

# Electrodeless Conductivity Stick Meter 5JI

## Product Description

This instrument is designed for measurement of conductivity for both field and laboratory use.

The toroidal non-contact principle ensures repeatable and accurate measurements, with the minimum of cleaning.

It is particularly suited for demanding industrial applications, when it can be relied upon to operate reliably, day after day, despite harsh conditions.

Temperature compensation is by a fast response temp sensor in a stainless housing. The compensation slope is 2.0% /C, available to other values by request.

The 5JI is of waterproof design, and will withstand temporary immersion up to 1m.



## Operation

### Turning on.

To turn on, momentarily push on the control button. The 5JI automatically powers off after 5 minutes of use, or after a minute when out of solution.

To power off at any time, hold the button pressed for 2 seconds or more.

Temperature display alternates with conductivity display, using momentary button presses.

The 5JI is provided with a removable sensor guard, to hold it clear of obstructions which could affect accuracy.

### Measuring Conductivity

Make sure that the sensor guard is in place. Dip the sensor head in the solution to be measured, to a depth that allows the temperature sensor to be covered fully. Wait for the temperature to stabilise, and take the reading. The display is in mS, with  $0.001\text{mS} = 1\mu\text{S}$ . When the upper limit of the sensitive range is exceeded, then the electronics switches ranges automatically, and momentarily the display shows '----'. The decimal point also moves automatically to display the optimum resolution of conductivity.

If temperature needs to be checked, then momentarily press the button, and afterwards, press again to read conductivity.

If a number of different solutions are to be measured consecutively, then it is necessary to rinse the 5JI in between measurements, especially in the case of measuring highly concentrated solutions, followed by say, the need to measure RO water.

### After Use

After use, the 5JI can be rinsed in clean water, and gently dried, no further cleaning is usually necessary.

In cases where a build up of solid has occurred on the 5JI, then cleaning by immersion in a dilute acid can be useful.

### Battery Life

The 5JI will run for 12 hours continuous display, which is sufficient for a year's daily use, if turned off manually after taking a measurement. When the battery begins to reach the endpoint, the display show 'bAt', and should then be changed for reliable operation.

### Changing The Battery

This should be done with care, since the internal electronics is sensitive to moisture, and chemical contamination.

Before changing the battery, clean the 5JI well, and ensure that it is completely dry.

Choose a clean dry place, and unscrew the handle anticlockwise, taking care to keep the 'o' ring seal in place on the red body part of the 5JI, slowly slide the body away from the electronics/sensor assembly.

The battery can now be replaced, ensuring correct polarity, i.e. the '+' facing the push button end of the battery holder.

Replace the red probe body carefully over the electronics/sensor assembly, and tighten until the black dot appears central in the small window on the sensor collar. In this position, the display will line up with the display window correctly, and the 'o' ring seal will be correctly compressed for a good watertight seal.

Batteries must be of high energy type, the AAA energizer L92 or equivalent. Use of other batteries may result in reduced operating duration.

Please make sure that any used batteries are disposed of responsibly

## Safety

The 5JI can be used in environments where toxic and corrosive chemicals are present.

The user of this instrument must be aware of the dangers of these hazardous substances, and take all necessary precautions in this respect when using the 5JI.

Wash hands after use, use protective clothing where appropriate, and make sure that any chemicals are rinsed from the 5JI after each use.

Care should also be taken to avoid electrical shock when it is used in an electroplating environment, since although the body is made of an insulator, circumstances can occur when current may track across the wetted surface of the 5JI.

## Specification:

Measurement principle: Contactless, Toroidal  
Wetted surfaces: Homopolymer high temperature polypropylene, stainless steel temp sensor, all welded construction

Weight	144gm
Size	255x40mm
Battery	AAA Energiser L92 or equivalent
Bat Life	12 hours continuous display
Display	4 digit 7 seg red LED
Range	0.001mS > 500mS Auto Range
Resolution	0.001mS (1uS)
Temp	0 => 60C (intermittent)
Resolution	0.1C
Temp Comp	Automatic 2.0%/C,
Ref Temp	25C
Accuracy	+/- 1% or 2uS.
Control	Single sealed pushbutton

## Contact details

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### Quick Start Guide

