

The Agrosta 100 Field Version 5 has been designed by end 2015
It integrates the best technology for measuring the firmness / softness of soft 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 and the sensor
- A SD card already inserted in the instrument
- A micro SD to SD adaptor
- A charger
- A certificate of conformity
- A manual

The Agrosta 100 Field is provided with one sensor (10 , 25 or 50) according to your requirements
You can buy adaptors separately :

- A100-10 sensor for **peaches** (35% to 95%), **apricots** (45% to 95%), **grapes and kiwis** (35% to 95%) , **cranberries**– With the 10 mm tip, a reading of 85% corresponds to 4.5 Kg per 0.5 cm² with a penetrometer.
- A100-25 sensor for **tomatoes** (values from 45 to 80), **cherries, plums, melon flesh, grapes** (values from 30 to 80), **blueberries** (values from 25 to 70 - destructive), **peppers**
- A100-50 sensor for **strawberries**



The AGROSTA®100Field is entirely designed and assembled in France. The motherboard comes from Italy, and the shield boards are made in the USA. The battery comes from DURACELL in the UK.

The AGROSTA®100Field is not waterproof! It is a precision instrument; please take care to avoid dropping or knocking it.

The AGROSTA®100Field has a two year guarantee from its date of shipment (Except on SD card, no guarantee on SD card).

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- Minimum %: 7% (operation threshold), corresponding to a pressure of 40 grams approx
- Maximum %: 100%, when fully depressed, corresponding to a pressure of 806 grams
- Resolution: +/- 1%
- Charging time: 20 to 120 minutes for one day work
- Maximum memory capacity: Huge – Limited only by SD.
- Maximum number of pieces of fruit per batch: 450



Comparison between previous Agrosta 100 Field, Durofel, and new model :

- The battery is high capacity
- 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
- No daily calibration, you can detect yourself when calibration is no more valid

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)
- You have to choose the tip you want (10, 25 or 50), and the tip is not removable – You can buy another sensor separately

1) HOW TO START THE INSTRUMENT



Start the device with the switch on the side

2) HOW TO USE THE INSTRUMENT

- If you are using the device in a dirty environment, or with fruits that are destroyed during measurement, like Blueberries or Strawberries, it is absolutely necessary to use the tip protections provided (You can use any finger cot)



1st Menu :



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

If you press 1, the device takes its origin

TAKE CARE TO TAKE THE SENSOR IN THE RIGHT POSITION when you press 1 (Tip free and in working position..):



The devices 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 4%

2nd Menu after choice 1 :



You can measure your fruits one after each other
Press 1 to cancel last measurement
Press 3 to record and obtain statistics
Press 4 to go back to Home menu without recording

If choice 3 :



The statistics of the batch are displayed, Press 4 to go back to Home menu
m is the minimum, Ma the maximum, Av the average and St the standard deviation

Menu "Manage Database"



Press 3 for batches 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 1 to erase Data, and go back to Batch 1, the data is deleted on SD card (Confirmation is asked by pressing 2)

3) 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

4) SELF-CALIBRATION

You can check if the calibration of your device is still valid.

1st – Start the instrument according the starting procedure above (Be sure that the sensor is in the right position when you start the device !!)

2nd – Press very strongly the tip on an hard and flat surface, like a table – You should obtain more than 96 % (The best is to obtain 100%) – If it is not the case, contact Agrosta for calibration

5) TESTING BATTERY CHARGE

In order to test the charge of the battery, just press on the button place on back side of the instrument :



And then look at the blue led close to the charger plug, the number of led switched on corresponds to the level of charge



6) CLEANING

Pull on the abutment carefully, and remove the tip, clean the red part with hot water and soap, and the inside (yellow plastic part) with a wet tissue

