

# AmiNIC's Meat Quality Sensor User Manual



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# Introduction

AmiNIC's Meat Quality Sensor (abbreviated as MQS) is a handheld device that can be used to determine expiration dates on fresh meat, fish and poultry. It is intended for use in industrial kitchens in restaurants, canteens, shops, production and processing plants, slaughterhouses, meat packing plants, as well as for food inspection, receiving- and self-inspection.

The MQS provides a fast and scientifically validated method to measure the expiration date on fresh meat, fish and poultry. A simple measurement takes 2 minutes.

**Important info!** This manual should be carefully read through before using the MQS.

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# MQS Kit content

In the MQS kit you will find:

- User manual
- Meat Quality Sensor device
- Dock and charging station for the sensor
- Charger
- 5 mouthpieces
- 5 cartridges, vacuum sealed
- Envelope, for sending back the cartridges

## User Manual

**Before using the sensor, we recommend that this user manual is thoroughly read and that one familiarizes themselves with the instructions. This will help ensure the correct, safe, and efficient use of the sensor.**

The user manual for AmiNIC's Meat Quality Sensor contains important information on how to use, store and clean the sensor and its components. The guide also includes instructions on how to set up the sensor and perform expiration date measurements on fresh meat, fish and poultry. The sensor cannot be used for frozen meat.

Before using the sensor, we recommend that you read the user manual thoroughly and familiarize yourself with the instructions. This will help ensure that you use the sensor correctly, safely and effectively.

## Quick guide

The Quick Guide is a sheet that can be used to reference the measurement procedure and some tips. The reverse side contains explanations of ambiguities in the result and what you should avoid doing with the sensor.

## Meat Quality Sensor Device

The device **(C)** has been developed in collaboration with experts in food equipment design. It is designed with a high standard of hygiene and food safety. It is hermetically sealed and 3D printed with a food-safe coating. In addition, the device is designed with end-user feedback to ensure a seamless user experience.

To turn the device on, simply press one of the green buttons **(1, 2, 3 and 4)**. The buttons (see next page) have these specific functions:

