

CITO

SOLA

PASSION FOR PRECISION

- DE Gebrauchsanweisung
- EN Operating Instructions
- FR Manuel d'instructions
- IT Istruzioni d'uso
- ES Instrucciones de uso
- NL Gebruiksaanwijzing
- RU Руководство по применению
- PL Instrukcja obsługi
- LT Eksploatacijos instrukcija
- LV Lietošanas instrukcija
- SR Uputstvo za upotrebu
- CS Návod k použití
- RO Manual de utilizare
- BG Ръководство за употреба
- HU Használati útmutató



EN

SOLA 
PASSION FOR PRECISION

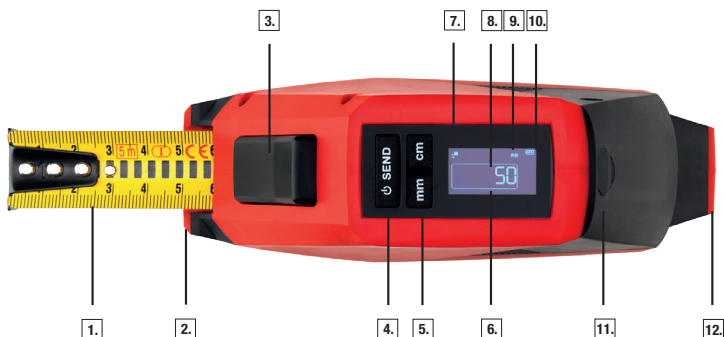
Scope of delivery for CITO

1. CITO digital tape measure
2. Belt case
3. USB-C charging cable
4. Quick starter



Device components, display and operating elements

1. Tape pull-out
2. Measurement reference point on the front edge | Reading aid with stop function
3. Button solution: brake and tape retraction
4. ON | OFF | Send measurement data
5. Unit function buttons cm/mm | Measurement reference point setting
6. Digital display
7. Status of the measurement reference point on the front/rear edge
8. Current measurement value
9. Set unit cm/mm
10. Battery status
11. USB charging socket
12. Measurement reference point on the rear edge





Operating instructions

CITO I Digital tape measure (original version)

About these Operating Instructions

Congratulations on the purchase of your new CITO tape measure! You have acquired a SOLA measurement device, which can make your work easier, faster, and more precise. To utilize the complete functionality range of this measurement device, and to ensure safe operation, please observe the following instructions:

- Please read these operating instructions before commissioning the device.
- Always keep the operating instructions near the device.
- Only hand over the device to other persons together with the operating instructions.
- Never render the attached warning signs unreadable.

Contents

1. General Information
2. Description
3. Technical Data
4. Safety Instructions
5. Getting Started
6. Operation
7. Checking the Leveling Accuracy
8. Maintenance, Storage, and Transportation
9. Radio Module Operating Data
10. Troubleshooting
11. Disposal
12. Manufacturer's Guarantee
13. EC Declaration of Conformity

1. General Information

1.1 Signal Words and their Meaning

DANGER

For an imminent danger that could lead to serious injury or death.

WARNING

For a possibly dangerous situation that could lead to serious injury or death.

CAUTION

For a possibly dangerous situation that could lead to slight injury or property damage.

NOTE

For application notes and other useful information.

