Manuals+ — User Manuals Simplified.

Quanturi QNT30502 Monitoring System with Mobile Base Station User Manual

Manuel d'utilisation
Quanturi monitoring system with mobile base station
User manual

Contents

QNT30502 Monitoring System with Mobile Base Station

HAYTECH

+

Tango M
Tango XN

Support
In case of problems please contact: **support@quanturi.com**
Find more instructions at: **www.quanturi.com**
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Introduction

The Quanturi monitoring system is used for the monitoring of fermentable materials during the storage period. The system is composed of monitoring probes, a base station and optional repeater(s). The probes are placed inside the fermentable materials at the time of storage. The base station sends the measurement data to quanturi.app.
This manual walks you through the installation and setup procedure.
After going through all the steps in this manual, the Quanturi monitoring system is ready for use.

Usage and precautions
The User is expected to thoroughly familiarize themselves with the system usage instructions, and then use the product with care and diligence.
The User's installation of the system is not to replace the normal usage and safety precautions that the User should continue to take to avoid a fire breaking out. The system acts as an additional tool to safeguard the material, but under no circumstances should it be used as the sole surveillance system. Quanturi cannot be held responsible for a fire breaking out nor for any of the consequences of this.
The User undertakes to regularly check that the whole Quanturi system works properly, and to take all necessary precautions with respect to the material's upkeep.
The User hereby notes that each probe is to be used to monitor only the material the probe is inserted in, and may not be used to measure several nearby entities.

Furthermore, the User undertakes to remove the probes from the material before it is used for any purpose other than conservation.

Quanturi may not under any circumstances be held liable for any damages arising from the User's negligent use of the material whether this be directly or indirectly, including – but not limited to – loss of profits, loss of savings or any other damages or expense.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For more information about the terms of use, please visit: **https://quanturi.com/pages/terms**

Start-up guide

1. Activation

1. Go to the web address: **www.quanturi.app/activation** to start the activation.
2. Activate your system by entering code 1 from your base station package.
3. Create an account by specifying your credentials like username, password, phone number etc. You will receive an SMS to confirm your phone number. Alerts will be sent to this phone number.
4. Upon your first login, you will be prompted to add your probes to the system, using code 2 from your probe package.

   **www.quanturi.app/activation**

2 Base station 1

1. Place the base station so that the distance between the probes and the base station is ideally less than 50 meters 2 .
   In case base station is placed outside it is recommended to install it in a place where it is covered from direct sunlight and rain.
2. Do not keep the base station on a metallic surface. Keep the base station at least 10 cm away from solid metallic structures.
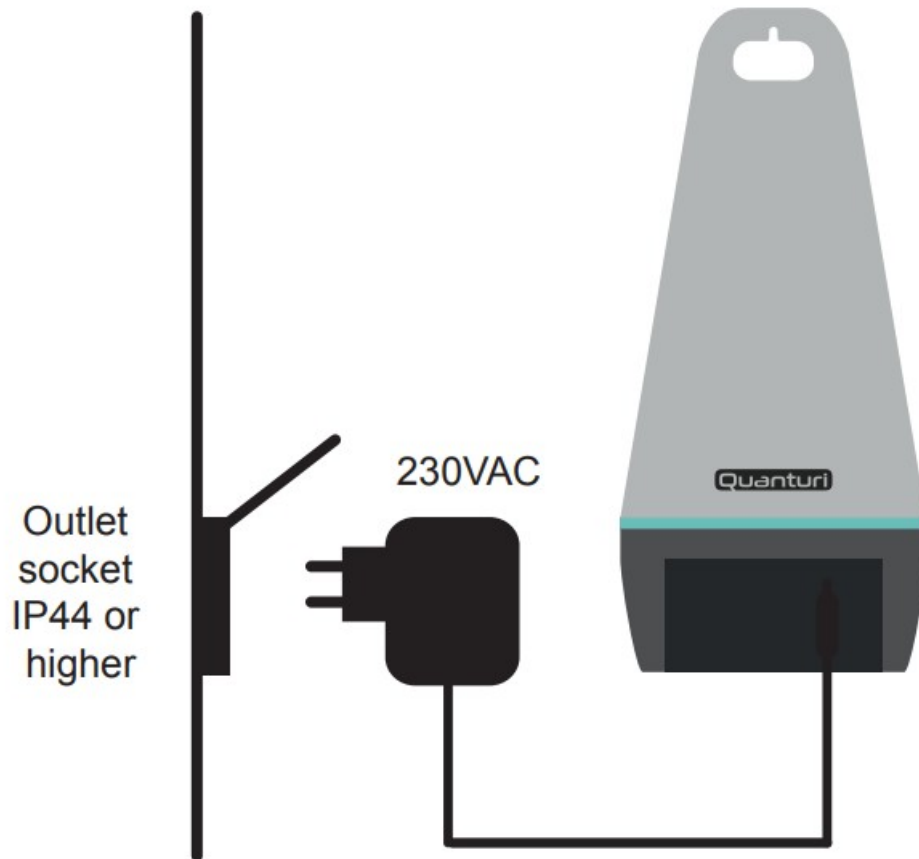
1. Devices meant for outdoor use have a protection class of IP44 for the enclosure and the power adapter. In case conditions for the IP44 can not be met, external protection is needed.