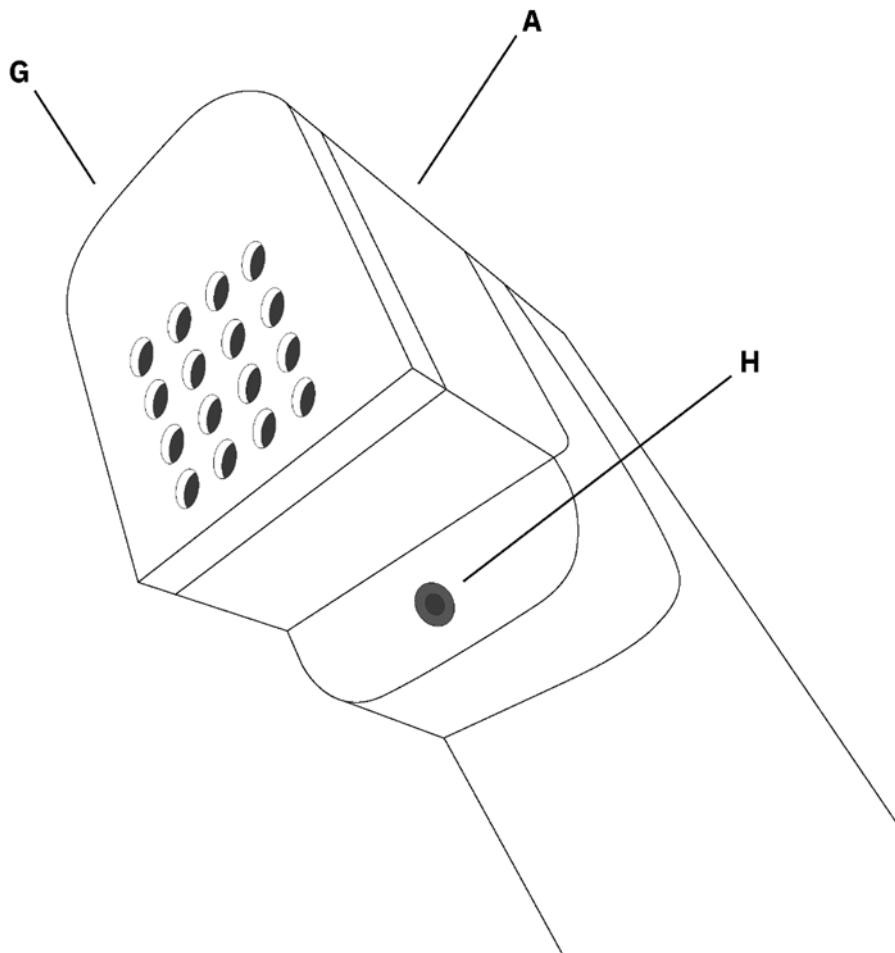
**Right (3):** Enter/OK

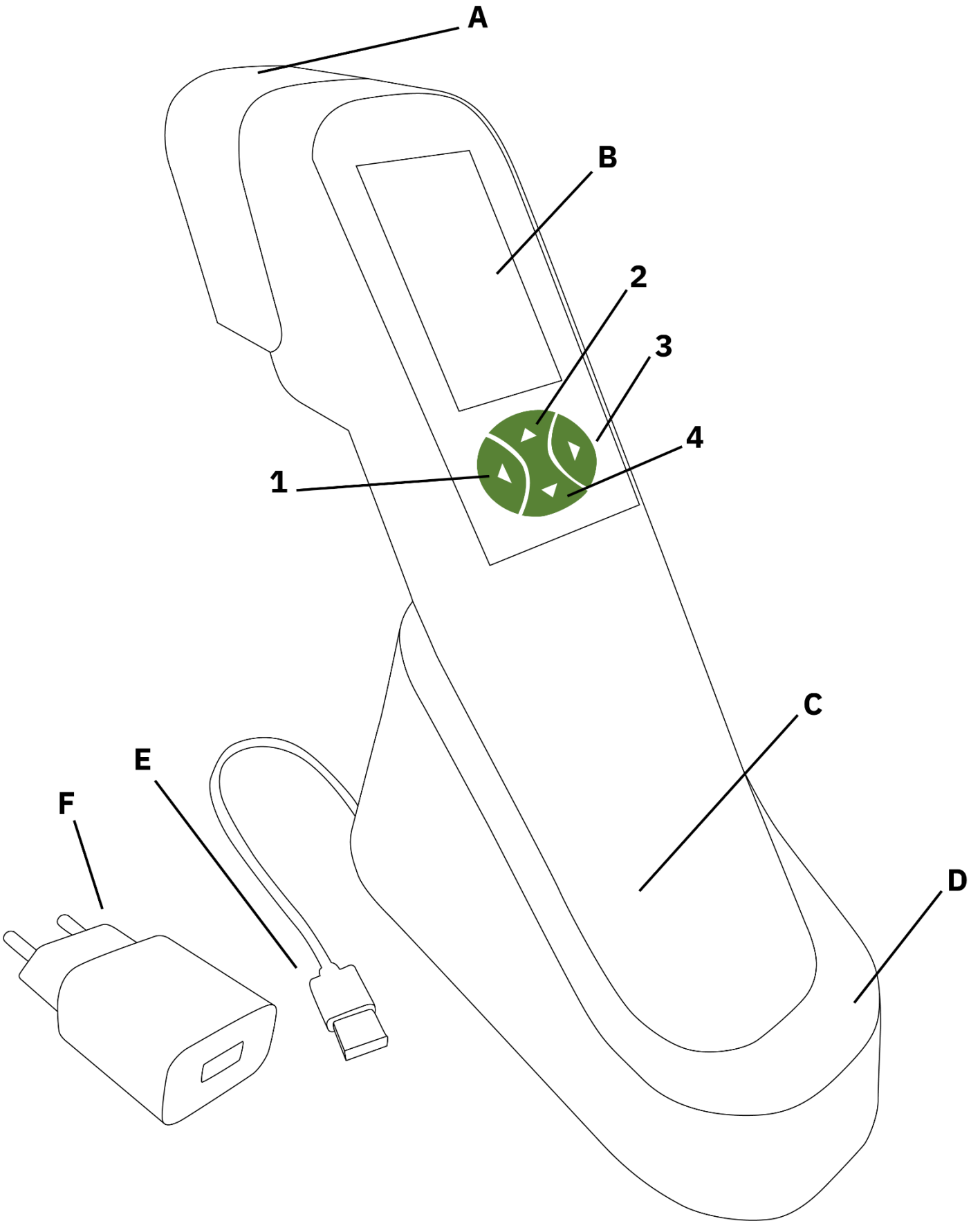
**Left (1):** Go back

**Up (2) and Down (4):** Navigate up and down in the menus.

On the back of the sensor, you will find a hole for the IR sensor **(H)**, which measures the temperature of the meat/fish during a measurement. During measurements, it is important that the IR sensor is directly over the meat and that it is not covered by a finger, for example.

