Online Digital pH Sensor

User Manual（Version V1.0）

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Thanks for choosing Yosemite Technologies' instrument.

Please read this manual carefully before using this product, and keep this manual in a safe place for future reference.

Please follow the instructions and procedures stated in this manual. To ensure warranty coverage after purchase, please follow the user instructions and maintenance procedures in this manual. Any damage and loss caused by improper use of this product will not be covered by the factory warranty. If you have any questions, please do not hesitate to contact Yosemite Technologies' customer services.

Remove the sensor from the packaging material and examine it carefully to make sure that no damage has occurred during shipping. If there is any damage, please contact Yosemite Technologies Customer Service immediately. Save all shipping materials until you are sure that the instrument functions properly.

Any damage or defective items must be returned in their original packaging material.

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Y532-B Online Digital pH Sensor

Yosemitech Y532-B is a general purpose digital pH sensor, which uses a rugged industrial electrode and a built-in temperature sensor for automatic temperature compensation, and supports RS485 Modbus digital output. It is ideal for long-term online monitoring.

Specifications:

Range：2-12 pH
Accuracy：0.1 pH
Operation Temperature: 0~50 ℃；
Built-in temperature sensor
Automatic temperature compensation
Depth Rating: IP68, 10 m immersion
Digital Output

Ordering：

Model #	Name	Features
Y532-B	Online digital pH sensor	RS485 output, automatic temperature compensation with integrated temperature sensor

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Y532-B Online Digital pH Sensor

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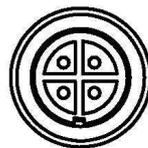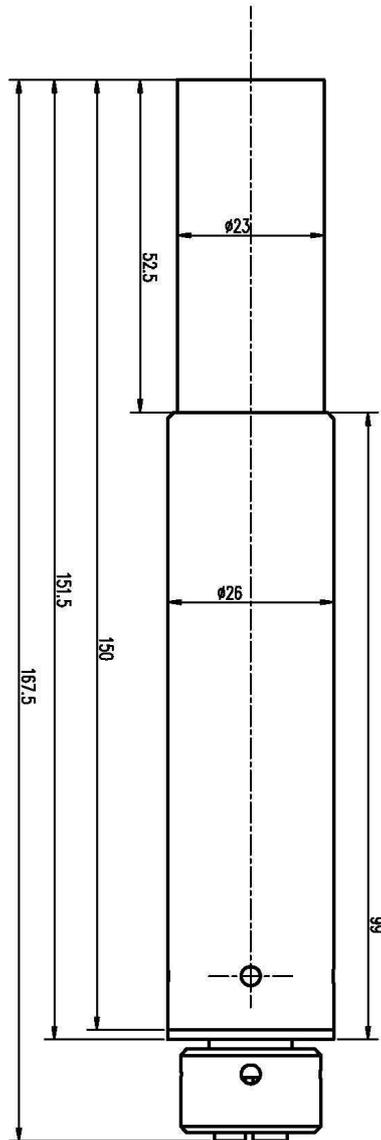
Item	Specification
Range	2-12 pH
Accuracy	±0.1 pH
Housing IP Rating	IP68（completed electrode assembly）
Depth Rating	10m
Storage Temperature	0~60℃
Operation Temperature	0～50℃
Interface	RS-485， MODBUS protocols
Assembly	submersible
Power Requirements	DC 5~12V，current<50mA
Sensor OD	26 mm
Sensor Length	167.5 mm
Cable Length	10m standard，5m、15m or30m optional
Body Materials	POM、316L
Calibration	Three points

All electrodes are shipped with a wetting cap covering the measuring end. This cap contains a buffer solution of potassium chloride (KCl).

Remove the wetting cap before calibration. There may be some dry KCl crystals forming on the outside of the cap. These deposits are expected over time and can be wiped or rinsed off. Save the cap for future long-term storage.

Rinse the electrode with distilled water and it is ready for use.

