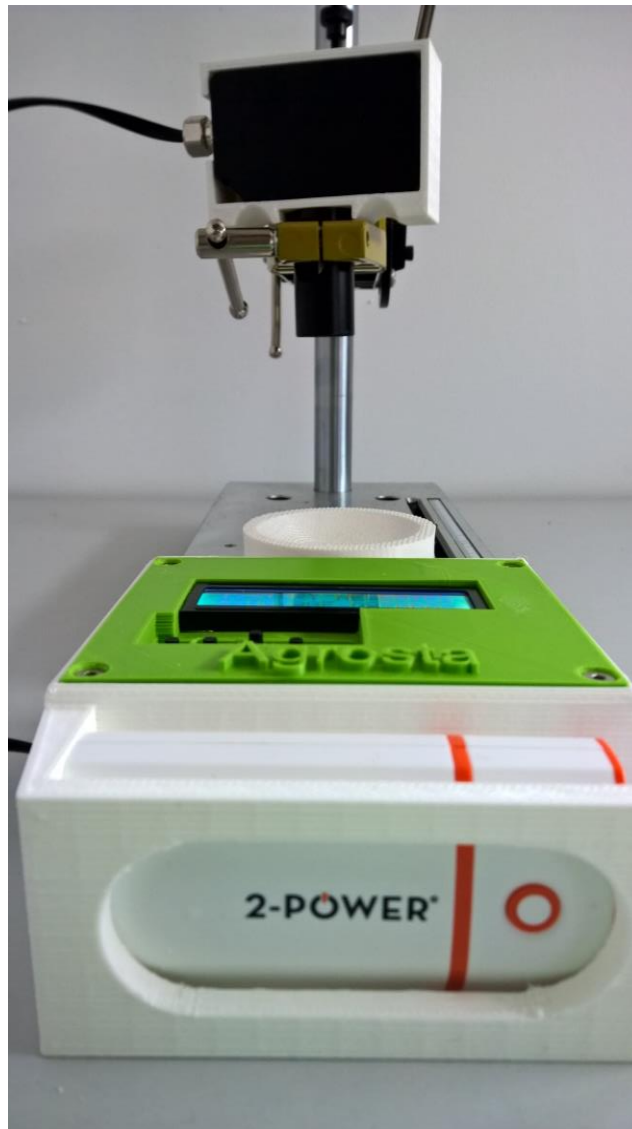


The Agrosta® 14 Field Version 3 has been designed in 2015
It integrates the best technology for measuring the firmness of crisp fruits and materials – It
is a statistic instrument



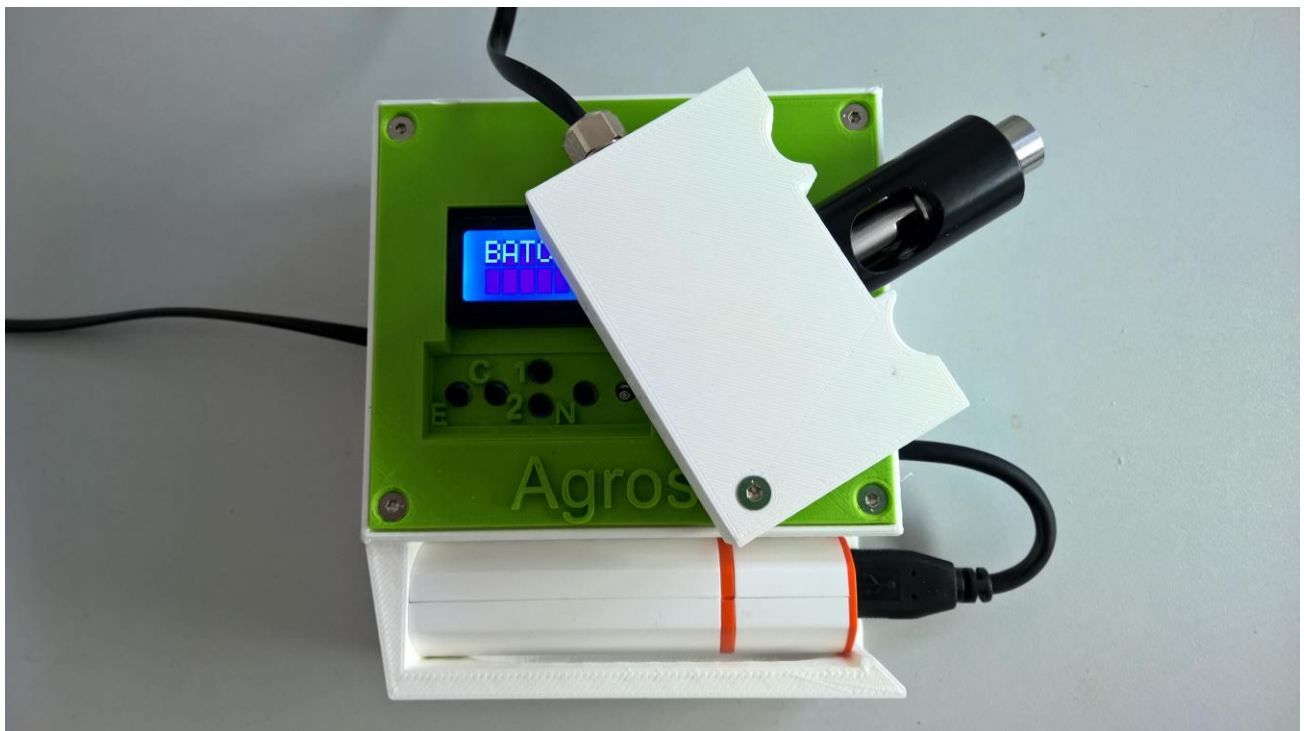
Many thanks for having acquired an Agrosta instrument