Under the cartridge **(A)**, there are four magnets that hold the cartridge. This makes it easy to attach and detach the cartridge from the sensor. The sensor ID and cartridge ID **(I)** make it easy to identify the specific sensor and cartridge on our online platform.





## Docking station for the sensor

The docking station (**D**) charges and updates the sensor when it's not in use. It also functions as a holder for the sensor.

## Charger

The included charger (**E and F**) is used to charge the sensor and charging station. The power supply is compatible with standard sockets in most of Europe and has a universal voltage input range of 100-240V. It is important to note that the power supply should only be used with AmiNIC's Meat Quality Sensor and not with other devices. In addition, the power supply should be stored in a safe, dry place and not exposed to moisture and water or other liquids.

If you receive a warning that the sensor needs charging, it is recommended to place it in the charging station to avoid possible data loss. For best results, the sensor should be charged in the charging station overnight.

It will hold its charge for about 8 hours and it takes about 8 hours to fully charge it.

## Mouthpieces

The MQS kit comes with 5 mouthpieces (**G**) that attach to the cartridge to avoid cross-contamination between measurements. These mouthpieces are washable, read more about this in the 'General use, storage and cleaning' section.

## Cartridges, vacuum sealed

The MQS kit contains five cartridges (**A**), with one cartridge stored in the larger compartment of the box and the remaining four stored in the cartridge box.

Each cartridge contains the technology needed to perform a measurement and is vacuum sealed to protect the sensitive chemistry inside, until you're ready to use it.

After opening the seal on a cartridge, it can be used for approximately two months before it needs to be replaced. Once a cartridge is used up, it should be put in one of four slots in the cartridge box for safe storage. When four out of five cartridges have been used, the cartridge box should be returned to AmiNIC. We will then re-functionalize the cartridges and send them back to you. (This is included in our subscription)

Always handle the cartridges with care as they contain sensitive components that are crucial to sensor performance. Dropping it can damage the cartridge. Proper storage and handling of the cartridges will help ensure accurate and reliable measurements.



## Envelope to send the cartridge box

The MQS kit contains an envelope that is used to send the used cartridges in the cartridge box back to AmiNIC.

To return cartridges using the envelope, please follow these steps:

- Email [forsendelse@aminic.dk](mailto:forsendelse@aminic.dk) and request a return label.
- Print your return label.
- Place 4 used cartridges into the four compartments in the cartridge box.
- Place the foam layer on top and close the box, then pack it into the black envelope.
- Seal the envelope and affix the return label so that it is visible.
- Send the package from your nearest PostNord post office.

It's important to note that the used cartridges should NOT be disposed of as regular waste, as they may contain hazardous materials. They need to be returned to AmiNIC for recycling.

If you need an extra envelope to return the cartridges, you can contact AmiNIC for assistance. Email [help@aminic.dk](mailto:help@aminic.dk) or refer to our contact information on the last page.

# General use, storage and cleaning

## Sensor and docking station

Store the sensor in its charging dock **(D)** when it is not in use.

The sensor **(C)** and the charging dock **(D)** should not be stored in cold environments, such as refrigerators or freezers

To clean the sensor, you can wipe the surface with a food-grade alcohol wipe. When using the sensor correctly, it should not come into contact with the meat or fish, as only the mouthpiece should touch the food.

You may notice the sensor changing from white to a more yellowish color after extended use. This is not due to dirt but because the special coating becomes more yellowish after prolonged use.

## Vacuum sealed cartridges

The vacuum-sealed cartridges **(A)** should be stored in the box until they are needed.

## Cartridges out of the seal

A cartridge **(A)** removed from its vacuum-sealed bag is stored on the sensor or in the box.

If a cartridge touches the meat (e.g., during a measurement), it can be cleaned with a food-grade alcohol wipe. **Do NOT rinse the cartridge.**

The cartridge should not touch the meat or fish, during a measurement.

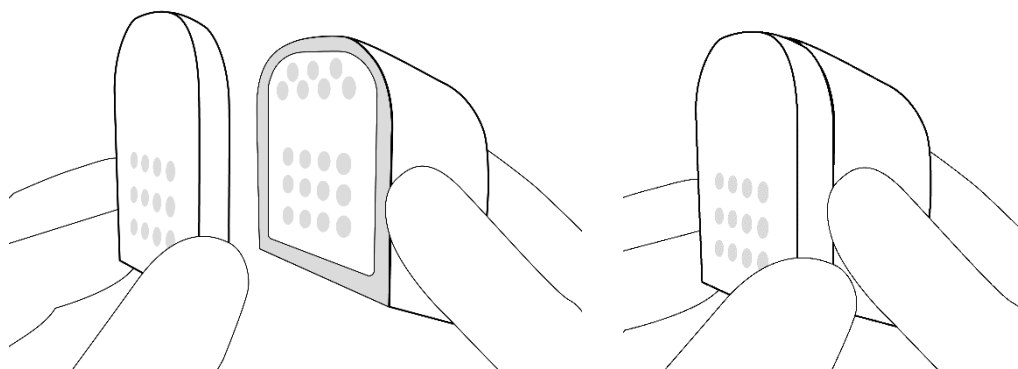
Remember that the technology inside the cartridge is sensitive and cannot withstand being dropped or getting wet.

