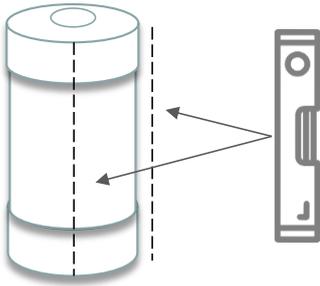


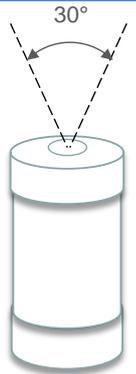
Quick Start Guide for the Ninox Z1 System

Positioning



The Ninox tube must be positioned vertically so that the SQM lens behind the top window is directed towards the zenith (use a level if possible). It is important to make sure that there is no close light sources directly visible from the Ninox window (lamp post, private lighting, ...).

The Ninox system can be positioned at different heights but not too close from the ground in order to prevent humidity from entering the tube through the hole in the bottom part. An important constraint must be respected: there should be a solid angle of roughly 30° clear of any obstacles vertically above the Ninox window at the top of the tube.



The Ninox must be placed at a good distance from any tall obstacles such as walls or trees which could obstruct its field of view. It is also recommended not to place the Ninox system near a road (except for specific projects) or the windows of a home. Here are some examples of **incorrectly installed** Ninox systems:



Too close from a tree and field of view obstructed by a pole



Ninox system is not positioned vertically



Too close from the ground with the risk that humidity goes into the tube



Ninox field of view partly obstructed by the supporting pole

Here are some examples of **correctly installed** Ninox systems:



Ninox high enough in order not to be obstructed by the roof



Ninox positioned at the top of a supporting pole



Ninox far from any obstacle that could obstruct its field of view



Ninox field of view not obstructed by the top of the tripod

The Ninox tube can be attached in various ways (preferably using zip ties when attached to a pole). The important thing is that the tube is securely fastened and the support is stable so as to withstand strong winds. The tube is waterproof but it is important to check the cleanliness of the window from time to time (use a soft microfiber cloth and a specific product for optics) and make sure there is no humidity visible through the top window.

Power Supply

The Ninox system must be powered with a **5V / 2A power supply**. A type A male USB plug is accessible through a hole at the bottom of the Ninox tube and must be used to power up the system. A male / female type A USB extension cord must be used to connect Ninox to a standard USB power supply or a battery. This extension must be long enough in order not to expose the power supply to bad weather. Once the type A USB connector is plugged into the extension cord, it must be slightly entered in the foam at the bottom of the tube in order to protect it from humidity.

Connection to the Ninox Z1 System

The Z1 version of Ninox is only accessible through its embedded Wi-Fi access point. Once the Ninox is powered up, it takes a couple of minutes to initialize and have the Wi-Fi hotspot SSID visible. Ninox will broadcast a Wi-Fi network with an SSID having the format `Ninox<nnn>` where `<nnn>` is a 3-digit identifier, for example 007, which corresponds to the Ninox serial number visible on the tube. All what is needed then is to get connected to the Ninox Wi-Fi network one wants to access, for instance `Ninox007`, from a computer, a digital tablet or a smartphone. The password to connect to the Wi-Fi network is:

ninoxstar

Once connected to the Wi-Fi access point, a standard web browser must be used to access the Ninox system using the URL **<http://192.168.42.1>**.

Updating the Geographical Coordinates

► Ninox Management

Password:

In the Ninox home page which is displayed after connecting to the URL, go into the zone « *Ninox Management* », enter the password **goninox** and click the button « *Manage Ninox* ».

Latitude:
 Longitude:
 Elevation (m):
 Name:

In the zone « *Geographical Location* », enter the longitude, latitude and altitude of the location where Ninox is installed. Use the '.' as a decimal separator. The coordinates can be expressed in decimal degrees or in degrees, minutes and seconds (with the 3 symbols ° ' " or blank spaces). Longitude must be positive to the East and latitude must be positive to the North.

Acquisition Activation

Still in the Ninox management page, click the button « *Enable acquisitions* » in the zone « *Acquisitions* ».

Acquisition	Software switch state
Waiting for nighttime	On
GPS	SQM
GPS not activated	SQM device found

Go back to the Ninox home page and check that the acquisition switch is green with the label « *On* » displayed. Check also that the SQM has been correctly detected (message « *SQM Device Found* » in the zone SQM).

Your Ninox is now ready to perform acquisitions as soon as the Sun is set!

Downloading measures

► Measures

Measures: 13232

Download the records from the Ninox database under the form of a ZIP file

Downloading measures is done from the “Ninox Management” area. Downloading the data can take quite a long time depending on the number of measures stored in the database and you must therefore possibly wait for a few minutes before the download is complete.

The data is sent by the Ninox system under the form of a ZIP file which is stored in the *Downloads* folder of the computer or phone used to make the transfer. The downloaded ZIP files contain CSV files with all the measures.

Stopping the Ninox System

► System Management

It is important to properly stop the Ninox system before removing the power supply. In order to do that, go into the Ninox management page (see above) and click the button « *Stop Ninox* ». Confirm the action and wait at least for 20 seconds before removing the power supply.