2. The distance depends on the landscape. On open space the distance can be longer, but having hills or buildings in between will reduce the maximum distance.

3. Connect the included power supply to an electrical outlet (with an IP-rating of IP44 or higher).

4. Wait for the base station to initialize. A blue light will circulate around the base station. Once it switches to a solid blue state, it indicates that the base station is connected to the network and operational.
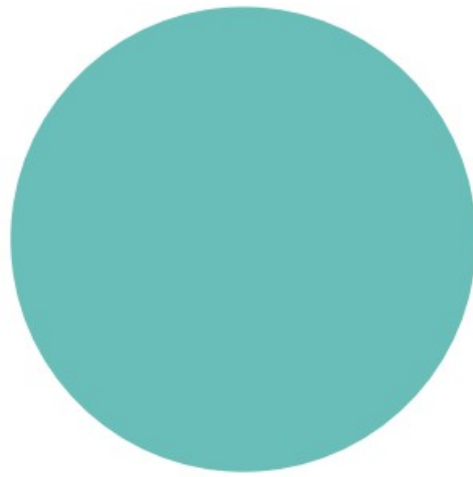
If the light does not enter the solid blue state after 5 min refer to the troubleshooting section on page 14.

Indicator Light

Circulating blue light Base station is looking for network connection

Solid blue light Base station is connected

Blinking orange light Base station has an internal error (refer to page 14)

5. The probes start sending data within 1 hour from the base station start-up. Login to: **https://www.quanturi.app** for the data visualization.

3 Quanturi.app

quanturi.app is the service application for visualizing the sensor data and for customizing your account settings. The application is available under the web address: **https://www.quanturi.app**.
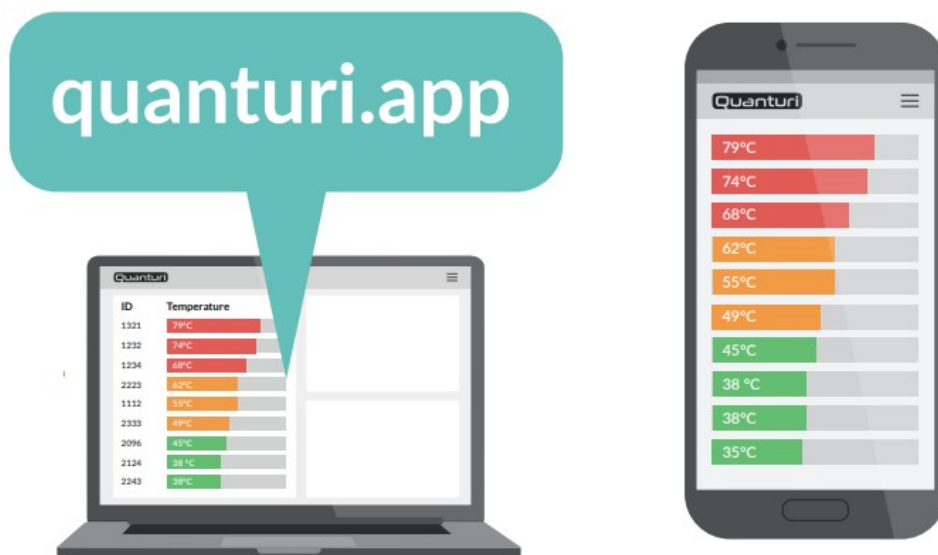
Login to the application with the credentials you created during your Quanturi system activation.

