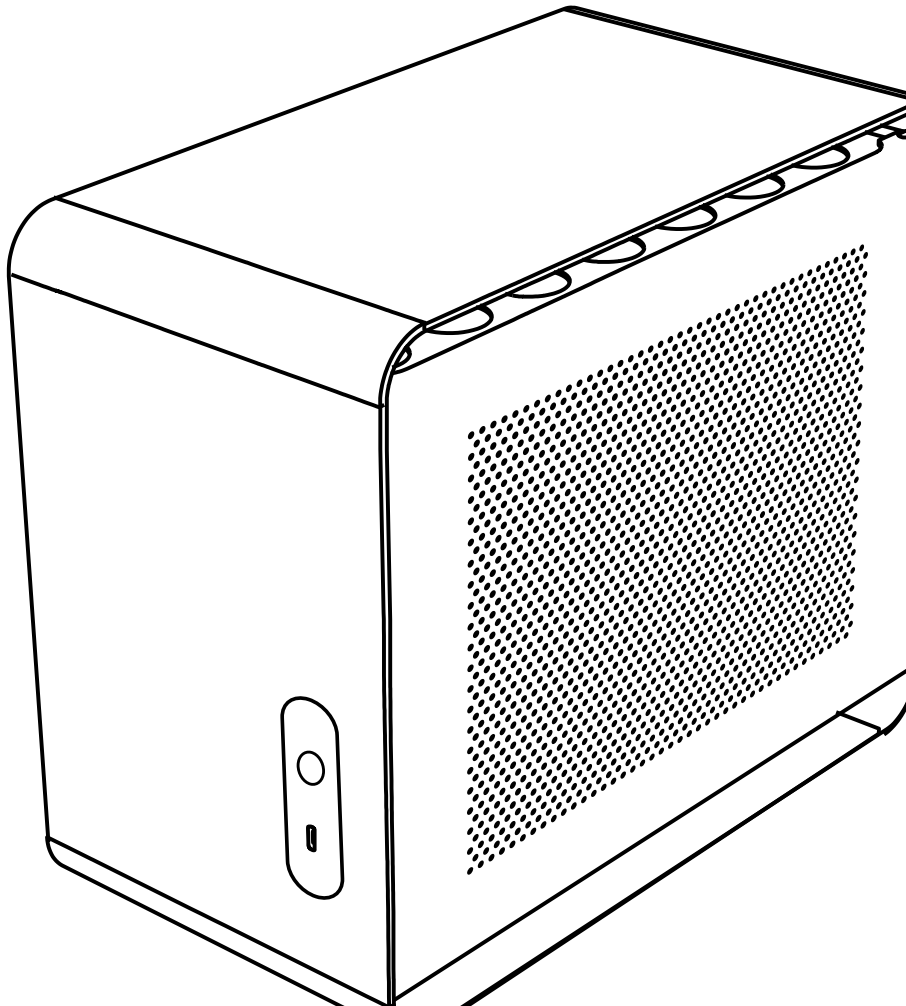
(ELY-MCU01)

# Operating manual

Revision: 1

Date: 01 April 2025

Product overview



The ElysION MinION Control Unit is an example Compute Unit sold with the ElysION that provides above standard compute requirements for operating and servicing the sequencing device.

The ElysION MinION Control Unit has the Sequencing Software installed, which runs the MinION Mk1D sequencing device integrated on the ElysION Sample Preparation Device worktable. The ElysION MinION Control Unit is connected to the ElysION Sample Preparation Device via an Ethernet cable, which allows data transfer to and from the MinION, enabling control and data storage of sequencing files produced.

The compute also runs downstream analysis of basecalled data to provide sample-to-answer solutions using the latest bioinformatic workflows, which are integrated into the Sequencing Software. The ElysION Sample Preparation Device integrates the MinION Mk1D nanopore sequencer into the end-to-end process.

The ElysION MinION Control Unit services the MinION Mk1D by having the Linux Operating system to run the Oxford Nanopore Sequencing Software. The Sequencing Software controls the MinION Control Unit, whilst the Dorado basecaller in the Sequencing Software converts per-base current changes from the nanopore into a genetic sequence.

