

SPECIFICATIONS:



RANGE / RESOLUTION

SM301	0 to 1990 μ S/cm / 10 μ S/cm
SM302	0.0 to 10.0 mS/cm / 0.1 mS/cm
SM401	0 to 1990 mg/L (ppm) / 10 mg/L
SM402	0.0 to 10.0 g/L (ppt) / 0.1 g/L

ACCURACY (@25°C)

\pm 2% Full Scale

CONVERSION FACTOR

SM401	0.5
SM402	0.5

CALIBRATION SOLUTIONS

SM301	1413 μ S/cm (M10031B)
SM302	5.00 mS/cm (M10039B)
SM401	1382 mg/L (M10032B)
SM402	6.44 g/L (M10038B)

CONDUCTIVITY PROBE

SM301 & SM401	MA811D/1 (included)
SM302 & SM402	MA812D/1 (included)

TEMP.COMPENSATION

Automatic, from 5 to 50°C

ENVIRONMENT

0 to 50°C, 95% RH max.

BATTERY TYPE

1 x 9V alkaline (included)

BATTERY LIFE

approximately 300 hours of use

DIMENSIONS

145 x 80 x 40 mm

WEIGHT

220 g (with battery) meter only

OPTIONAL ACCESSORIES:

M10031B	1413 μ S/cm solution, 20 ml sachet (25 pcs)
M10039B	5.00 mS/cm solution, 20 ml sachet (25 pcs)
M10032B	1382 mg/L solution, 20 ml sachet (25 pcs)
M10038B	6.44 g/L solution, 20 ml sachet (25 pcs)
MA811D/1	EC/TDS probe w/DIN connector and 1m cable
MA812D/1	EC/TDS probe w/DIN connector and 1m cable
MA950	Portable meter wall fixing kit

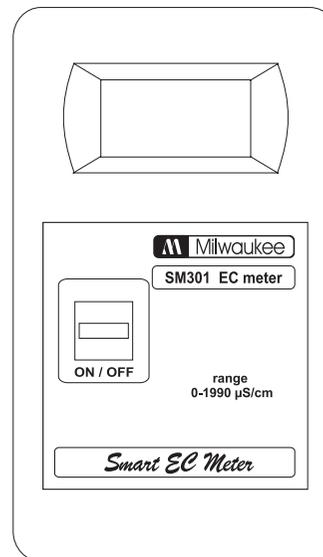
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USER MANUAL

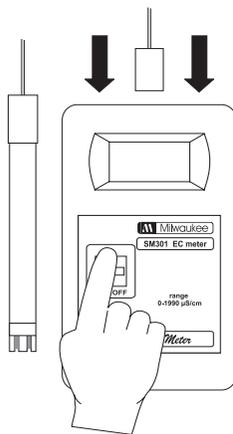
**PORTABLE
CONDUCTIVITY & TDS METERS
MODELS: SM301, SM302, SM401, SM402**

Smart EC & TDS Meters



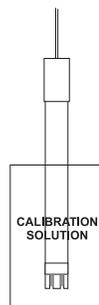
OPERATION:

- The meter is supplied complete with a 9V battery. Slide off the battery compartment cover on the back of the meter. Install the battery while paying attention to its polarity.
- Connect the probe to the meter securely by aligning the pins with the plug in.
- Make sure that the meter has been calibrated before taking any measurements (see Calibration Procedure)
- Immerse the tip (4 cm) of the EC/TDS probe into the sample. If possible use plastic beakers or containers to minimize any EMC interference.
- Turn the instrument on by pressing the ON/OFF key.
- Wait for the temperature sensor to reach the thermal equilibrium before taking any measurements.
- After use, the instrument should be switched off and the probe should be cleaned and dried. Whenever needed, use alcohol for better cleaning.

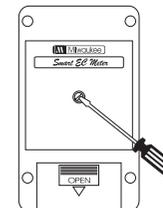


CALIBRATION PROCEDURE:

- Clean the probe with alcohol and let it dry.
- Open a sachet of conductivity calibration solution (see Specifications) and immerse the probe making sure that the metal pins are completely submerged.
- Wait until the thermal equilibrium is reached and the reading is stable.



- Adjust the calibration trimmer on the rear of the instrument with the supplied screwdriver until the display shows:
"1410" $\mu\text{S}/\text{cm}$ for **SM301**
"5.0" mS/cm for **SM302**
"1380" mg/L (ppm) for **SM401**
"6.4" g/L (ppt) for **SM402**
- The calibration is now complete and the meter is ready for use.



The instrument should be re-calibrated at least once a month, or when the probe or battery is changed.

BATTERY REPLACEMENT:

When the battery becomes weak the meter will display "V". When the low battery indicator appears, the battery has only about 50 hours of working time left. A low battery will result in unreliable measurements. It is recommended to replace immediately the battery.

Battery replacement must only take place in a non-hazardous area using an alkaline 9V battery.

Turn the meter off, slide off the battery compartment cover at the rear of the meter and replace the 9V battery with a new one. Make sure the battery contacts are tight and secure, seat the battery in its compartment and insert the cover again.

WARRANTY:

This instrument is warranted from all defects in materials and manufacturing for a period of **two years** from the date of purchase.

The **electrode is warranted for a period of 6 months.**

If during this period, the repair or replacement of parts is required, where the damage is not due to negligence or erroneous operation by the user, please return the parts to either dealer or our office and the repair will be effected free of charge.

Note: We reserve the right to modify the design, construction and appearance of our products without advance notice.