NOTE! Without registering your device and creating your account, you will not be able to receive any alerts or see any data.

Connection symbols

|		
	Strong Signal – Probes are sending data correctly
	Weak Signal – Probes may occasionally fail to send regular data.
	Very Weak Signal – Probes may fail to send regular data even for long periods of time. Please refer to page 14 to solve this issue.

HAYTECH probes

Safety instructions

Follow the safety instructions to prevent harm or injury to yourself and people near you when using the Quanturi monitoring System.

|	
	For professional use only
	Do not store the probes up-side down
	Store at room temperature
	Sharp spike, please handle with care

1 Repeater (optional)1

The base station communicates wirelessly with the repeater near the hay storage. The distance between the base station and the repeater is ideally less than 200 meters.

1 Devices meant for outdoor use have a protection class of IP44 for the enclosure and the power adapter. In case conditions for the IP44 can not be met, external protection is needed.
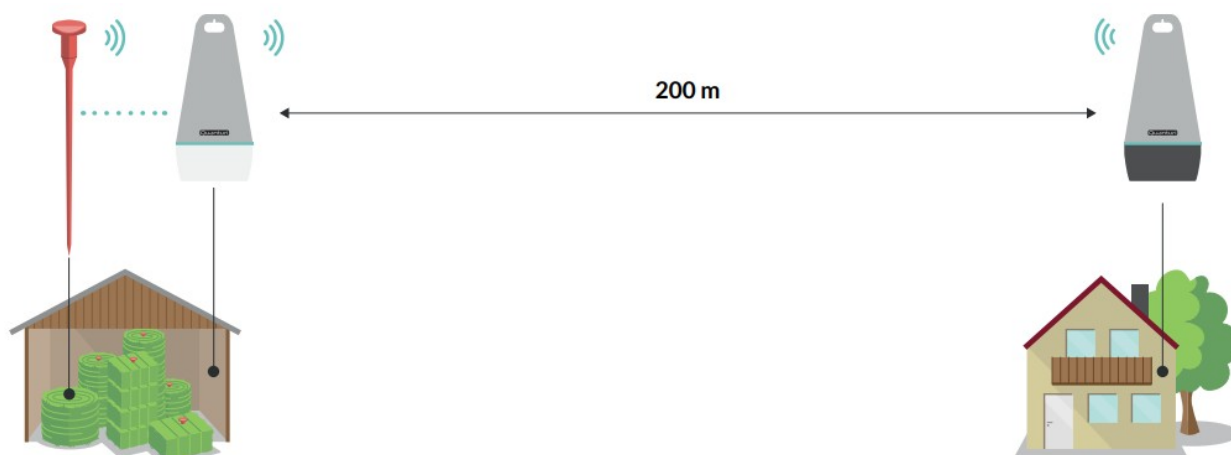