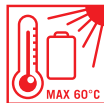
1.2.2 Symbols



Read instructions before use



Batteries and devices may not be disposed of with household waste



Do not heat devices above 60°C

1.2 Pictograms and Other Information

1.2.1 Warning Signs

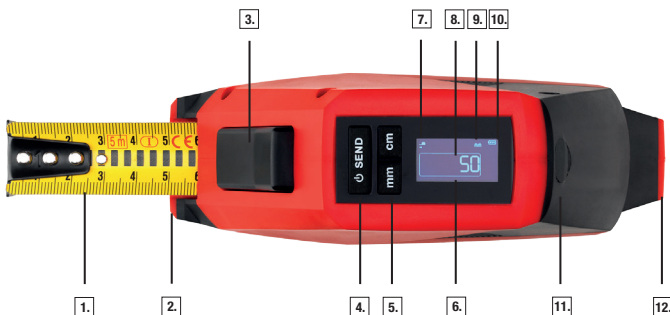


Warning of dangers in general

2. Description

2.1 Device Components, Display and Operating Elements

1. Tape pull-out
2. Measurement reference point on the front edge | Reading aid with stop function
3. Button solution: brake and tape retraction
4. ON | OFF | Send measurement data
5. Unit function buttons cm/mm | Measurement reference point setting
6. Digital display
7. Status of the measurement reference point on the front/rear edge
8. Current measurement value
9. Set unit cm/mm
10. Battery status
11. USB charging socket
12. Measurement reference point on the rear edge



2.2 Intended Use

The CITO is an easy-to-use digital tape measure that can digitally record lengths and distances up to 5 meters and send them to processing software. Follow the instructions contained in this manual. The device and accessory equipment may present a danger if they are utilized improperly or inappropriately by persons who are not instructed as required.



3. Technical Data

3.1 General

Working range	5 m
Graduations	mm
EC accuracy class of tape	I
Material and tape surface	Steel, yellow, extruded nylon
Tape brake	Backstop
Housing material	ABS, TPE
Digital display for max. measuring tolerance	± 1 mm
Power supply	Li- polymer battery (700 mAh)
Operating time (at 20 °C)	8 hrs continuous operation*
Operating temperature	-10°C to +50°C
Storage temperature	-20°C to +60°C
Protection class	IP54
Weight	385 g
Dimensions	155 x 45 x 85 mm

* automatic switch-off after 3 minutes without operation

3.2 Functions

- › Choice between mm and cm display
- › Switching option between the measurement reference point at the front and rear

4. Safety Instructions

4.1 Area of Responsibility

4.1.1 Manufacturer

SOLA is responsible for the safe delivery condition of the product, including the operating instructions and the original accessories.

4.1.2 Operator

The operator is responsible for using the product as intended, the deployment of personnel, their training, and the operational safety of the product.



- The operator understands the safety information which is stated on the product and the instructions in the operating instructions.
- The operator shall comply with the standard local regulations relating to safety and accident prevention regulations as well as worker protection laws and regulations.
- The operator shall immediately notify SOLA if safety-related issues should arise relating to the product or during its utilization.
- The operator shall ensure that the product is not utilized any further if defects become evident, and they will have the product repaired professionally.

4.2 Improper Use

- Use of the device and the accessories without instruction.
- Use of third-party accessories or additional equipment.
- Use outside of the intended limits (see Chapter 3/Technical Data).
- Use under extreme temperature fluctuations without adequate acclimatization.
- Disabling of safety devices and removal of hazard notices and labels.
- Unauthorized opening of the device.
- Performance of modifications or alterations to the device or the accessories.
- Deliberate blinding of third parties.
- Inadequate safeguarding at the installation site.

4.3 Utilization Limitations

The CITO is suitable for continuous use in an atmosphere which can be inhabited by humans.

- Do not operate the product in explosion-prone or corrosive environments.
- Inform the local safety authorities and safety experts before working in hazardous environments, in close proximity to electrical installations or similar surroundings.



Only the measurement results read optically from the tape may be used to determine the length measurements for commercial transactions (billing, accounting or allocation of consumption-based costs). The digital measuring unit (sensor) does not comply with the MID regulations.

4.4 Usage Hazards

4.4.1 General



WARNING

Missing or incomplete instructions may result in improper or incorrect use. This can cause accidents with serious damage to persons, property, assets, and the environment.

- Follow the manufacturer's and operator's safety instructions.
- Protect equipment and accessories from being accessed by children.



CAUTION

A fall, longer storage, transportation, or other mechanical effects can lead to erroneous measurement results. Check the unit for damage before use. Do not use damaged equipment.