## Mouthpieces

The mouthpieces **(G)** are designed to be easily attached and removed from the cartridge and are dishwasher safe. To sterilize the mouthpiece, you can use a food-grade alcohol wipe.

To attach a mouthpiece to the sensor, simply press the mouthpiece onto the cartridge until it clicks into place.

To remove a mouthpiece, pull on either side of the cartridge until it comes off.



After using a mouthpiece, remove it from the sensor and wash it thoroughly with warm water and soap or wash it in a dishwasher. To sterilize the mouthpiece, you can use a food-grade alcohol wipe.

It is important that the mouthpiece is completely dry before putting it back on the cartridge.

It is recommended that you switch to a clean mouthpiece when measuring a new type of meat, fish or poultry to ensure accurate and hygienic results.

## **Warnings on use**

Do not place the sensor or components in the freezer.

Do not place the sensor in a wet area or near chemicals.

Dropping the cartridges or sensor can damage the technology inside, so be careful when handling the sensor and cartridges.

Store the sensor in the charging station when not in use.

# Sensor setup

## Charging the sensor

To use the power charger, follow these steps:

- Connect the USB cable from the charging station to the plug.
- Connect the plug to a power outlet.
- While the sensor is in the charging station
  - o The sensor screen will show that it's charging
  - o The sensor will blink green
  - o The charging station will light up blue
  - o A red light **(C)** will light up on the sensor to show that the sensor is uploading and downloading data.
    - The red light will turn off after a short time
- To check the battery charge level on the sensor, go to **Device Info -> Battery**.

It works all the way down to 0 % battery, but we recommend charging the device when it's at 60 % for optimal measurement accuracy.

It is important that the charging station is not placed in cold environments such as refrigerators or freezers, as this can damage the charging station or affect its performance. We recommend storing the sensor in the charging station when it's not in use.

## Download and upload

Your sensor uploads and downloads data when it is placed in the charging dock. It's important to be aware that a red light on the sensor (C) will illuminate, indicating that the sensor is uploading and downloading data. This process will occur briefly when the sensor is placed in the charging dock.

## Updating the sensor

The sensor's firmware and algorithm need to be regularly updated.

You can check the current version of the firmware and algorithm in **Device Info -> Version**.

If an update is available, you can find the **Update** option in the **Settings** menu. Click on **Update -> Firmware** or **Algorithm**. Click on the active update and press **Yes**.

**Don't put the sensor in the charging station while it is updating.**

After an update, it is advisable to turn off the sensor and then turn it back on for the best results.

## Cartridge calibration **Important info!**

When you use a cartridge for the first time, it is important to calibrate the cartridge.

### Calibrating the cartridge:

1. Put the new cartridge on the sensor
2. Take a measurement without measuring anything
3. The sensor starts the cartridge calibration automatically, then the cartridge is ready for use.

If it does not start a calibration, the 'Cartridge Empty' error appears.

Go to **Settings** -> **Reset** -> **Cartridge** and press **Yes**

4. Repeat step 2 and take a measurement without measuring anything
5. The sensor will automatically start cartridge calibration.

When the calibration is complete, you get a frequency number, which is individual per cartridge. This helps the sensor to make optimal measurements with each cartridge.

The cartridge is then ready for measurements. If you use a cartridge on another sensor, we also recommend that you perform a calibration of the cartridge.

### Info about the cartridge

You can use the sensor to see which cartridge you have installed:

1. Choose **Device Info**
2. Choose **Cartridge**
3. If not already attached, attach the cartridge to the sensor

You will get this information:

**Cartridge ID:** This is a 4-digit ID that you can use to identify a specific cartridge. This can also help us with troubleshooting. You'll also find all cartridges you've used on the data platform.

**Date of first use:** First measurement this cartridge has made. This date helps keep track of when the cartridge expires.

**Manufacturing date:** This is the date AmiNIC has functionalised the cartridge.

### Resetting the sensor:

The reset function can be found in the Settings menu.