Install the repeater within or near the hay storage, for example hanging on the wall of the shed. The distance from the repeater to the haystack is ideally less than 50 m.
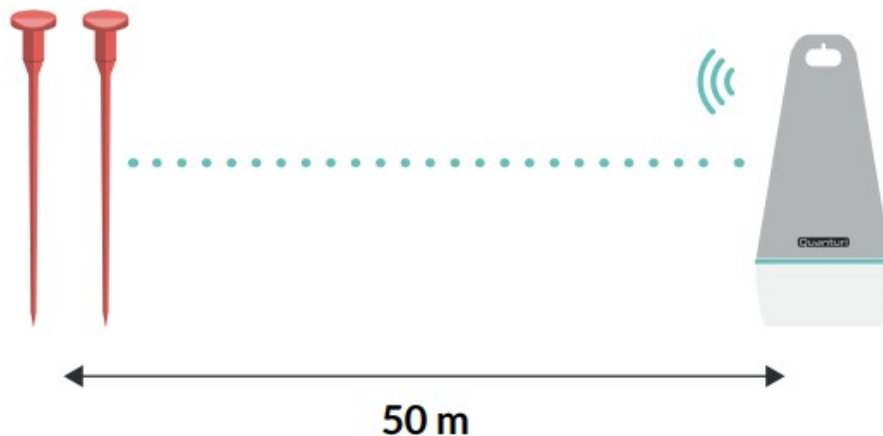
Do not install the repeater directly on a metallic structure. Keep it at least 10 cm away from solid metallic structures.

Mount the repeater at a minimum height of 2 meters, so that there are no big obstacles, like tractors, between the repeater and haystack. Do not mount the repeater directly above the haystack.
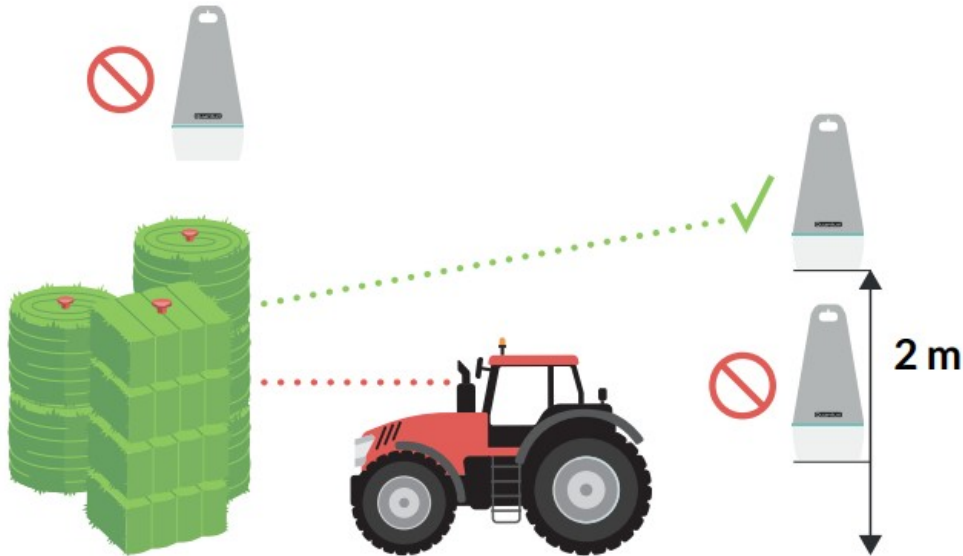
The blue light will turn solid after you have plugged the power cord into an electrical outlet. Before turning the repeater on make sure that the base station is on.
In case of problem receiving data, please refer to page 14.
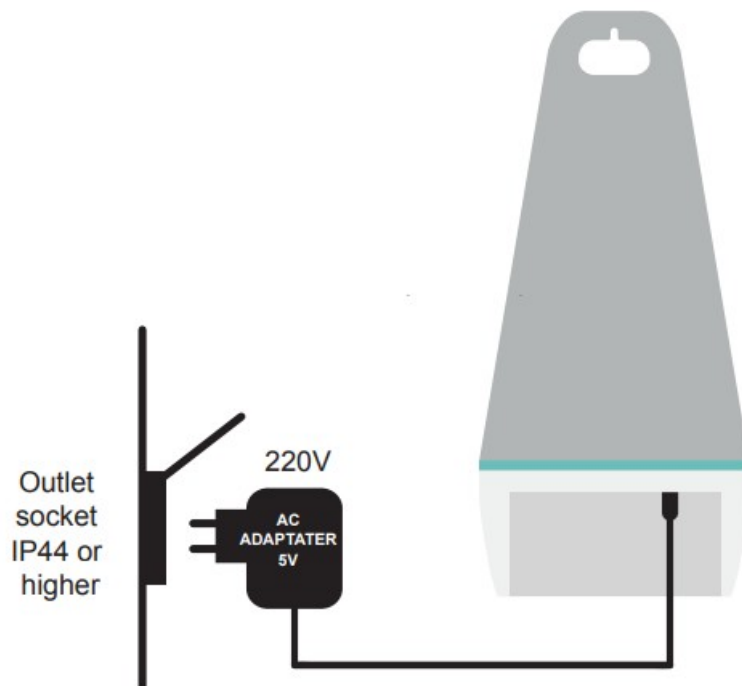

