APERA® INSTRUMENTS

Fluid Precision since 1991

LabSen® 863 pH/Temp. Electrode for High Temp. Complex and Caustic Solutions

User Manual



LabSen® pH electrodes are made with proprietary sensor technologies and key components from Switzerland. LabSen® 863 pH/Temp. electrode is designed for high-accuracy pH measurement of complex and caustic solutions (up to 130°C).

Features

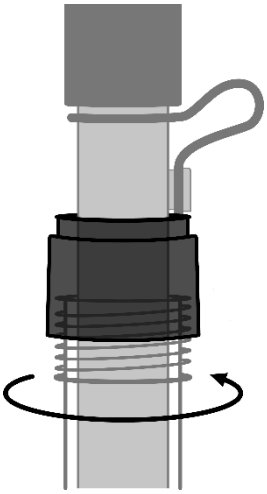
- The special PHY membrane is highly resistant to chemical corrosions, maximizing the reliability and service life of the electrode in complex and high-temp. solution testing.
- The PTFE ring junction prevents junction clogs from complex chemicals.
- Blue gel inner solution - does not flow and will not generate air bubbles.
- Suitable for high-temperature solutions (up to 130°C)
- Lead-free glass body

Technical Specifications

Measuring Range	1-13 pH
Temperature Range	0-130°C
Body Material	Lead-free Glass
Reference	Silver ion trap
Junction	PTFE
Temperature Sensor	NTC 30KΩ
Reference Solution	Gel KCL
Soaking Solution	3M KCL
Membrane Type	PHY
Membrane Resistance	<500MΩ
Electrode Dimension	Φ12×120 mm
Connector	BNC/RCA
Cable	Φ5×1m

How to use

1. Connect the electrode to the BNC connector of your pH meter.
2. Insert the black RCA connector of the electrode to the RCA temperature socket directly.
3. Before measuring, twist off the storage bottle cap (see graph on the right), pull out the electrode and rinse it off with distilled or deionized water.
4. Perform at least a two-point calibration before measuring after connecting the new electrode to your pH meter.
5. After using, put the electrode back into the storage bottle and twist on the bottle cap.



Maintenance

1. When not in use, the electrode should be soaked in the storage bottle containing 3M KCL soaking solution to keep the glass membrane and junction in a healthy condition. Clean the bottle and replace the soaking solution if it gets contaminated. The electrode should never be stored in pure water such as deionized or distilled water.
2. The electrode is only as accurate as it is clean. Always thoroughly rinse off the probe before and after each measurement with pure water in a container or with a wash bottle.
3. For tough contaminants, soak the electrode in Apera cleaning solution (AI1166) for 30 minutes. Then use a soft brush to remove the contaminants. Afterwards, soak the electrode in 3M KCL soaking solution for at least 1 hour. Rinse it off, then re-calibrate it before using again.
4. The connector of the electrode should be kept clean and dry. If contaminated, please clean it with medical cotton and isopropyl alcohol and blow-dry it to prevent short circuit of the electrode or slow response of the electrode.
5. The electrode should avoid testing strong acid and strong alkali solutions, as well as dehydrating media such as absolute ethanol and concentrated sulfuric acid. If testing such solutions, the immersion time should be minimized and the electrode should be carefully cleaned after use.
6. Every pH electrode will eventually age and fail. The typical service life of Apera pH electrodes is 12-24 months depending on the frequency of usage, nature of test samples, and how well you keep it clean and properly stored. We recommend replacing your electrode at least every 12-18 months to ensure the best accuracy.

Warranty

We warrant this electrode to be free from defects in material and workmanship and agree to repair or replace free of charge, at option of APERA INSTRUMENTS, LLC, any malfunctioned or damaged product attributable to responsibility of APERA INSTRUMENTS, LLC for a period of SIX MONTHS from the delivery.

This limited warranty does NOT cover any damages due to:
Accidental damage, transportation, storage, improper use, failure to follow the product instructions or to perform any preventive maintenance, unauthorized repair or modifications, normal wear and tear, or other external causes or actions beyond our reasonable control.

To get the fastest warranty fulfillment, go to **support.aperainst.com** and click **"New Support Ticket"** on the upper right corner. Type your email in the requester field, "Warranty" in the Subject field, and then input the following information in the description field:

- Your full name
- Product model that needs warranty fulfillment
- Serial number of the product (can be found on the back sticker of the tester body)
- What problem or issue you had experienced with the product
- Attach a photo of your proof of purchase
- Attach a photo of the problematic product

Then click Submit. One of our customer care specialists will help you fulfill the warranty within one business day.

APERA INSTRUMENTS, LLC

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