This function will erase:

- Logs with measurements and data that the sensor had collected since the last reset.
- Error reports that are only accessible by the AmiNIC team.

- The current version of the algorithm in the sensor, reverting it to the standard version.
- Firmware, reverting it to the standard version.
- Batch numbers.

Before using the reset function, it is advisable to contact AmiNIC if there are issues with the sensor. See our contact information on the last page.

The sensor cartridge can also be reset. This should only be done when the cartridge is used for the first time if it does not automatically start calibrating.

# Online setup

## Online platform

You can find our online platform at this link: [www.AmiNIC.data.dk](http://www.AmiNIC.data.dk)

The platform works on most web browsers. If you encounter an issue with the page, try opening it in a different browser before contacting AmiNIC support.

The platform requires a login, which you create with us. It's important that you provide the correct email address to set up your account. After we have created an account for you, your login information will be sent, and you can log in.

We recommend creating a separate user account for each person using a sensor.

## Connect a new sensor to the platform

Go to the **Devices** page on the platform.

Add the new sensor by entering its ID.

You can find the sensor's ID by using the sensor and going into **Device Info -> Version**.

The sensor's ID is 15 digits long, so it's crucial to enter it correctly when associating the sensor. If you enter it incorrectly, there won't be any measurements under **Measurements**. You can always edit the sensor information to correct it.

### Information used when connecting a sensor

|                               |                                  |
|-------------------------------|----------------------------------|
| <b>ID</b>                     | The sensor's ID                  |
| <b>Name</b>                   | Naming the sensor                |
| <b>Version</b>                | 1                                |
| <b>Company</b>                | Choose your company              |
| <b>Functionalization Date</b> | The first day you use the sensor |



## Make a new location

On the **Location** list, you add the location of your sensor.

### Information to add a location

|                |  |
|----------------|--|
| <b>Name</b>    | The sensor's ID  |
| <b>Company</b> | Choose your company  |
| <b>Type</b>    | Type of work:<br>Quality Control, teaching tool, checking the storage etc. |

## Connect the location to the sensor

Once you have a location for the sensor, you add it within the **Devices** section.

In the row with your sensor, there should be a location column. Click on the edit icon:



Here, you can ensure that you have selected the correct sensor and assigned it the right location. You can always make changes to the location as needed.

## Batch number

To perform measurements with expiration dates, you will need to use a batch number. Batch numbers help you filter your measurements by their product type and when they were taken.

Each batch number corresponds to a single day of measurements.

### Batch number information

|                  |   |
|------------------|---|
| <b>Batchcode</b> | The batch code is the ID you see on the sensor, and it can have a maximum of 8 characters. You can also choose to auto-generate this code by clicking on <b>Generate Random</b> .   |
| <b>Name</b>      | This is the name of the batch code. It can be something like "Tuna Inventory Check" or "Beef Control."  |
| <b>MeatType</b>  | Here, you choose the type of meat or fish you are measuring.<br><br>Currently, you can choose between Ground Beef, Pork, Tuna, and Salmon.<br><br>You can also choose "Raw Data" which provides quality measurements. (Read more about this in the section: 'Measuring on other types of meat and fish.') |
| <b>StartTime</b> | Du vælger starttiden her, dette vil som standard være dags dato. Men batchnumre kan planlægges fremad.  |

Remember to press **Submit** when you're done making your batch number!

## Synchronize batch numbers with your sensor

Your sensor needs to retrieve batch numbers from the platform before you can use them for measurements. You can do this by:

1. Turn on the sensor using any button.
2. Click on **Scan**.
3. Select **Sync Cloud** to synchronize with the platform.
4. The sensor will indicate how many batch numbers it has retrieved.

From here, you can start a measurement by going into **Scan -> Select**. Choose the batch number, and the measurement will begin.

# Measurement guide

## General operation

To turn the device on, simply press one of the green buttons.

The buttons have these specific functions:

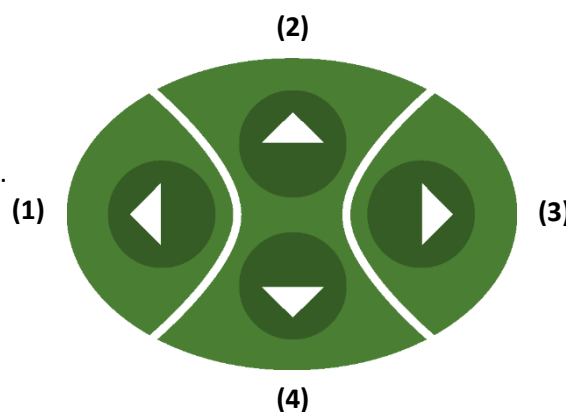
Right **(3)**: Enter/OK

Left **(1)**: Go back

Up **(2)** and Down **(4)**: Navigates up and down in the menus.