For repeaters with a model number starting with QNT-306
If the light of the repeater stays circulating, it means it is too far away from the base station. Move it closer to the base station.
NOTE!
The solid blue light indicates only that the repeater is connected to the base station. Please refer to your base station and quanturi.app to ensure your system is operational.
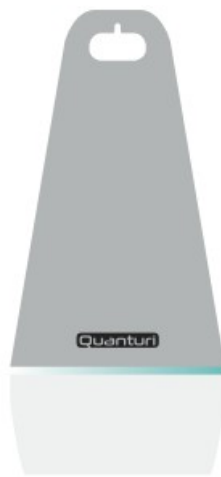
2 Wireless probes

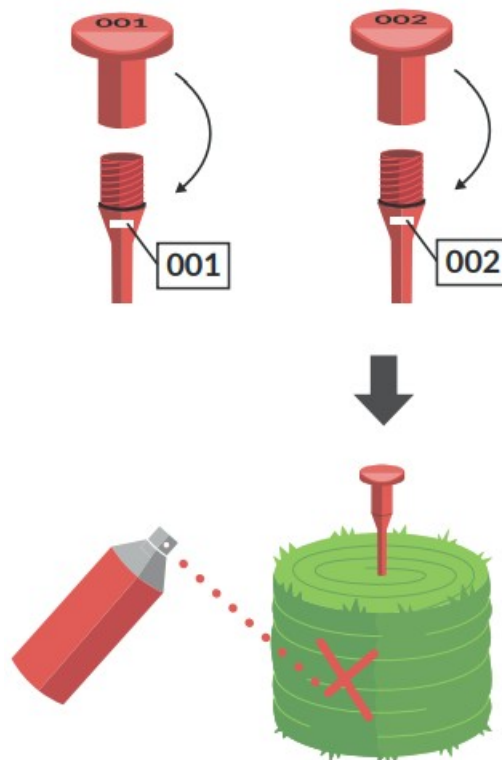1. Follow the instructions in your probe package to assemble the probes and connect their batteries.

   ⚠ Do not mix the caps of the probes!

   Each probe has a specific ID. Remember to put the right cap on the right spike with the matching ID number.

2. After baling hay and before storing the hay bales, place the probe in the center of the bale. Mark the hay bale with spray paint for easier recognition.

3. Note the ID of the probe together with the location of the hay bale on a table. You can also use Quanturi service plan to register the probe locations.
4. Before using the hay bale, remove the probe and store it in the box for the next season.
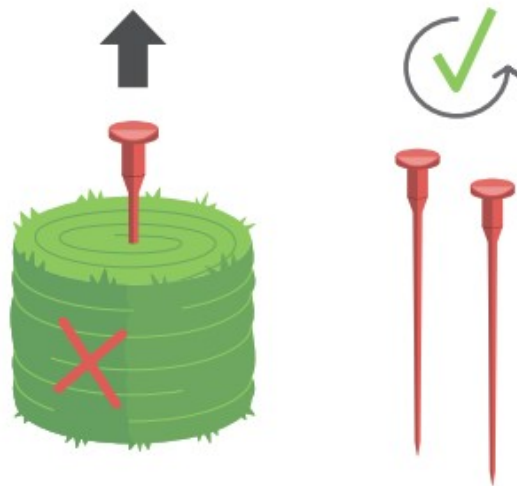
Tango M and Tango XN probes

Safety instructions
Follow the safety instructions to prevent harm or injury to yourself and people near you when using the Quanturi System.

