

# Wireless Berry Platform Quick Start Guide

## Data Collector Set up steps

1. Connect the Data Collector to the line power.
2. Connect the wired Cat5e connection to the Data Collector.
3. Wait for the Data Collector to boot up and connect to the Internet.
4. Check the Status Indicator LED.

## Node Set up steps

5. Connect the sensors to the Node.
6. Connect the Node to the line power.

## Calibration

7. Follow the calibration protocol detailed in this guide.
8. Check the incoming measurements in the web app.
9. [Contact support](#) if you experience any issues.



*Wireless Trutina Support QR Code link*



## Detailed Operational Description

The Wireless Trutina system consists of a Data Collector and its connected Wireless Node. Once a Data Collector is supplied with power (110-240V AC, 50/60Hz ) the Data Collector will boot up, once it is connected to the Internet the unit will establish network connection. **The bootup sequence lasts about 4 minutes. Please do not power down the device during this operation!** Once online the Data Collector will periodically establish connection with the Node or Nodes within range.

## Network requirements

The Data Collector requires wired, broadband internet access. In general, connecting through a DHCP enabled network device modem/switch is sufficient. We recommend testing the cabled RJ45 connection with a laptop computer before proceeding with the installation. A simple test is loading the [GOOGLE](#) main page. Checking the network stability and speed is recommended. An online connection speed testing service can be used, such as [FAST.COM](#). In certain scenarios network configuration might be required. Please consult with your IT technician and make sure that DHCP and ports 80, 443 and 123 (NTP) are enabled.

## The Data Collector

The Data Collector contains a status indicator LED located on the bottom right of the housing. This LED indicates the operational status of the device. These are the following: No LED, RED, RED-GREEN blinking and GREEN.



*Data Collector with line power.*



*Data Collector with line power and Ethernet connection. Note the RED LED, there is no active network connection yet.*

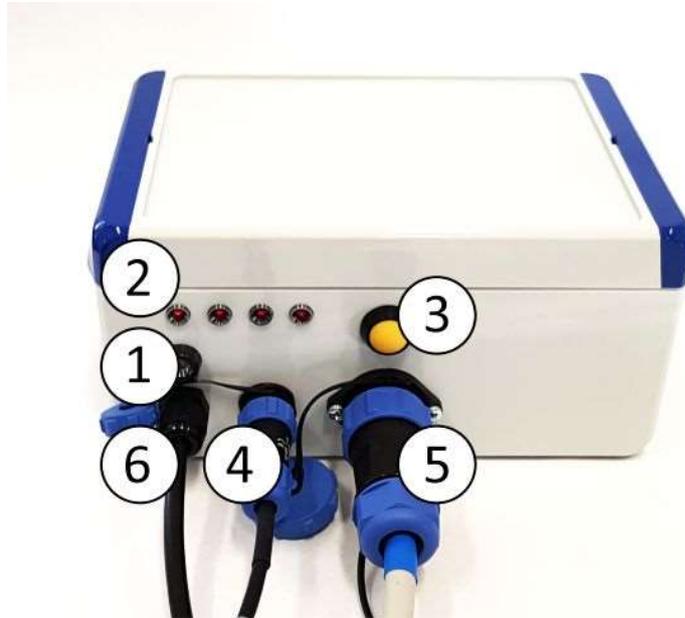


*Data Collector with line power and Ethernet connection. Note the GREEN LED, the network connection is active.*

## Data Collector Indicator LED STATUS

LED status	meaning
LED RED	LINE POWER ON
LED FLASHING GREEN-RED	ESTABLISHING NETWORK CONNECTION
LED GREEN CONTINUOUS	LINE POWER AND NETWORK CONNECTION OK
LED OFF	NO LINE POWER

## Wireless Berry Node



*Connecting sensors*

- 1 Power LED
- 2 Signal LED's
- 3 Button
- 4 Port 1 – dedicated port for the SLS-4D Digital Pyranometer
- 5 Port 2 – dedicated port for the Load cell and the ES-2
- 6 Power cable

If the hardware configuration has changed from the one in the quotation, for example an additional Pyranometer has been added, then please contact our support team with the NODE serial number. The serial number is located on the ID plaque of the device, and the list of the connected sensors and their port numbers.