When the device is turned on, you can use it to take measurements, calibration measurements and view previous measurement results.

To turn the device off, you can tap **Turn off** in the main menu. You can also set it to charge in the charging station.



## Good measuring practice

### **Do not measure meat that is above 11 degrees.**

The MQS is intended to measure meat or fish taken from the fridge that is between 4° - 11° degrees Celsius. If the meat or fish is too warm, the measurement will not be accurate. Therefore, it is important that the standard for storing meat and fish is maintained.

You can check the temperature of the meat by going into **Device Info -> Temperature**.

The measurement procedure will also check if the meat is below 11° degrees.

### **Do not measure on frozen meat.**

Frozen meat cannot emit the correct gasses we measure, therefore the MQS will not work on frozen meat or fish.

You can check the temperature of the meat by going into **Device Info -> Temperature**

### **Do not use the sensor on cooked meat.**

**Do not use the sensor on meat that is being processed, salted, boiled, cooked, prepared or roasted.**

**Do not measure on fat, scales and skin, as this will not give a useful result.**

**If you've just opened a MAP pack of meat, let it acclimatize first.**

MAP-packed meat will often have a build-up of gasses that clears off after a short time. Measuring immediately after opening MAP-packed meat can give a misleading result.

**If this is the first time the cartridge is used remember to calibrate it**

Read more about cartridge calibration in the Sensor Setup section.

**Make sure firmware and software are up to date**

Read more about updating in the Sensor Setup section.

## Measuring procedure

For a normal measurement, you have a piece of meat, fish, or poultry in front of you that you want to measure. The ideal temperature for this meat is between 4°C - 11°C.

To start a measurement:

1. Select either Select Batch (Specific meat type) or Scan (Unspecified meat type).
  - a. For Select Batch, select the correct batch number.
  - b. If it has no batch numbers, use Sync Cloud in the Scan menu.
  - c. Select your batch number.
2. Your measurement starts.

**Hold off Sample:**

3. Measurement starts: Hold the sensor or place the sensor on a clean surface.
4. After the beep, you can take the sensor again.

**Maintain on Sample:**

5. the screen will state that the sensor must be in contact with the meat before you continue.  
Place the sensor on the meat/fish and press Continue to activate the next step.
  - a. The IR sensor must be above the meat/fish to ensure a correct temperature measurement. (A warning will appear if the temperature of the meat is above 11° degrees, press Continue again)
6. After the next beep, the screen will switch to Second Sweep, you need to remove the sensor from the meat/fish.

**Hold off Sample:**

7. The sensor can be left on a clean surface again.
  - a. The sensor performs a sweep.
  - b. The sensor then performs a ventilation.
8. After ventilation is complete, the result is displayed.

You can repeat the measurement on a new piece of meat of the same type by pressing **Repeat** or return to the start menu.



Turn on the sensor, go into the Scan menu, and choose either a batch number in Select or Scan.



While the sensor is doing the preliminary measurement DON'T put the sensor on the meat.



The sensor will beep when it is ready to measure the meat. Hold the sensor on the meat and press **Continue**.



While this screen is active keep the sensorhead on the meat. Ensure that the IR sensor is also positioned above the meat!



When the sensor beeps again you can take it off the meat and wait for the result. While calculation the sensor will clean itself.

## Result

The screen will display the result until you press **Repeat** or **Menu**.

You can access your results on our platform.

This information is provided on the results screen:

### Expiration date

The first line of the result shows the expiration date of the meat.

This expiration date is valid thereafter if the product is stored correctly in terms of temperature and packaging.

It is important that your products are stored safely and correctly.

### Temperature

The next part of the result is the temperature of the measurement in Celsius. This can also help you observe the temperature of your meat and fish products.



# See your measurements online

## Measurements

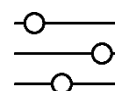
It is important that after a series of measurements, the sensor is placed in the charging dock. The sensor uploads measurements to your platform.