	For professional use only
	Do not store the probes up-side down
	Sharp spike, please handle with care
	Do not open any of the products
	Do not bend the shaft of the probe
	Store at room temperature

1 Repeater (optional)1
A repeater extends the reach between the base station and the probes. The distance between the base station and the repeater is ideally less than 200 meters. Install the repeater on a wall and connect it to an electrical outlet with the power cord.
The blue light will turn solid after you have plugged the power cord into an electrical outlet. Before turning the repeater on make sure that the base station is on.
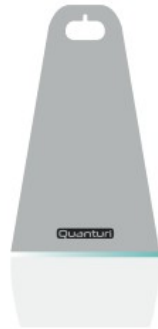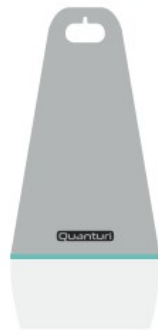
 For repeaters with a version starting with QNT-306
If the light of the repeater stays circulating, it means it is too far away from the base station. Move it closer to the base station.
NOTE!
The solid blue light indicates only that the repeater is connected to the base station. Please refer to your base station and Quanturi.app to ensure your system is operational.

2 Wireless probes

1. If delivered in parts, assemble the spike of the probe according to the instructions in your probe package.

2. When screwing tight, pay attention not to squeeze the cable between the two ends of the tube.

3. Then, simply insert your probes into the bulk material. Make sure to note the location of the probes in order to find them easily in an alert situation. If the material is moved, simply insert the probe into another pile.
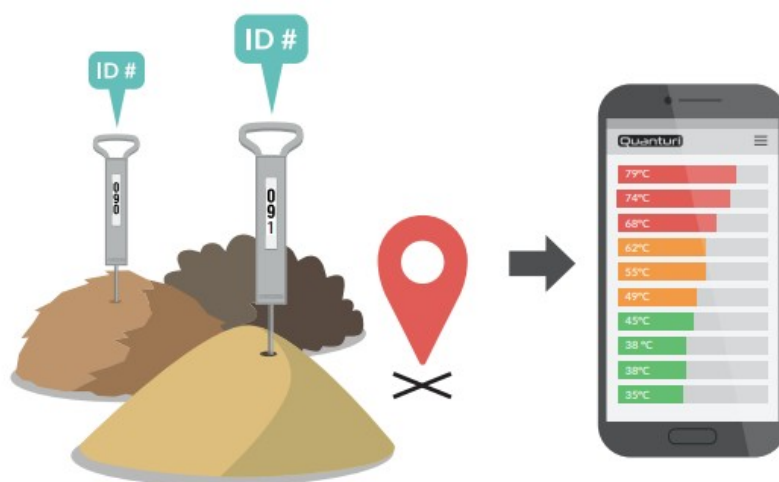
1 Devices meant for outdoor use have a protection class of IP44 for the enclosure and the power adapter. In case conditions for the IP44 can not be met, external protection is needed.

Troubleshooting

If the light of the base station enters the blinking orange state:

1. Unplug and reconnect the device to reboot it.
2. Wait for the base station to initialize and connect to the network.
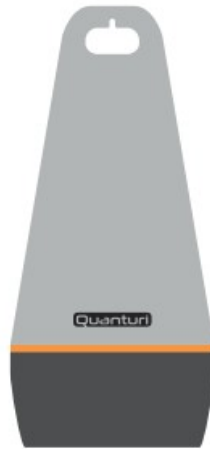3. If the problem persists, contact: **support@quanturi.com**