- Repairs must only be performed by SOLA.
- Before using, check the accuracy of the device (see Chapter 7/Checking the Accuracy).

4.4.2 Charger/Batteries/Rechargeable Batteries



DANGER

There is a risk of mortal danger from electric shock.

- Never open the CITO.
- Only use the CITO and USB-C battery chargers in a dry environment and do not bring them into contact with liquids.



DANGER

Mechanical damage can cause batteries to leak, explode, or catch fire or trigger the release of toxic substances.

- Batteries and rechargeable batteries must not be opened or exposed to mechanical loads.
- Damaged batteries, chargers and charging stations may not be used.
- Repairs must only be performed by SOLA.

**WARNING**

High ambient temperatures and immersion in liquids can cause batteries to leak, explode, or catch fire or trigger the release of toxic substances.

- Protect batteries and rechargeable batteries from mechanical damage during transport.
- Do not overheat batteries and rechargeable batteries or expose them to fire.
- Avoid the ingress of moisture into batteries and rechargeable batteries.

**WARNING**

Using charging devices from other manufacturers can damage the Li-ion batteries. This can lead to a fire and explosion hazard.

- Only use original SOLA accessories.

**WARNING**

If disposed of improperly third parties can possibly be seriously injured and the environment polluted. Burning plastic components generates toxic fumes which may impair health. Batteries/rechargeable batteries may explode if they are damaged or heated excessively, and thereby cause poisoning, burning, corrosion, or environmental contamination. If disposed of negligently, unauthorized persons are able to use the product improperly.

- The product must not be disposed of together with household waste. Dispose of the device and accessories properly (see Chapter 12/Disposal).
- Protect the product against access by unauthorized persons at all times, especially children.



4.5 Electromagnetic Compatibility (EMC)

The electromagnetic compatibility is the ability of the product to function in an environment where electromagnetic radiation and electrostatic discharge are present, without causing electromagnetic interference to other devices.

4.5.1 Interference with Other Devices by CITO

Although the product meets the strict requirements of the relevant directives and standards, SOLA cannot completely exclude the possibility of interference with other devices (for example, when using the product in combination with third-party devices, such as field computers, personal computers, wireless devices, mobile phones, certain cables, or external batteries).

- When using computers and radio equipment, be sure to observe the vendor-specific information about electromagnetic compatibility.
- Only use original SOLA equipment and accessories.

4.5.2 Interference with the CITO by Other Devices

Although the product meets the strict requirements of the relevant directives and standards, SOLA cannot entirely exclude the possibility that intense electromagnetic radiation in the immediate vicinity of radio transmitters, two-way radios, diesel generators, etc., may distort the measurement results.

- When performing measurements under these conditions, check the plausibility of the results.



5. Getting Started

5.1 Battery

1. Fully charge the Li-polymer battery using the charger before first use.
2. After switching on, the Li-polymer battery charge level is shown on the display.
3. Charge the battery when only one bar is visible – the battery will last for approx. 1 hour depending on the ambient conditions. When the battery symbol starts flashing, the remaining operating time is 30 minutes.
4. The Li-polymer battery is fully charged after 3 hours.

5.1 Belt Pouch

The CITO can be stowed in the belt pouch for transport. The CITO must be removed from the pouch for measurement.

6. Operation

➤ Please read the enclosed Quick Start guide before use.

6.1 Switching On and Off

Before switching on the electronics, ensure that the tape is completely retracted.

ON: Press and hold the main button for 2 seconds to switch the CITO on.

OFF: Press and hold the main button for 2 seconds to switch the CITO off.

6.2 Selecting the Unit

Use the function buttons to change the unit from mm to cm. The setting last selected remains active even after the device is switched off.

6.3 Selecting the Measurement Reference Point



By pressing the “mm” and “cm” function buttons at the same time for one second, the front stop surface or the rear stop surface of the CITO can be selected as the measurement reference point.

