Senz µSiemen tester

Why should Conductivity be monitored?

Conductivity is one of the most commonly measured parameters in water quality control, manufacturing process control, cleaning processes and municiple water quality check. The Senz uSiemen tester is specially designed to measure low concentration water. Its portability makes it easy for inspector and service engineer to perform quick on site testing.

Some application include the measurement of condensate in cooling towers, water treatment in manufacturing plants, boiler water, chemical mixing and dilution of concentrate liquid etc.

TRANS Senz Conductivity tester is specially designed for industrial application.

PRECISION
Precision display of 1 micro-Siemen (µS).

RUGGEDNESS
It is made to withstand accidental drop and shocks. The tester is also water-resistant and it floats.

ONE-TOUCH CALIBRATION
On activation, the tester calibrates the end-point reading automatically at prescribed standard solutions.

AUTOMATIC TEMPERATURE COMPENSATION
This tester is equipped with a sensitive temperature sensor for quick and reliable compensation in achieving accurate readings.

AUTO END-POINT READING
It automatically senses a stable end-point reading and freezes it for recording.

SPECIFICATION		
Operating Range	0 to 1,999 µSiemen
Resolution	1 µSiemen
Accuracy	±2% (full scale)
Battery	4 x 1.5V Button Cell (Alkaline A76 or equivalent)
Battery Life	Approximately 100 hours (continuous use)
Weight	Approximately 70gm
Size	180 (L) x 32 (W) x 22 (H) mm

TRANS INSTRUMENTS CE ISO 9002 certified firm

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water resistant - float on water - drop shock - simple to use

TRANS INSTRUMENTS

SenzPal TESTER
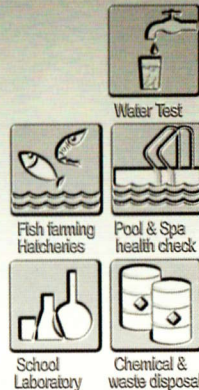
Senz µSiemen
digital conductivity tester

Economical and simple to use
A rugged and reliable tool !

Widely used in:
Laboratories
Industries
Schools
Pool
Spa

Water Test

Fish farming Hatcheries

Pool & Spa health check

School Laboratory

Chemical & waste disposal

READ THIS INSTRUCTION SHEET BEFORE USE

UNDERSTAND YOUR PRODUCT

Change battery according to polarity

Battery Cap

Read button

CAL button

Immersion level

Protective Cap Sensor inside

Lift latch here then push cap up to open

Installing Battery Cap:
The unit is shipped with the Battery Cap open, close the Battery Cap by pressing Cap on table top till the latch "click" for a secure lock.

click!

How to open Battery Cap:

1 Use a mini screwdriver to lift latch till it pops up. DO NOT PULL latch out completely.

**2** Use the thumb to push Cap forward as shown. Turn over to the front and pull Cap out completely.
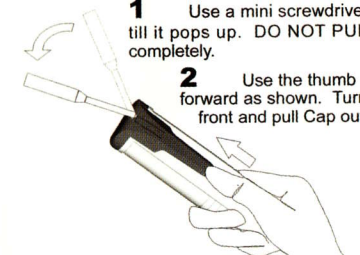
## PRECAUTIONS IN HANDLING

Do not touch, rub or scratch the sensor. It is very delicate and might break or loose its sensitivity.

Do not submerge the unit underwater. Though the unit is splash-proof and water resistant, it cannot come under high pressure underwater and is beyond repair if water gets into the unit. If it is dropped into water, retrieve it immediately and wipe dry with a cloth.
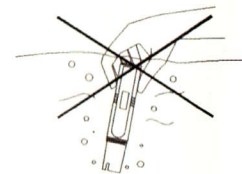
Do not store the unit under high temperature or direct sunlight. This will shorten the life span of the unit.
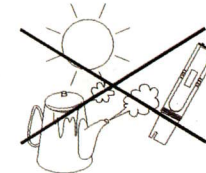
Do not clean unit with thinner or solvents. This will damage the unit. Use only a damp cloth to clean unit if needed.

SPECIFICATION

Range	: 0 to 1,999 µS
Resolution	: 1 µS
Accuracy	: ±2% Full Scale
Battery	: 4 x 1.5V Button cell (Alkaline A76 or equivalent)
Battery life	: Approx. 100 hours (continuous use)
Auto Shut-off	: Approx. 15 minutes
Operating temperature	: 0° to 50°C
Case Material	: High impact ABS plastic
Size (LxWxH)	: 180 x 32 x 22mm
Weight	: Approx. 70 gm

APPLICATION & PRODUCT SELECTION GUIDE

Concentrate Solutions

Sea Water

Sewage Water

Untreated raw water
Stream / well water
Cooling water

Industrial Water

RO permeate
Boiler Water
Good City Water

Pure Water
De-ionised Water
Steam Condensate

Ultra Pure Water

0.05µS		0.5µS		5µS		50µS		500µS		5mS		50mS		500mS
	0.1µS		1µS		10µS		100µS		1mS		10mS		100mS		

Senz µSiemen

RO meter

Senz mSiemen

WalkLAB Conductivity Pro meter

MAKING MEASUREMENT

1. Remove protective cap from bottom (See product layout).

2. To switch on, depress the **Read** button once. Display will appear blinking.

3. Dip tester into sample solution up to the immersion level, shake to remove bubbles.
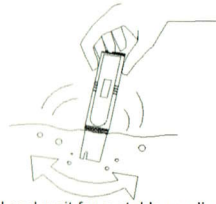
4. Keep still and wait for a stable reading. When the display stops blinking and beeps, a stable reading has been establish. You can now take the reading.