If the light of the base station enters the circulating blue state:
Circulating blue light means that the device is trying to connect to the server. In case the light does not turn solid after 5 minutes there is a problem with the connection. Try locating the base station to a different place.
If the problem persists, contact: **support@quanturi.com**
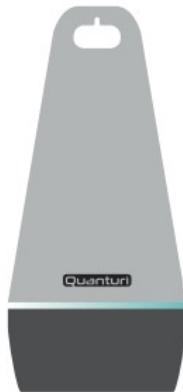
If you don't receive any data in your dashboard:

1. Make sure you wait for at least one hour after installing the base station until the probes send the first data.
2. Check that you have connected the batteries of the probes properly. (HAYTECH probes only)
3. Check that the base station is connected to the internet (the light should be solid blue).
4. Check that the base station is within the specified range from the probes. (This also applies to the repeater, if installed.)
5. To check if the probes are working, move some of them closer to the base station and wait for 2-3h.
   A) If you receive some data, it means that your base station is too far away from the other probes in the storage.
   B) If you don't receive any data, contact **support@quanturi.com**
6. If you have a repeater, place some of the probes closer to the repeater and wait for 2-3h.
   A) If you receive some data, it means that your repeater is too far away from the other probes in the storage. Move it closer to the probes in the storage.
   B) If you don't receive any data, it means that your repeater is too far away from the base station. Move it closer to the base station.
7. If you still don't receive any data at this point, contact us at **support@quanturi.com**

If one of your probes is not sending data:

1. Check that you have connected the batteries of the probes properly. (HAYTECH probes only)

2. If you have a repeater, place the probe closer to the repeater and wait for 2-3h.

    A) If you receive some data, it means that your probe is too far from the repeater. Move it closer.

    B) If you don't receive any data, contact **support@quanturi.com**

3. If you don't have a repeater, move the probe closer to the base station and wait for 2-3h.

    A) If you receive some data, it means that your probe is too far from the base station. Move it closer.

    B) If you don't receive any data, contact **support@quanturi.com**

General information

Repair and Maintenance

Quanturi products are designed so that they do not need any maintenance operations during normal use. If you still find something that requires our attention or your product(s) need(s) repair, please contact Quanturi support for further information.

For more information about our product warranty, please refer to our terms and conditions: **https://quanturi.com/pages/terms**

For replacement batteries please contact: **support@quanturi.com**

Base station product model numbers

This manual applies to base station model numbers QNT300-70, QNT300-71, QNT300-72, QNT300-73, QNT305-00, QNT305-01, QNT305-02, QNT305-03

Compliance

 This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.

– Increase the separation between the equipment and receiver.

– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

– Consult the dealer or an experienced radio/TV technician for help.

RF Exposure Statement

This equipment complies with the IC RSS-102 radiation exposure limits set forth for anuncontrolled environment. This equipment should be installed and operated with aminimum distance of 20 cm between the radiator and your body.

IC regulations

This device complies with Innovation, Science and Economic Development Canada license-exempt RSS standards(s).

Operation is subject to the following two conditions:

1. This device may not cause harmful interference;

2. This device must accept any interference received, including interference that may cause undesired operation of the device.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must be at least 20 cm from the user and much not be co-located or operating in conjunction with any other antenna or transmitter.

Recycling

This product should not be disposed of with household waste.
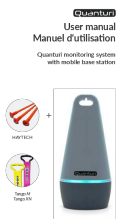Please bring this product to the appropriate electronic waste collection center in your region.

This product contains Lithium metal batteries. Please do not dispose of these batteries with your household waste. Please bring the batteries at their end of life to an appropriate collection point in your area.

The packaging of this product, as well as this manual can be recycled with cardboard or paper waste respectively.

Quanturi

Documents / Resources

Quanturi QNT30502 Monitoring System with Mobile Base Station [pdf] User Manual
QNT30502, QNT30602, QNT2X3, QNT30502 Monitoring System with Mobile Base Station, Monitoring System with Mobile Base Station, Mobile Base Station, Base Station

References

- **Wireless monitoring solutions for fermentable materials – Quanturi**
- **Terms – Quanturi**
- **Quanturi.app**
- **User Manual**