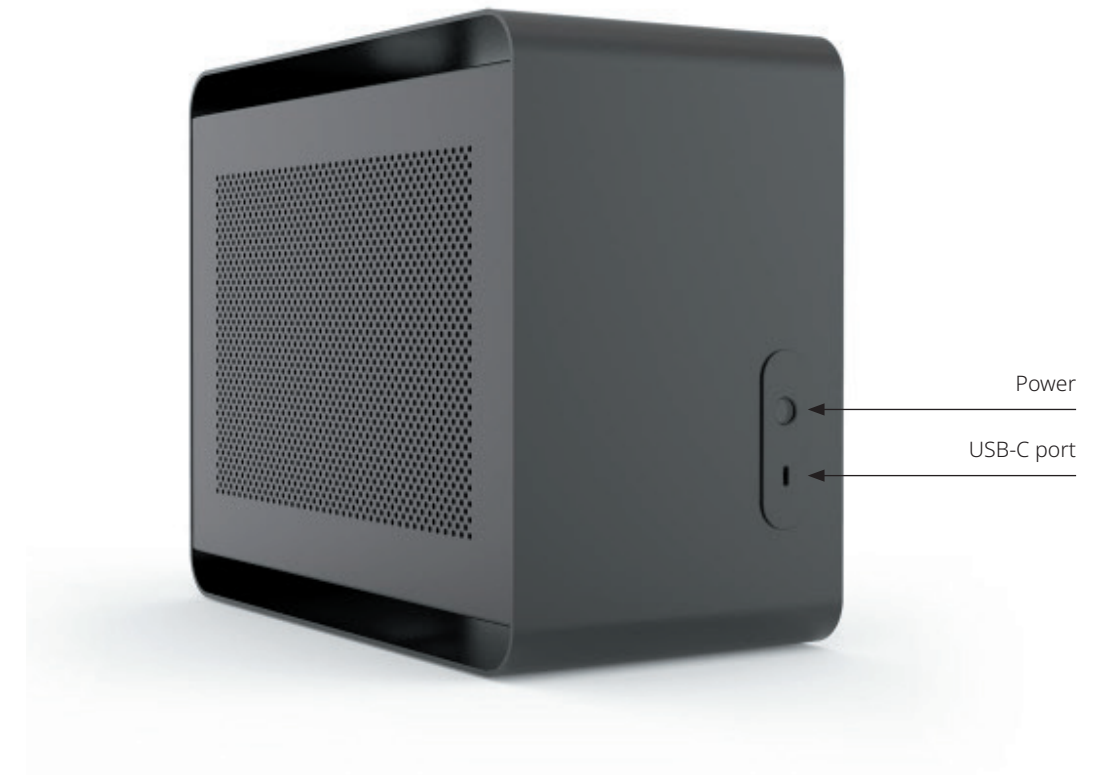
The ElysION MinION Control Unit has 6.7 Tb of data storage to save sequencing files produced during the assay.

### Use disclaimer

The ElysION MinION Control Unit is a small compute for sequence data acquisition, basecalling, and interpretive analysis.

To be used by **trained personnel only**.

### The ElysION MinION Control Unit:



## Technical specifications

Specifications	ElysION MinION Control Unit
Model number	ELY-MCU01
Supply voltage (V)	200-240 AC $\pm$ 10% (50/60 Hz)
Maximum rated current (A)	10
Maximum rated power (W)	750
Size (H x W x D) (mm)	300 x 180 x 340
Weight (kg)	9
Installation ports	1 x Power socket 2 x HDMI port 6 x DisplayPort 2 x Ethernet port 4 x USB-A 2.0 port 1 x USB-C 3.0 port
Software installed	Ubuntu 20.04
Compute specification	Intel CPU (12 cores) 64 GB RAM NVIDIA GPU (RTX A6000) 7.6 TB SSD

## Environment specification

Operational temperature range	Functional range of electronics is within environmental temperatures of +5°C to +40°C
Humidity	Use within 30% to 75% relative non-condensing humidity limits
Sequencing temperature	N/A
Clearance	The user should maintain 30 cm clearance to all but the bottom face of the device
Altitude range	Can be used up to altitudes of 2,000 m
Indoor use	Intended for indoor use
Pollution	The device has a Pollution Degree 2
Overvoltage	This has an Overvoltage 2 category

## Set up

The MinION Control Unit ships with 5x power supply cables (1x US, 1x UK, 1x EU, 1x CN, 1x AUS) for international use.