**Gremon Wireless Node** IP 54 CE  
Type: P2 Digital

GREMON SYSTEMS LTD  
HU-6721 Szeged Dugonics St. 42.

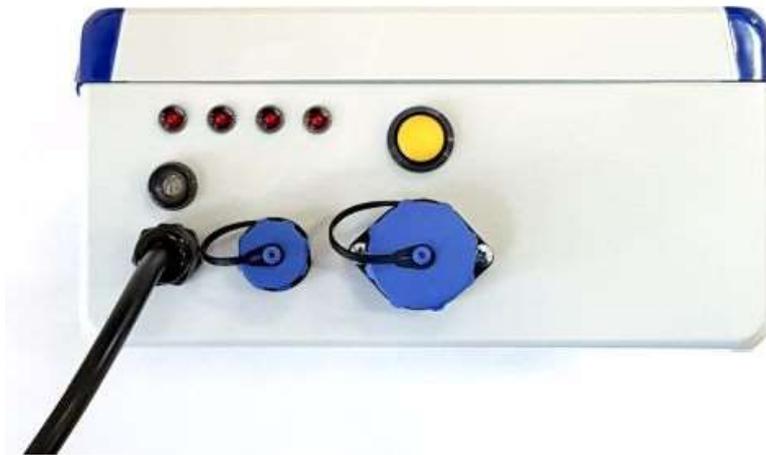
Year of manufacture : 2021

S/N : 201 410 WN 20019

An example for one such case would be: WN 20019

*The above serial number serves only as an example*

## Setting up



*wireless Digital Node*

Start by connecting the digital sensors to the ports located on the bottom of the Digital Node. Once the sensors are connected connect the node to the line power and the press the button on the bottom of the device for at least 3s. This will restart the Node and test all ports for sensors.

### NODE POWER LED STATUS

LED status	meaning
LED LIGHT	DC POWER OK
LED LIGHT	NO DC POWER

Signal range. It advised to check the Data Collector-Node communication signal quality by testing the signal strength. To do so make sure that the Data Collector is installed and operational. At the proposed installation location press and hold the button on the device for 1s, then release the button. The LED's on the device will light up to represent the signal strength. Please refer to the table below.

Button press duration	LED, device behaviour
short button press 1s	1 LED weak signal less than 120db
short button press 1s	2 LED 100-120db
short button press 1s	3 LED 80-100db
short button press 1s	4 LED strong signal 80db or better
short button press 1s	0 LED no communication
long button press 3s	RESET function

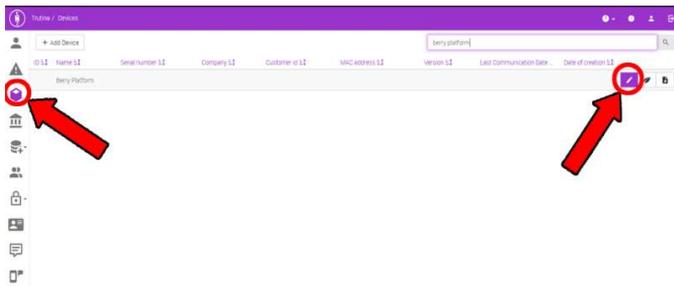
## Calibration Procedure

Prepare 2 containers filled with 1l of EC 2,5mS/cm water.

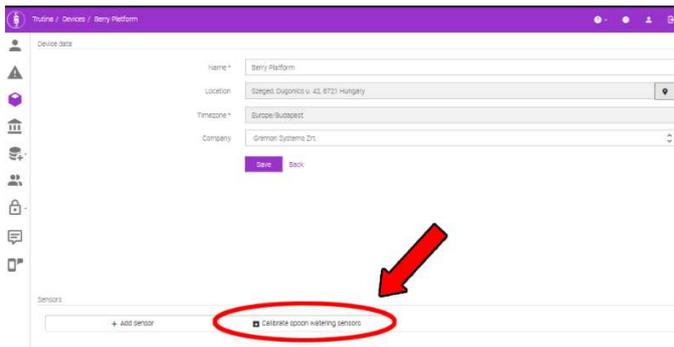
The calibration can be started from the device settings menu on the Trutina 2 web app.