Inside the platform, you can view the measurements you have made with an associated sensor and the uploaded data. At the top is the latest measurement where you receive this information:

|                      |  |
|----------------------|--|
| <b>Device</b>        | Sensor ID                              |
| <b>Cartridge</b>     | Cartridge ID                           |
| <b>Device Ver</b>    | Version of firmware in the sensor      |
| <b>Algorithm Ver</b> | Version of algorithm in the sensor     |
| <b>Type</b>          | Type of meat/fish that was measured on |
| <b>Quality</b>       | Expiry date or quality index           |
| <b>Temperature</b>   | Temperature on the meat or fish        |
| <b>Time</b>          | When the measurement was taken         |
| <b>Batch</b>         | The belonging batch code if applicable |

## Filtering:

At the top, under "Measurements," you can see a filter with this icon:



You can filter by:

|                            |  |
|----------------------------|--|
| <b>Device</b>              | Sensor ID                                    |
| <b>Date</b>                | Cartridge ID                                 |
| <b>Meat type</b>           | Type of meat/fish that was measured on       |
| <b>Batch code assigned</b> | If the measurement had a batch code assigned |
| <b>Batch code</b>          | Batch code (shown on the sensor)             |
| <b>Batch name</b>          | Batch name                                   |

Remember to press **Apply Filter** to display the measurements.

## Associate batch numbers with measurements

You can associate measurements without a batch number by using the Batch Code Assigned filter.

The batch number should be created before you associate it with measurements.

Under filtering, you can choose "No" under Batch Code Assigned. Then, you can see a "Select" option in the right column. Click on the measurements that match, and at the bottom of the page, associate them with the batch number you have created.

Remember to click: "Assign the Batch to the selected measurements!"



# AmiNIC's Expiration Dates

## AmiNIC's meat and fish types

For each of the AmiNIC meat and fish types, we develop specific algorithms to measure the specific type of meat. This development is done in collaboration with meat and fish experts, knowledge institutions and our own developers. This means we know exactly when the specific type of meat or fish is too bad to be processed and eaten.

These are AmiNIC's fish and meat types:

- **Pacific Salmon / Alaskan Salmon**
- **Yellowfin Tuna**
- **Pork**
- **Beef**

## Differences on the types

Due to the differences in fish and meat, as well as the different types of each, an AmiNIC shelf-life Index must be created for each type.

It is also important to be aware that fish goes bad faster, so the measurements for these can change quickly. It is important to store fish and meat safely at all times.

## Differences between cuts of and minced meat/fish

Different cuts of meat and fish also mean that we need to test and develop a shelf-life index for the specific cut of meat/fish.

# Measuring other meats or fish types

## Other types of meat and fish

We are working on creating new indexes for many types of meat and fish. This is a lengthy process that is being developed in collaboration with experts in meat and fish quality and shelf life.

To measure on other types of meat and fish, you will need to make a measurement using the Undefined type, which is explained in the next section.

## Using the Undefined Type

To make a measurement on a different type of meat or fish than AmiNIC's meat and fish types, you have to do the same measurement procedure except you choose the **Undefined type** when you start the measurement.

This will give you a number where the closer it is to 0 the fresher the meat/fish is.

We cannot measure the expiration date on new types of meat or fish, but this number will be a guide to whether or not it is fresh.

## Reading the result

The result is a measurement of the amount of cadaverine present in the meat/fish. The more cadaverine a piece of meat or fish emits, the older the meat/fish is.

Using the table below will act as a guide for your measurements.

| <b>Result nr.</b> | <b>Freshness</b>                  |
|-------------------|-----------------------------------|
| -5 & 5            | The meat/fish is very fresh       |
| 6 & 15            | The meat/fish is fresh            |
| 16 & 21           | The meat/fish should be used soon |
| 22+               | The meat/fish should be discarded |

## Making your own table

You can also write your own table, where you make an Undefined measurement on a piece of meat/fish that is no longer useable. In this case, the measurement will be your guide to how bad the next piece of meat/fish is.

# Frequently Asked Questions

## About measuring

### How long does it take for the MQS to deliver a measurement?

It takes approximately 2 - 3 minutes after calibration.

### How accurate is the MQS in measuring the expiration date of meat and fish?

Measurements with AmiNIC's meat and fish types have a safety margin of one day.

We cannot guarantee this level on custom meat and fish types.

### Can MQS be used for all types of meat and fish?

Yes, it can. Our sensors currently have 5 types of meat and fish that have a scientifically validated shelf-life index. For other meat and fish types, a simple scan is required. You can read more about this type of measurement in the section 'Measuring other meats or fish types.'

