

# Conductivity Probe K 1.0

## Graphite

Range	<b>5 – 200,000 <math>\mu</math>S/cm</b>
Response time	<b>90% in 1s</b>
Max pressure	<b>200 PSI</b>
Temperature range °C	<b>1 – 110 °C</b>
Internal temperature sensor	<b>No</b>
Time before recalibration	<b>~10 years</b>
Life expectancy	<b>~10 years</b>
Maintenance	<b>N/A</b>



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## Conductivity K 1.0 Probe

### Typical Applications

- Standard Lab use
- Field use
- Aquarium
- Hydroponics
- Food Safe
- Fish keeping
- Mixed aqueous/organic
- Samples containing Heavy metals
- Soil Samples
- Strong reducing agents

### Specifications

- K 1.0 - 5  $\mu\text{S}/\text{cm}$  to 200,000  $\mu\text{S}/\text{cm}$
- Measuring Surface: Graphite
- Body material: Epoxy
- Max Temperature: 0-70°C
- Max PSI: 1379 kPa (200PSI)
- Cable length: 1 Meter
- Weight: 51 grams
- Dimensions 12mm X 150mm (1/2" X 6")
- BNC connector
- Sterilization

Chemical ✓

Autoclave ✗

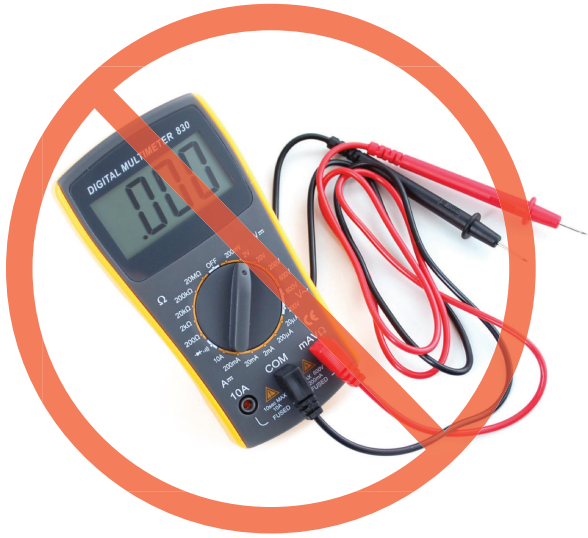


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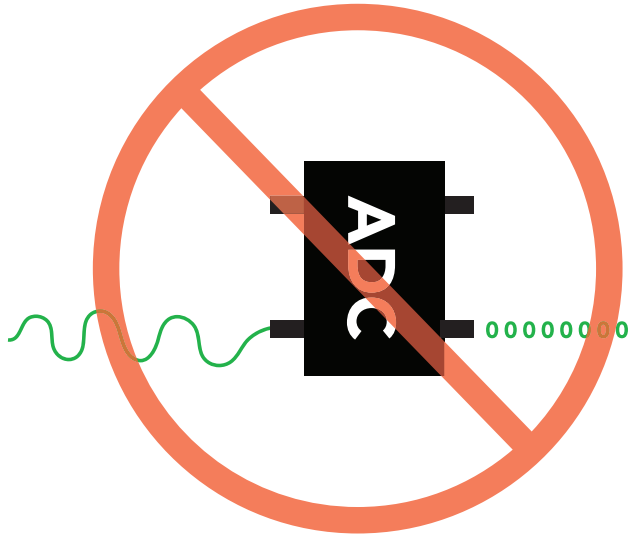
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## Conductivity K 1.0 Probe

A conductivity probe is a very simple device. It is just two conductors with a fixed surface area at a fixed distance from each other. This distance and surface area is known as the conductivity cell. The cells distance and surface area is quantified as the conductivity cells K constant.



Result will **always** read zero.



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## Conductivity Probe Range



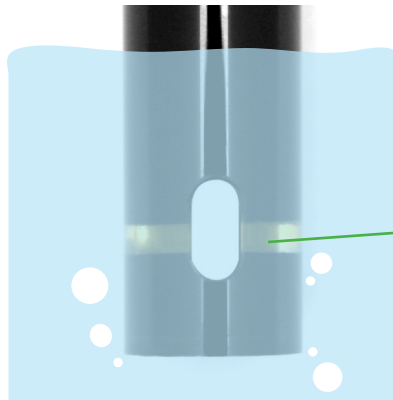
This Atlas Scientific conductivity probe, has a cell constant of **K 1.0**. When this conductivity probe is connected to an Atlas Scientific EZO<sup>TM</sup> conductivity circuit, it has a range of **5  $\mu\text{S}/\text{cm}$  to 200,000  $\mu\text{S}/\text{cm}$** .

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## Conductivity K 1.0 Probe

The Atlas Scientific **K 1.0** conductivity probe has two graphite conductors. The conductor area is easily identified by the **gold** section on the probe.



The entire conducting area must be submerged in order to get accurate readings.



Remove protective cap  
before using probe

This Conductivity K 1.0 Probe can be **fully submerged** in fresh water or salt water, up to the BNC connector indefinitely.



## How often do you need to recalibrate a Conductivity probe?

The Conductivity probe works by measuring the electrical current of the water between two graphite plates. The plates do not go bad, or change, so recalibration is not necessary. After the first calibration your Conductivity probe is good to go.

## Extending the length of the probe cable

You can extend the cable to 100 meters with no loss of signal, however you run the risk of turning your pH probe into an antennae, picking up noise along the length of your cable. If you want to extend your cable, we recommend that you use proper isolation, such as the **PWR-ISO**, or **Tentacle Shield**. Be sure to calibrate your probe with the extended cable.

Extending a probe cable can be easily done with our **BNC Extension Cable**. Simply connect the BNC end of the probe to the Extension cable, and you are all set. If you need to water proof a BNC connection, we highly recommend using a product like **Coax-Seal** to safely cover and prevent any water damage that may occur.



## Best practice tips

Be sure to watch out for air bubbles they can get caught between the two graphite plates and throw off your results. Lightly tap your Conductivity probe to knock out any bubbles caught in the probe.

Keep your probe clean. Dirt, grime, algae can build up on the sensing plates and throw off your results, clean with soap and water and a soft cloth.



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