#### First steps

### Supported (UK/IE)









Barlev

Trticale

Rye (IE only)

Install Atfarm app

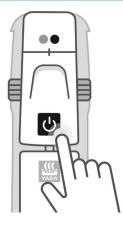




Farm 01

Farm 02





### N-Tester BT

# Measuring head On/Off button Thump rest Leaf adjuster Test disc 2x AA (LR06) Wrist cord LED indicator Lens Battery compartment

O. ♥ blinks blue	Search for Atfarm mobile app
	Connection successfull
	Batteries need replacing

### **Application errors**







On some smartphones a window with Bluetooth $^{f B}$  connection options appears, please

The Yara N-Tester BT is a handheld device that measures the chlorophyll content of a leaf. Do not use this instrument for any other purpose.

Observe the following points in order to avoid incorrect measurements:

- Do not take measurements during incorrect development stages.
- Do not perform measurements on insufficiently developed leaves.
- Do not perform all measurements on the same plant.
- Do not perform all measurements on a small area of the field.
- Do not use the N-Tester on areas with sulphur deficiency.
- Do not use with visible drought stress (leaves rolled together).
- Do not measure using an outdated Atfarm mobile app version.

### **Battery misuse**

- Do not disassemble or short-circuit the battery.
- Do not heat the battery, or leave nearby heated place.
- Do not immerse the battery in water or get it wet.
- Do not impact, throw, damage, strike or step on the battery.

### Handling & Conformity



Clean the N-Tester BT with a damp cloth. Do not use chemical cleaners or place under running water. Be careful with the lens inside the measurement head. Only if required, clean the lens with a clean, dry soft cloth.



The symbol of the crossed-out dustbin means that this electronic equipment must not be disposed of with household waste at the end of its life



The N-Tester BT uses 2x AA (LR06) Alkaline (non-rechargeable) batteries. To change batteries please open battery compartment with a PH1 screwdriver. Empty batteries must be removed and taken to collection points. Batteries should never be disposed of with household waste.



This product complies to all applicable EU/UK/NZ directives. The full text of the Declaration of Conformity is available at the following internet address:

https://support.at.farm/hc/articles/9010235164700

## **Specifications**

Tomporaturo rang







Temperature range	0 - 50 °C
Humidity range	≤ 85 %
Altitude	≤ 2000 m
Operating place	outdoor
Pollution Degree	2 (as defined in IEC 61010-1)
Protection against water	Protect the N-Tester BT from heavy rain or submersion in liquid!
Communication	Bluetooth® LE V4.1 / V4.2 / V 5.2
Communication Radio frequency	Bluetooth <sup>®</sup> LE V4.1 / V4.2 / V 5.2 2402 - 2480 MHz
Radio frequency	2402 - 2480 MHz
Radio frequency Radio transmit power	2402 - 2480 MHz ca. 1 dBm
Radio frequency Radio transmit power Batteries	2402 - 2480 MHz ca. 1 dBm 2 x AA, 1.5 V (Alkaline)

Copyright

## Legal



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List of the used Open-source Components

The listed Open-source software (OSS) components are used within the device under the terms of the respective licenses. The source code corresponding to the Open-source software components is also provided along with the product wherever mandated by the respective OSS license.

Included OOS components: STM32Cube generated files, STM32 Examples

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### Legal Information (US / Canada)

The information included in this manual corresponds with our current state of knowledge and is no claim for completeness.

The fertilizer application rates that are recommended using this device are non-binding and do not form a contractual relationship between the receiver and Yara. Warranty or liability for correctness of the fertilizer recommendation is exempted in individual cases as the location and the cultivation conditions may be substantially different. The information provided does not replace any individual consultation.

YARA MAKES NO REPRESENTATIONS, WARRANTIES OR GUARANTIES OF ANY KIND, EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH RESPECT TO THE N-TESTER. ANY REPRESENTATION, WARRANTY OR GUARANTY OF YARA WHICH MIGHT OTHERWISE BE IMPLIED OR INCORPORATED INTO THIS MANUAL IS HEREBY EXPRESSLY EXCLUDED.

The device must not be modified or be opened e.g. to carry out unauthorized repairs.

The manufacturer and the distributor of the measuring devices do not claim liability for damages or injuries of any kind resulting from an improper use or handling of the devices.

The contents of this manual are subject to change without prior notice because of improvement in performance or function.

### Supplier's Declaration of Conformity (US)

Supplier's Declaration of Conformity 47 CFR § 2.1077 Compliance Information

Unique Identifier: Yara N-Tester RT

Model 2.1: Serial numbers S/N: 2000 0000 - 2001 9999 Model 3.0: Serial numbers S/N: 3000 0000 - 3001 1000

Responsible Party: Yara North America

100 North Tampa Street Suite 3200 - Tampa, FL, USA +44 1484 509725

FCC Compliance Statement: This product contains FCC ID:

Model 2.1: S9NBNRGMOAL Model 3.0: YCP-32WB5MMGH02

This device complies with part 15 of the FCC rules. Operation is subjected to the following two

1. this device may not cause harmful interference and

2.this device must accept any interference received, including any interference that may cause undesired operations.

### Supplier's Declaration of Conformity (Canada)

Supplier's Declaration of Conformity

Unique Identifier: Yara N-Tester BT

Model 2.1: Serial numbers S/N: 2000 0000 - 2001 9999 Model 3.0: Serial numbers S/N: 3000 0000 - 3001 1000

Responsible Party: Yara Canada

1800 - 1874 Scarth Street

Regina, Saskatchewan S4P 4B3, Canada +44 1484 509725

This product contains IC:

Model 2.1: 8976C-BNRGMOAL Model 3.0: 8976A-32WB5MMGH02

This device complies with RSS-247 of the IC rules. Operation is subjected to the following two conditions:

1. this device may not cause harmful interference, and

2.this device must accept any interference received, including any interference that may cause

undesired operations.

#### Compliance information (US)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. (Part. 15.21)

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

#### Compliance information (Canada)

CAN ICES-003(B) / NMB-003(B)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. (RSS-247)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to to RSS-247 of the IC 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

### Returns



Returns (US) Yara North America Reference: N-Tester BT 100 North Tampa Street Suite 3200 - Tampa, FL USA

Returns (CA) Yara Canada

Reference: N-Tester BT 1800-1874 Scarth Street Regina, Saskatchewan S4P 4B3 Canada

Returns (NZ) Yara Fertilizers (NZ) Ltd 4/211 Heretaunga St East

4122 Hastings New Zealand

Brett Stubbings Returns (UK) YARA UK Ltd

Century Business Park, Manvers Way, (BSB Print unit 2) S63 5DA Rotherham

United Kingdom Returns (EU) Openstore24 GmbH & Co KG

c/o Yara International ASA Eichenstrasse 1A 3385 Gerersdorf Austria

Importer (UK) Yara UK Ltd

Pocklington Industrial Estate Pocklington, York, YO42 1DN United Kingdom

Importer (NZ) Yara Fertilizers (NZ) Ltd

4/211 Heretaunga St East 4122 Hastings New Zealand