### I just bought this piece of meat or fish, why does the sensor say it's bad?

Besides the meat or fish not being fresh anymore, a fluctuation in results can be caused by:

- **MAP packed**  
As the MAP package often has a build-up of gasses when opened, this can have a direct effect on the measurement. Therefore, we recommend waiting a few minutes before measuring meat that has been in a MAP pack.
- **The temperature of the meat is too high**  
Doing a measurement on meat that is above 11 degrees can give an incorrect result. Check that the temperature of the meat is below 11 degrees.
- **The cartridge is saturated**  
If the meat is at the right temperature, the cartridge may be saturated after measuring other meat. In this case, we recommend that you perform a measurement without the meat to clear the cartridge with the vents.

### Can I use MQS on meat or fish products that have been MAP packed?

Yes, however, we recommend that you let the meat or fish "steam off" for a few minutes on the table or in the fridge, as the MAP package often has a build-up of gasses that can affect the measurement.

If measured immediately after opening a MAP-packed meat, this can cause a big fluctuation in the measurement, that does not show the actual expiration date.

### **Can MQS be used on frozen meat and fish?**

No, the MQS can only be used on meat and fish between 2-10 degrees. It works optimally on meat and fish between 2-5 degrees.

### **Can MQS be used on thawed meat and fish?**

Yes, but you should be aware that thawed meat/fish has a different structure, which means that the meat often deteriorates quickly. When you have a piece of thawed meat, we recommend measuring several times: Once after thawing and especially the day after. The result can show a closer shelf life.

### **Can MQS be used on smoked, marinated or cooked meat and fish?**

No, smoked, marinated or cooked meat and fish has undergone a structural and physical change which means that it does not excrete gasses in the same way as raw meat and fish.

### **Can MQS be used on minced meat and fish?**

Yes.

### **What happens if MQS detects that the meat or fish has expired?**

You can safely discard the meat or fish.

## **Sensor warnings**

### **Cartridge Empty**

Even if the cartridge has been calibrated, it can still display this error. This could be because you have used the sensor on old meat for an extended period. If you receive this error, we recommend performing a new calibration.

### **Cartridge Missing**

If you receive this warning, it means the cartridge is not on the sensor. You can press the left button to exit the measurement/calibration or place the cartridge on the sensor, and it will continue with the measurement/calibration.

### **Error: Cloud, Cloud Activation Required**

This error message occurs if you try to access the batch number menu after resetting the sensor. You can continue by pressing "Connect" after it has synchronized with your batch numbers.

### **Calibration Warning**

This warning appears when the cartridge still needs to be calibrated or is running low. You can ignore this warning and continue with measurements, but we recommend either performing a new calibration or using a new cartridge if you have been using it for 2 months.

### **Inaccuracy Meat Temp: 12°C+ Too high**

This warning appears if the meat temperature is above 12°C when taking a measurement. You can still take the measurement, but we recommend measuring meat between 4°C - 11°C for accuracy.

### **Low Battery Warning**

When the sensor's battery is below 70% and you try to synchronize with the database (download batch numbers), you will receive this warning. Charge the sensor to 70%+ before synchronizing again.

### **No Results Available**

This warning appears if the sensor cannot find any batch numbers in the database for the current date when synchronizing. This could be because there are no batch numbers in the database for the current date or because the sensor is not registered correctly on the platform.

## **About the sensor**

### **How often should I calibrate my MQS?**

When you unpack a cartridge for the first time, it is important to perform a cartridge calibration. See section Sensor Setup -> Cartridge Calibration (See page XX)

### **Is the MQS waterproof? Can it be submerged in water for cleaning?**

The sensor is waterproof and can be submerged under the tap. However, we recommend using an alcohol wipe.

Read more about cleaning the sensor in the 'Use, storage and cleaning' section

### **How do I clean the MQS? Are there specific cleaning instructions?**

Yes, you can read about cleaning the sensor in the 'Use, storage and cleaning' section

### **Does the MQS require ongoing maintenance?**

We expect the sensor itself to last for several years without additional maintenance.

The cartridges are replaced regularly. We also do quality control when the cartridges are sent in. Thus, there should never be a bad cartridge in circulation.

If there is something wrong with one of our products, please contact us. Our contact details can be found on the last page.

#### **How long is the warranty for MQS and what does it cover?**

There is a 1-year warranty on the sensor, cartridges and charging station from the date of purchase.

## **Warranty and Support**

There is a 1-year warranty on the sensor, cartridges and charging station from the date of purchase.

The warranty covers any manufacturing defects or defects that occur within the warranty period.

If you experience any problems with the product, please contact our customer service and we will take care of it immediately.

If you have any further questions, you can always contact us via. phone or email:

+45 28 14 20 35

[help@aminic.dk](mailto:help@aminic.dk)



Product name: Meat Quality Sensor  
Model No.: 1.0

Made in Denmark



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