The shipping weight is ~9 kg.

## Operation

### Powering on

1. Press the power button on the front of the MinION Compute Unit to power on the compute. Wait ~30 seconds until you arrive at a login screen.

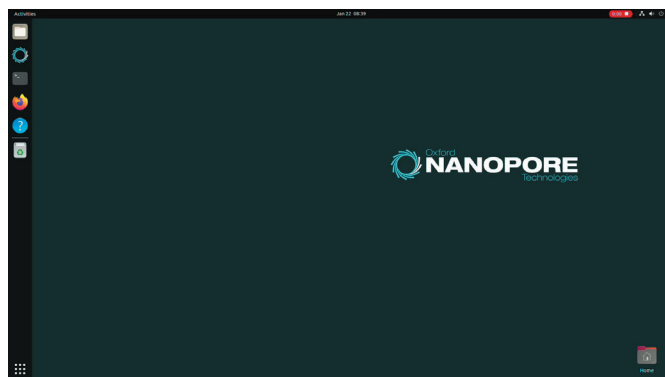


## Log in

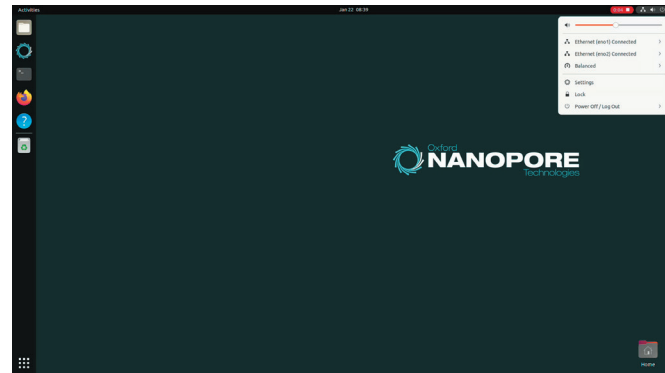
1. Log in to the MinION Compute Unit with the password: **prom**

## Powering off

1. Click on the power icon in the top right corner of the home screen.



2. Click **Power Off/Log Out** in the drop-down menu.



3. Click **Power Off**. Wait until the LED lights on the compute turn off to ensure the MinION Compute Unit is fully powered off.

## Storage

The MinION Control Unit is shipped at +15 to +25°C.  
The MinION Control Unit is operational at +5°C to +40°C.

## Safety and regulatory



- This equipment is to be used by trained and authorised personnel only.
- This equipment is not intended for use in locations where children are likely to be present.
- This equipment is not to be opened or tampered with, unless by authorised and trained engineers.
- Opening the equipment can expose users to components which pose burn risks, fans which pose physical risks and can lead to serious injury. Do not open the equipment unless you are an authorised and trained engineer.
- This equipment contains no user serviceable parts, do not attempt to service the unit. Contact Oxford Nanopore Technologies Support at: [support@nanoporetech.com](mailto:support@nanoporetech.com)
- The equipment is to be used in the vertical position only.
- Only use the cable supplied, or a suitable approved and rated power cable.

Nordic warnings:

Denmark: "Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord."

Finland: "Laitte on liitettävä suojakoskettimilla varustettuun pistorasiaan"

Norway: "Apparatet må tilkoples jordet stikkontakt"

Sweden: "Apparaten skall anslutas till jordat uttag"

## Emergency procedures

In case of an emergency, the mains plug of the MinION Control Unit must be disconnected from the mains power immediately.

## Software, license, and warranty

### Software

The Field Applications Scientist will install and update any software during service or as required.

### Warranty

A license and warranty can be purchased for your device here: [store.nanoporetech.com/device-warranty.html](https://store.nanoporetech.com/device-warranty.html)

Flow cell warranty: [community.nanoporetech.com/to/warranty](https://community.nanoporetech.com/to/warranty)

### Address

**Manufacturer:** Oxford Nanopore Technologies, Gosling Building, Edmund Halley Road, Oxford Science Park OX4 4DQ

**Supplier:** BIOS IT, New Broad Street House, 35 New Broad Street, London EC2M 1NH

**Production Factory:** Boston, Unit 5 Curo Park, Frogmore, St Albans AL2 2DD


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