

SPECIFICATIONS:



RANGE	
SMS315	0.00 to 9.99 mS/cm
SMS415	0 to 1990 mg/L (ppm)
RESOLUTION	
SMS315	0.01 mS/cm
SMS415	10 mg/L (ppm)
ACCURACY (@25°C)	±2% Full Scale
CONVERSION FACTOR	approx. 0.7 (SMS415 only)
TEMPERATURE COMPENSATION	Automatic, from 5 to 50°C with $\beta=2\%/^{\circ}\text{C}$
ENVIRONMENT	0 to 50°C; 95% RH max.
PROBE	
SMS315	MA815/2 (included)
SMS415	MA816/2 (included)
POWER SUPPLY	external, 12VDC power adapter (included)
DIMENSIONS	85 x 104 x 39 mm
WEIGHT	130 g (meter only)

OPTIONAL ACCESSORIES:

M10031B	1413 $\mu\text{S}/\text{cm}$ calibration solution, 20mL sachet (25 pcs)
M10442B	1500 ppm cal. solution, 20mL sachet (25 pcs)
M100020B	Cal-Test solution for SMS315, 20mL sachet (25 pcs)
M100040B	Cal-Test solution for SMS415, 20mL sachet (25 pcs)
MA815/2 (*)	Conductivity probe for SMS315, with 2m cable
MA816/2 (*)	Conductivity probe for SMS415, with 2m cable

(*) To be replaced by technical personnel only.

WARRANTY:

These instruments are warranted from all defects in materials and manufacturing for a period of **two years** from the date of purchase. The probes are 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.

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USER MANUAL

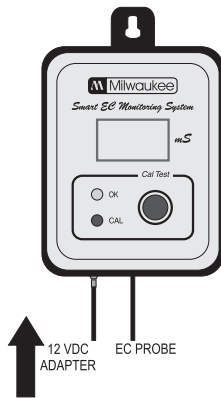
CONDUCTIVITY & TDS METERS WITH CAL-TEST MODELS: **SMS315** & **SMS415**

Smart Monitoring System



OPERATION:

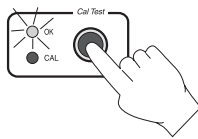
- Connect the supplied 12VDC power adapter to the meter and to the mains line.
- Immerse the tip (4 cm) of the conductivity probe into the sample.
- Wait for thermal equilibrium to be reached and the meter will start continuous monitoring.



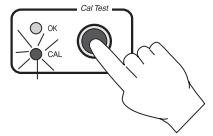
CALIBRATION TEST:

These meters are provided with a check system, which allows to verify the calibration status in a fast and easy way. It is recommended to perform the below operations once a month.

- Rinse thoroughly the probe with water.
- Immerse the probe in the suitable "Cal-Test" solution, **M100020** for **SMS315** and **M100040** for **SMS415**.
- Wait for one minute and then push the "Cal-Test" button on the meter front.
- If the GREEN LED lights up, the meter is calibrated.
- If the RED LED lights up, clean the probe, immerse it in the "Cal-Test" solution and push again the button.



- If the GREEN LED lights up, the meter does not need calibration.
- If the red LED lights up, calibrate the meter.



CALIBRATION PROCEDURE:

- Clean the probe with alcohol and let it dry (if a more thorough cleaning is required, brush the metal pins with fine sandpaper and then rinse with water).
- Open a sachet of suitable conductivity calibration solution and immerse the probe, making sure the metal pins are completely submerged.
Use **M10031** (1413 $\mu\text{S}/\text{cm}$) for **SMS315** and **M10442** (1500 ppm) for **SMS415**.
These calibration solutions are recommended for applications in agriculture and hydroponics.
- Wait until the reading stabilize for temperature variations, and then adjust the CAL trimmer on the meter side with the supplied screwdriver until the display shows: "1.41" mS/cm for **SMS315** and "1500" ppm for **SMS415**.



- The calibration is now complete and the meter is ready to take measurements.

If calibration can not be reached, the probe has to be replaced. Contact your dealer for technical service.