Your package contains :

- A Box with the instrument itself
- A sensor connected to the instrument
- A SD card already inserted in the instrument
- A micro SD to SD adaptor
- A charger
- A certificate of conformity
- A manual

Tip choice :

- Tip of 11 (standard) : Used on **apples**... diameter 11.11 mm (7/16") – surface 0.97 cm²
- Tip of 8 (standard) : Used on **peaches, pears, kiwis, melon flesh**... diameter 7.94 mm (5/16") – surface 0.49 cm²
- Tip of 11 (Hemispheric) : Used on **oranges**... diameter 11.11 mm (7/16") – surface 0.97 cm²
- Tip of 8 (Hemispheric) : Used on **Lemon**... diameter 7.94 mm (5/16") – surface 0.49 cm²
- Plastic Tip for **meat flesh**
- Plastic Tip for **meat fat**
- Plastic Tip for **chicken**
- Specific tips according to special uses



The AGROSTA®14Field is entirely designed and assembled in France. The motherboard comes from Italy, and the shield boards are made by DF Robot. The battery comes from DURACELL in the UK.

The AGROSTA®14Field is not waterproof! It is a precision instrument; please take care to avoid dropping or knocking it.

The AGROSTA®14Field has a two year guarantee from its date of shipment (Except on SD card, no guarantee on SD card).

- Minimum grams: 800 (operation threshold),
- Maximum grams : 13 000,
- Resolution: +/- 1 gram
- Precision 1.5 grams (24 Bits)
- Charging time: 1 day for one week work
- Maximum memory capacity: Huge – Limited only by SD.
- Maximum number of pieces of fruit per batch: 450



Comparison between previous Agrosta 14 Field, Penefel, and new model :

- The battery is high capacity (more than 5000 mAh)
- The precision is 24 bits instead of 12 bits for previous version
- Equipped with a larger screen (2 * 16 characters) with retro light
- Equipped with sd card slot for unlimited storage of data
- Can be charged by any mobile phone charger with micro-usb plug
- You can activate a light from the battery

It presents the following disadvantages compared to old version

- The choice 1 to 4 measure per fruit is no more available (But it has no effect on statistic data)
- A number is automatically given to a new batch (you cannot give another name)

1) HOW TO USE THE BATTERY

- Press a few seconds on the button of the battery, a strong light is switched on
- Press again, 4 blue leds appear, they indicate the charging level

2) HOW TO START THE INSTRUMENT

- TAKE CARE TO TAKE THE SENSOR IN THE RIGHT POSITION when you start the device (Tip free and looking at the floor..) :



The device takes the origin when you switch it on. If the sensor is not in the right position when you start the device, you can have a mistake in the measurements that can reach up to 60 grams



While keeping the sensor in the right position, start the device with the switch on the side

3) HOW TO USE THE INSTRUMENT

1st Menu :



Press 1 to start a new batch, 2 to consult or delete previous batches

2nd Menu after choice 1 :



You can measure your fruits one after each other
Press C to cancel last measurement
Press N to record and obtain statistics
Press E to go back to Home menu without recording

If choice N :



The statistics of the batch are displayed, Press E to go back to Home menu

Menu "Manage Database"



Press N for batched consultation – Each batch statistics is displayed during 3.5 seconds – “A” corresponds to the average, “St” is the standard deviation of the batch, “Hi” corresponds to the homogeneity index of the batch (shall be less than 10% for good homogeneity)



Press C to erase Data, and go back to Batch 1, the data is deleted on SD card (Confirmation is asked by pressing 1)



4) ON SD CARD

The SD card is located on the right side of the instrument. In order to remove it, apply a light pressure on it till it "clicks"



2 Files are available on the SD card :

- ALL.txt is used by the machine, and shall no be deleted nor modified (If deleted, it is re-created by the instrument, but the memory is erased)
- BATCHES.csv can be opened by Excel (choose ";" separator when Excel tries to open the file) – All measurements and statistics are stored on this file – We recommend to copy it on your computer, and not to modify the file on the SD card

5) SET OF ADDITIONAL TIPS

Many tips are available, or can be produced on demand :

Main specific requests til now :

- Cabbage firmness at the earth of the cabbage with a needle tip
- Cheese firmness measurement in a factory (Needle tip)
- Sausage
- Mushrooms hardness
- Corn stems hardness
- Granules for rodents texture
- Cow udders firmness
- Chicken breast firmness

And many other projects...