Regular Maintenance

Proper maintenance will ensure faster measurements, improve accuracy and extend the lifetime of the electrode. Regular electrode maintenance requires that a electrode be stored in the recommended storage solution between measurements, and that the electrolyte solution be refilled as necessary. 3M KCl solution is recommended as the proper storage solution.

Periodically (at least yearly) check for wear and damage, including corrosion, stress cracks, frayed cables, loose cable clamps, cable tightness, etc. and take necessary corrective actions.

Periodically (at least yearly) check electrical connections.

Electrode Cleaning

Slow response and large offsets may indicate that the electrode has become coated. The nature of coating will dictate the type of cleaning technique that should be used.

Organic coatings, like bacterial films are best removed using a squirt bottle, or water jet from a faucet. Greasy and oily coatings are best removed with a liquid soap solution. Always clean soap residues using warm water prior to storage in solution. Hard coatings, like calcium or lime scale are best removed with a solvent appropriate for the particular coating. A soft brush can be used to remove stubborn coatings.

Wash sensor surface with tap water and wipe it using a soft cloth prior to storage.

WARNING: Acetone, MEK, THF, or trichloroethane will harm the electrode.

Sensor cable

Sensor cable should be maintained stress free. Route the sensor cable correctly and install routing brackets if necessary.

Important: Probe contains sensitive optical components and electronic components. Ensure that the probe stays away from potential mechanical impact. Any damage caused by misuse is not coved by warranty.

| ERROR	POSSIBLE CAUSE	SOLUTION
Unstable pH reading	Connection error	Reconnect controller and cable
	Cable failure	Contact customer service
Measured value is too high, too low or unstable	Inaccurate Measurement	Re-Calibrate
	Water leakage	Contact customer service
	pH electrolyte depleted	Replace pH electrochemical solution

Electrical Wiring

1. Sensor Dimensions

   26x167.5 mm(Φ x L)

2. Power Supply Requirements

   Power Supply DC 5~12V +/-5%, Current <50mA

3. Sensor Cable

   4 AWG-24 wires or AWG-26 shielding wire. OD=5mm
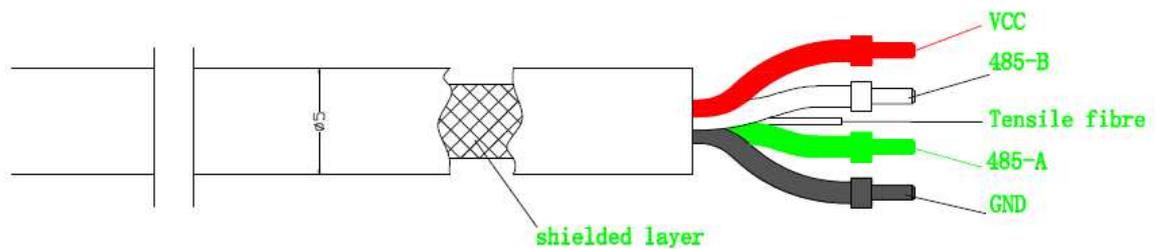
1. Red—Power (VCC)

2. White—485 Date_B (485_B)

3. Green ---485 Date_A (485_A)

4. Black --- Ground (GND)

5. Bare wire ---- Shield

What is Covered

This limited warranty covers defects in materials and workmanship in this product. Yosemite Technologies online digital pH sensor and controller are covered by a warranted for up to three(3) months from the date of purchase.

If there are defects found during the warranty period, Yosemite technologies promises to repair or replace the defective products, or return the payment of the product except for the return shipping fee.

This warranty does not apply to consumable products, such as lamp, piping. Please contact Yosemite technologies or your agents for clarification. Once we receive feedback for the product quality problems from the customer, Yosemite technologies will confirm whether the product need repair or replacement in two weeks. Please note that the product can not be returned without prior approval from Yosemitech.

What is Not Covered

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature.

This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Yosemitech to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product.

This limited warranty does not cover equipment enclosures, cables or accessories used in conjunction with this product.

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