6.4 Starting Measurement



Pressing the tape retraction button releases the CITO brake and allows the tape to be pulled out. When the tape retraction button is released, the brake is immediately activated and the tape is fixed.

➤ When pulling out the tape, be sure to release the brake to prevent wear.

As soon as the tape is brought into position on the object to be measured, the stop surface of the CITO serves as the measurement reference point. The respective measurement result can be read optically from the tape and also appears on the display for checking. If the CITO is connected to the SOLA Measures app, this value can now be sent to the app by pressing the SEND button. The last measured and set value is also shown on the display.

6.5 Buttons



6.5.1 ON/OFF and SEND

Switching the CITO on or off or sending the measurement value to the app.



6.5.2 Function Buttons

Switch the unit between mm and cm.

By pressing the "mm" and "cm" function buttons at the same time, it is possible to switch between

the front and rear edge as the measurement reference point.

7. Checking the Accuracy

Test the accuracy of the CITO before carrying out every measurement. Before starting the check, let the device acclimatize to the environmental conditions. Before use, check the print on the tape (especially the black bars) for completeness and damage (1). The accuracy of the digital display is checked by matching the value shown on the tape at the stop surface with that on the display (2).





8. Maintenance, Storage, and Transportation

8.1 Cleaning

- Wipe off the dirt with a soft damp cloth.
- Do not clean the tape using harsh cleaning agents.
- To clean the sensors, carefully and slowly pull the tape out completely until you can read the word 'STOP' on the tape. The cloth attached to the tape cleans dirt from the surface of the sensor.
- Do not use aggressive cleaning agents or solvents. Do not immerse the device in water!
- Clean and dry wet equipment, accessories, and transport containers prior to packaging them. Only pack equipment again when it is completely dry.
- Keep plug connections clean and protected from moisture.

8.2 Storage

8.2.1 General

- The equipment must only be stored within the specified temperature limits (see Chapter 3/Technical Data).
- After prolonged storage, check the accuracy of the measuring device before using it.

8.2.2 Batteries

- Before storing for extended periods, charge the battery to 80% capacity (see Chapter 6/Operation). Repeat the process every six months during storage.
- After storage, fully charge the battery.

8.3 Transport

8.3.1 General

- The device may be damaged if it falls or is subjected to strong vibrations.
- Never transport the product loose. Always use the original packaging or an equivalent transport container.
- Switch off the measuring device before transporting it.
- Check the unit for damage before use.



8.3.2 Li-Polymer Battery

When transporting or shipping the CITO with a built-in Li-polymer battery, the operator is responsible for complying with the applicable national and international laws and regulations.

In principle, Li-polymer batteries are subject to the requirements for dangerous goods; nonetheless, they can be transported by the user by road without any further requirements.

When shipping occurs by means of third parties (e.g. forwarding agents or air freight), specific requirements for packaging and labeling and, if necessary, supplementary requirements of the respective transport company must be observed.



9. Radio Module Operating Data

This module is equipped with an internal antenna, but also features an interface to an external antenna. To use the external antenna, the OR resistor must be adjusted to block the internal antenna. Contact the manufacturer if you have any questions.

A 50-ohm antenna can be connected directly to the HF port.

- Frequency band 2402 – 2480 MHz BLE4.2
- TX output power +8 dBm
- RX sensitivity up to -90 dBm



10. Troubleshooting

Error	Possible Cause	Remedy
CITO is switched on, display does not light up	➤ Battery empty ➤ CITO or switch defective	➤ Charge battery or replace ➤ Contact your dealer and have the CITO repaired
Status/battery voltage display flashes	➤ Low battery capacity	➤ Recharge the battery in good time
CITO switches off immediately after start-up	➤ Battery empty	➤ Charge battery
Measured value of tape does not match the reading on the display	➤ Tape/sensor is dirty ➤ Impairment due to temperature	➤ Clean tape ➤ Temper the CITO to room temperature
End hook is at the end stop – measured value shows 1 mm	➤ Tape/sensor is dirty ➤ Sensor tolerance overlap	➤ Clean tape ➤ Switch CITO off and on again
Warning message “long warned – retract blade”	➤ Tape pulled out too far (more than 5 m)	➤ Retract the tape until the end stop

