

NUTRIENT CONDUCTIVITY METER



This Nutrient Conductivity Meter is designed for hydroponics and agriculture applications.

It measures electrical conductivity (EC) in mS/cm and the Total Dissolved Solids (TDS) in parts per million (ppm) of the nutrients in water solution accurately.

It features an extend range up to:

6.0 mS/cm(EC)

3000ppm (in 500ppm scale)

4200ppm (in 700ppm scale)

EC graphite electrode with **Auto Temperature Compensation (ATC)**, **IP67 waterproof** design, makes it suitable for stirring and testing simultaneously.

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To install the batteries:

1. Follow the “Open” mark on battery cap to unfasten it.
2. Insert the new batteries positive (+) end down into the meter.
3. Refasten battery cap, ensure the cap and the O-ring contacts tightly for IP67 waterproof.

After batteries installed properly, LED will lights up for one run.

NOTE:

1. **Please use alkaline batteries.**
Do not use rechargeable batteries.
Do not mix brands of batteries.
Do not mix old with new.
Do not put upside down.
2. **Do not leave battery in instrument when no usage for more than 1 month.**

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FEATURE

- Accurate EC graphite electrode
- 24 brightly LED lights indicator
- Multi-scale display in EC, CF, ppm
- Auto Temperature Compensation
- IP67 Waterproof design
- Button free, Auto on / Auto off
- No calibration required
- Easy acquisition AA batteries for operation

MATERIAL SUPPLIED

This package contains:

- ✓ Meter x 1
- ✓ AA battery x 3
- ✓ Hand strap x 1
- ✓ Operation manual
- ✓ Package box

BATTERY INSTALLATION

The meter is powered by 3 pcs AA batteries.

To check the battery when:

1. First time use
2. The meter is not power on

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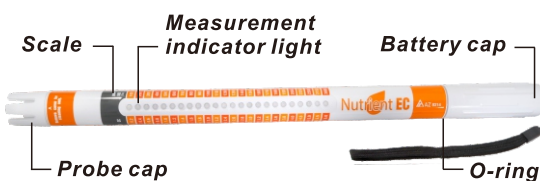
3. Check for corrosion when replace new batteries.

Batteries that have been inside the unit for a long length of time may corrode.

Check the battery and contacts or corrosion.

If you find any, clean the contacts before installing new batteries.

OPERATION



Place probe into nutrient solution and stir.

LED lights on the side indicate current measurement status.

LED lights will jumps for a few seconds and then stabilized for current measurement.

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If the LED lights are keep jumping between two values without stabilized, the measurement is between those two values.
(e.g. If jumping between 8 and 10, measurement is 9)

To take another measurement, remove the meter from testing solution and place it back.

NOTE:
For very cold or very hot temperatures solution, it will take around 1-2 minutes for the probe to reach solution temperature.

To help decrease time taken to reach the solution’s temperature, place the probe in an area where there is a strong movement of solution, or stir solution with the probe.

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any lemonjuice residue.
Blot dry with a lint-free cloth or paper towel.
Reinstall the probe cap before next use.

SPECIFICATION

NUTRIENT CONDUCTIVITY METER	
Cond. Range (EC)	0.2~6.0 mS/cm 2~60 CF
Resolution	0.1 mS/cm (0.2 to 4.0 mS/cm) 0.25 mS/cm (4.0 to 6.0 mS/cm) 1 CF (2 to 40 CF), 2.5 CF (40 to 60 CF)
Accuracy	±4 % of reading ±1 resolution point
TDS Range	140~4200ppm (700 ppm scale) 100~3000ppm (500ppm scale)
Resolution	700ppm scale: 70 ppm (140 to 2800 ppm), 175 ppm (2800 to 4200 ppm) 500ppm scale: 50 ppm (100 to 2000 ppm), 125 ppm (2000 to 3000 ppm)
Accuracy	±4 % of reading ±1 resolution point
Calibration	Factory Calibrated
Material	Graphite electrodes in ABS +PC body
IP rating	IP67 , floating
ATC	Automatic from 0.0~50.0°C (32~122°F)
LED	24pcs blue LEDs
Measuring temp.	0~50°C
Storage temp.	0~60°C
Storage RH%	Humidity < 90%
Sensor life time	>5 years (with good maintenance)
Battery type	3 x 1.5AA alkaline
Battery life	Around 3 years (10 measurements/day)
Dimension	453mm (L) * 29.9mm (Dia.) 17.83" (L)*1.18"(Dia.)
Weight	230g
Standard Package	Meter, Wrist strap, Battery, Manual, Package box

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CLEANING & MAINTENANCE

We recommend the probe be cleaned once every two weeks. This can vary depending on frequency of use.

1. Prepare the Cleaning Solution:
Measure 40 mL of fresh lemon juice (approximately 5% citric acid).

Add to a container and fill with distilled or deionized water to reach 100 mL total volume. Stir gently to mix.

2. Soak the Probe:
Remove the probe cap and submerge the meter’s electrodes in the solution for 10–15 minutes to dissolve mineral deposits. (e.g. calcium, magnesium).



If needed, gently wipe the electrode with a soft, lint-free cloth or sponge, avoiding abrasive materials to prevent scratching.

3. Rinse and Dry
Thoroughly rinse the electrode with distilled or deionized water to remove

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TROUBLE SHOOTING

Meter turns off before reading taken.

Take out of solution for 3-5 seconds.
Dip in solution again and take reading.

Meter not lighting when dipped into testing solution.

- 1. Ensure the EC level of solution is within measuring range
- 2. Clean the probe
- 3. Replace batteries if above not works

Meter gives low readings.
Follow Cleaning & Maintenance chapter to clean the probe tip.

WARRANTY

The meter is warranted to be free from defects in material and workmanship for a period of one year. This warranty covers normal operation and does not cover misuse, abuse, alteration, neglect, or improper maintenance. Proof of purchase is required for warranty repairs. Authorization must be obtained from the supplier before returning items for any reason. The meter should be returned along with good packing to prevent damage.

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