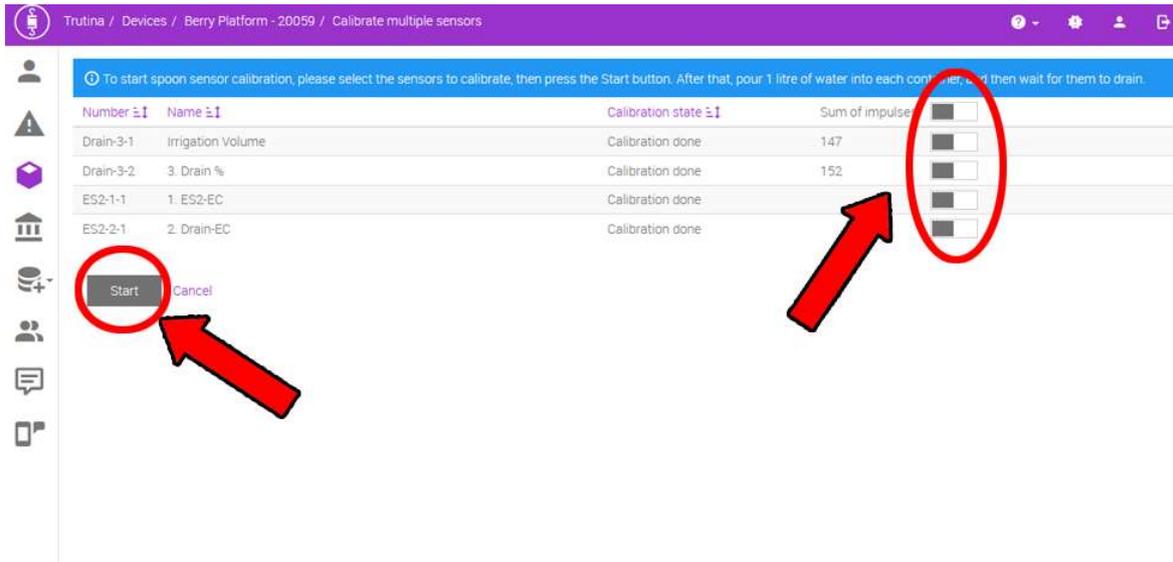
*navigate to and select the User Menu*



*select the device Settings Menu  
select the device and click on Edit*

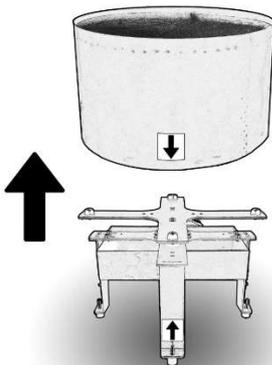


*click the Calibrate Spoon Watering Button*

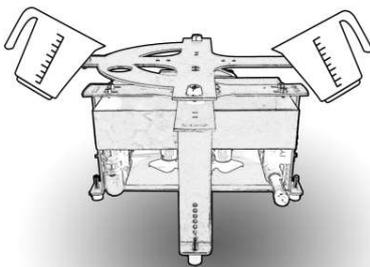


*select the sensors and press calibrate*

Click the Calibration button to start the calibration procedure. Do not close this window until the calibration process has ended. If you are also calibrating the EC sensors, then select them as well before starting the calibration.



*Remove the top of the Berry Platform unit.*



*Pour 1l of solution into the drain collection tray and 1l of solution into the irrigation collection tray.*

Wait for the fluids to drain completely through the system. This will take about 10 minutes. Approximately three minutes after all of the water had drained the calibration will stop automatically and a message will appear on the web app stating if the calibration was successful.



## Troubleshooting

As all electronic devices, such as switches and routers, are susceptible to repeated power outages and overcurrent events. To minimize damage to these devices usage of surge protection and shielded cables is advised.

Issue	Cause	Solution
<b>No Internet connection</b>	Network hardware or configuration issue.	Enable DHCP on the network. Check cable integrity and run a diagnostic on the connected active network devices. (router/switch)
<b>Unstable Internet connection</b>	Network hardware or configuration issue.	Check cable integrity and run a diagnostic on the connected active network devices. (router/switch)
<b>Power LED OFF</b>	No or insufficient voltage supplied to the device.	Check the circuit breakers and if necessary contact your contracted electrician.
<b>No signal on digital node</b>	Too much interference or weak signal strength.	Reduce the distance between the Digital node and Data Collector and re-test.