5. To take another reading, press the **Read** button again. Whenever the display is blinking, it means that the unit is sensing for a stable reading and waiting for a complete temperature compensation to take place.

6. If measurement is made in a cup, be sure to leave a 1/2 inch or 1cm gap between the bottom.
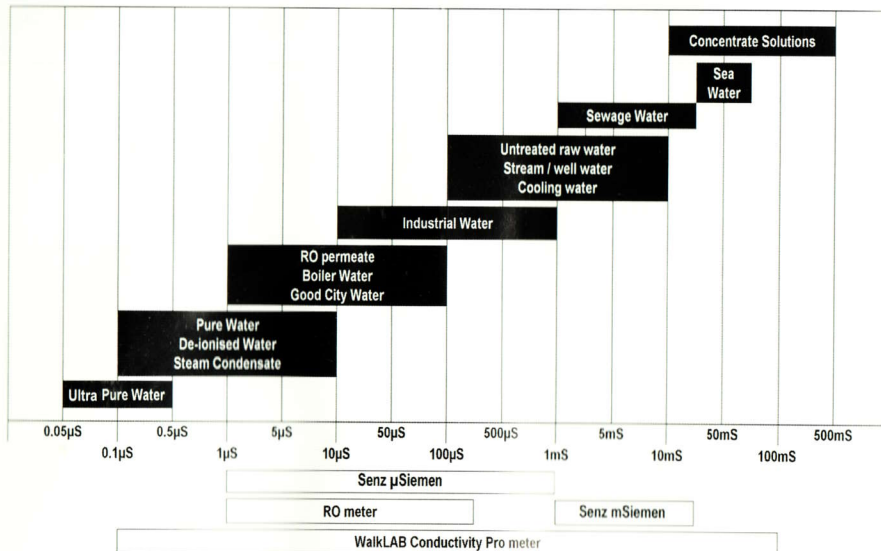
Min. 2cm or 1/2 inch.
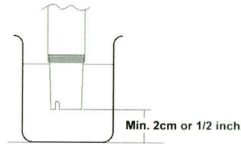
7. Always rinses the sensor area with clean tap water before and after each test. Soak it in a cup of clean tap water for at least 1 hour before storing.

8. To Switch off, press and hold the **Read** button for 3 seconds.

9. Replace with the protective cap before storing away.

⚠️ In the presence of certain radio transmitters, this product may produce erroneous readings. If this occurs then measurements should be repeated at another location.

ERROR CODE

1. When **Erb** is displayed during calibration, it means you have used the wrong standard solutions. Make sure you have the right calibration solutions before performing calibration.

2. When **Err** is displayed during calibration or measurement, it means the unit cannot get a stable reading. This could sometime due to electro-magnetic inteference when you make tests near equipments with strong magnetic field. To prevent this, move to another location.

3. Press **Read** to exit error mode at anytime.

4. When the display shows " - - - " during measurement, it indicates an overanged reading. This means the solution is too concentrated or temperature is out of the meter's measuring range. Rinse the sensor area with water thoroughly and make measurement only in solutions not above the measuring range and within 0 to 50°C.

5. When the display shows " - - - " when switched on or before dipping into any solution, it means the meter is malfunction or damaged.

MAINTENANCE

Always soak the sensor in clean tap water after each test. This will maintain the sensor's accuracy and prevent dirt from depositing on it. If dirt is deposited on the sensor, it will degrade the accuracy of the unit.

CLEANING THE SENSOR

If the sensor is dirty, soak the sensor area in mild detergent and agitate for 2-3 minutes will remove dirt. Soak the sensor area in alcohol will remove oil.

After soaking, rinse the sensor area thoroughly with distilled water and soak for another 5 minutes.

Perform a calibration after each cleaning.

CALIBRATION

Perform calibration every 6 months or whenever readings are in doubt.

NOTE: NEVER PERFORM CALIBRATION IF YOU DO NOT HAVE 1413µS STANDARD SOLUTION. WRONG CALIBRATION WILL SEVERELY AFFECT THE ACCUARCY

1. Make sure you have the correct standard solution:

   Standard solution: 1413µS
   Order Code: 2010 (90ml)

2. Dip the sensor into the solution while keeping a 1cm or 1/2 inch gap between the bottom. Shake to remove bubbles at the sensor.

3. Switch on the unit, then press and hold **CAL** button until the display shows **CAL**. Then 1413 will appear in a blinking mode.

4. Keep still and wait until it beeps and the display stops blinking.

5. Calibration completed. Rinse the senor area thoroughly before proceeding with further tests.

LOW BATTERY ALERT

When the battery symbol 🔋 appear on the display, this indicates a low battery and only 2 hours of continuous use remain. Though the unit may continue to function, the accuracy of the unit will be affected beyond 2 hours.

Change the batteries according to instructions under the section: **UNDERSTAND YOUR PRODUCT.**