11. Disposal

If disposed of improperly third parties may be seriously injured and the environment polluted. Burning plastic components generates toxic fumes which may impair health. Batteries/rechargeable batteries may explode if they are damaged or heated excessively, and thereby cause poisoning, burning, corrosion, or environmental contamination.

If disposed of negligently, unauthorized persons are able to use the product improperly.

Measuring tools, accessories and packaging must be recycled in an environmentally friendly manner.



- The product as well as the accessories – especially the batteries and rechargeable batteries – may not be disposed of with household waste.
- Dispose of the device and the accessories properly. Only dispose of batteries when discharged.
- Observe the country-specific disposal requirements.

Your SOLA dealership will accept returned batteries as well as old equipment, and will ensure proper disposal.

Only for EU Countries



Electric tools must not be disposed of with household waste!

According to European Directive 2002/96/EC on Waste Electrical and Electronic Equipment and its transposition into national law, electrical and electronic equipment that is no longer usable must be collected separately and recycled in an environmentally friendly manner.



12. Manufacturer's Guarantee

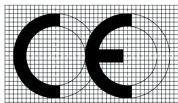
"The manufacturer warrants to the original purchaser freedom from defects of the device for a period of two years, with the exception of batteries, from such time as the device is handed over. The guarantee is limited to repairs and/or replacements at the manufacturer's discretion. Defects which are caused through improper handling by the purchaser or third parties, natural wear, and optical flaws that do not affect the usability of the equipment, are not covered by this guarantee. Claims under this guarantee can only be invoked if a written proof of purchase or handover is submitted together with the device. If the guarantee claim is justified, the manufacturer shall bear the transport costs. The duration of the guarantee will not be extended through repair or spare parts work which is carried out within the scope of the guarantee. Further claims are excluded, unless these are stipulated by the respective national legislation. In particular the manufacturer shall not be liable for any direct, indirect, incidental, or consequential damages, losses or expenses in connection with device's use or because of the inability to use the tool for any purpose whatsoever. Implied warranties for the usage or suitability for a particular purpose are expressly excluded."



13. EC Declaration of Conformity



**Konformitätserklärung
Declaration of Conformity
Déclaration de conformité**



Wir/We/Nous **SOLA-Messwerkzeuge GmbH, A-6840 Götzis, Austria**

erklären in alleiniger Verantwortung, dass das Produkt(e)
declare under our sole responsibility that the Product(s)
déclarons sous notre seule responsabilité que le(s) produit(s)

CITO

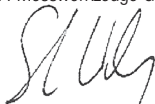
auf das sich diese Erklärung bezieht, mit den folgenden Normen übereinstimmt.
to which this declarations relates is in conformity with the following standards.
auquel(s) se réfère cette déclaration est conforme aux normes.

EN61010-1: 2010
EN61010-1: 2010/AMD1: 2016
EN61010-1: 20210/A1: 2019
EN62133-2: 2017
EN62133-2: 2017/AMD1: 2021
EN61326-1: 2013
EN301489-1 V2.2.3: 2019
EN301489-17 V3.2.4: 2020
EN300328 V2.2.2: 2019
EN50663: 2017

Gemäss den Bestimmungen der Richtlinie(n)
Following the provisions of the Directive(s)
Conformément aux dispositions de(s) Directive(s)

**Radio Equipment Directive 2014/53/EU
Electromagnetic compatibility 2014/30/EU
Low Voltage Directive 2014/35/EU**

SOLA-Messwerkzeuge GmbH


Mag. Wolfgang Scheyer CEO