



Y510-B Turbidity Sensor

User Manual (Version V1.1)



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Introduction



Thanks for choosing Yosemite Technologies' instrument !

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

Please follow the instructions and procedures stated in this manual.

To ensure after sales warranty coverage, please follow the user instructions and maintenance procedures stated in this manual.

Any damage and lost caused by improper use of this product will not be covered by factory warranty. Please keep all documents, and if you have any questions, please do not hesitate to contact Yosemite Technologies' customer services.

Remove the instrument from package material and examine it to make sure that there is no damage occurred during shipment. If there is any damage, please contact Yosemite Technologies Customer Service immediately. Save all materials until you are sure that the instrument functions properly. Any damage or defective items must be returned in their original packaging material.

Y510-B Turbidity Sensor



MAIN FEATURE :

0.1~1000 NTU

Accuracy < 5% or 0.3 NTU

Digital sensor, RS-485; MODBUS protocol compatible

0~50 °C; IP68 rating, Maximum pressure 6 bar

90° Angle of scattered light principle

Optical fiber type structure, strong ability to resist external light interference

Infrared LED light source, high stability

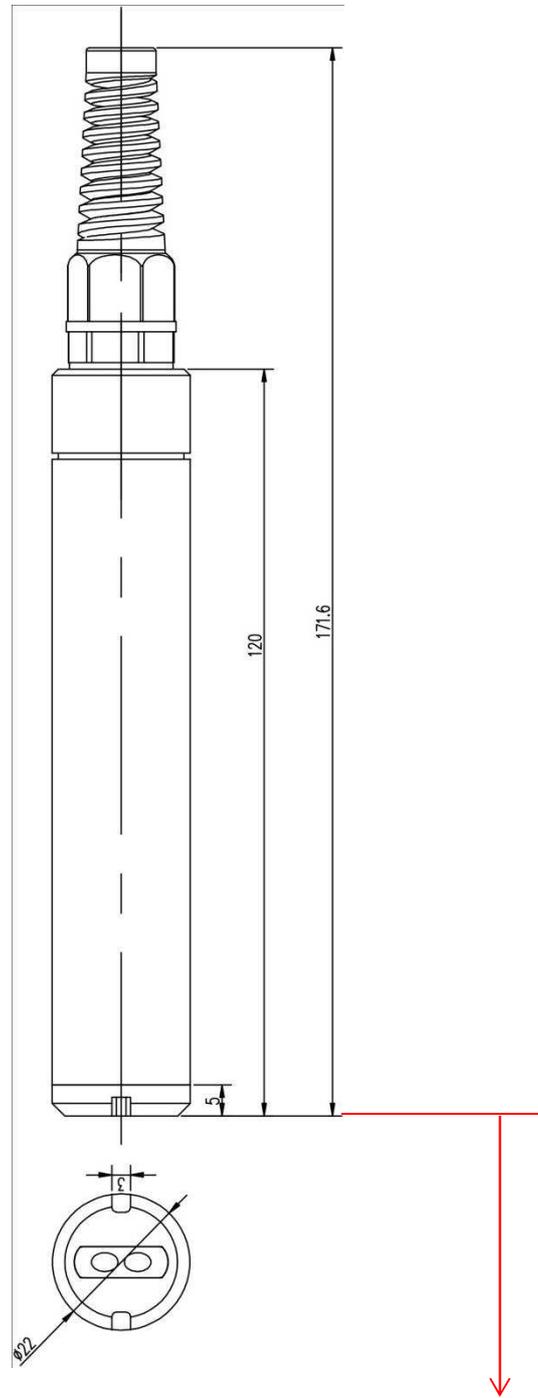
Miniaturization design, more easy to install

Convenient, fast, stable, easy to maintain

Ordering :

Model Description	Model #
Turbidity Sensor	Y510-B
Online Controller	Y610-A
Multi-parameter handheld meter	Y602-A

Y510-B Sensor Structure chart



Note: keep more than 50 mm from side and the bottom wall of the liquid

Y510-B Sensor structure chart

Y510-B Technical Parameters



Item	parameter
Range	0.1~1000 NTU
Accuracy	<5%或0.3NTU
Housing IP Rating	IP68
Maximum pressure	6 bar
Temperature Range	0~50℃
Interface	Support RS-485, MODBUS protocols
Power Requirements	DC 5~12V, current<50mA
Size	Φ22mm*120mm
Thread model	M22*1.5
Assembly	Immersion or circulation installation
Cable Length	10m standard, 5m、15m or30m optional
Body Materials	POM
Windows material	Optical fiber material
calibration	one point or two

Y510-B Maintenance



Maintenance schedule and methods

1. Maintenance Schedule

Cleanliness is very important for maintaining accurate readings.

Maintenance tasks	Maintenance frequency
cleaning	According to use environment
Calibration (if required of agency)	Regular calibration

2. Maintenance methods

Routine Maintenance

- 1) surface:** Wash the outer surface of sensor with tap water, if there is still a clastic residues, using wet soft cloth to wipe, for some stubborn dirt, can add household detergents in tap water to clean.
- 2) outer surface:** wash with tap water, for some stubborn dirt, can use the traditional detergent and soft cloth to clean.
- 3) Check the cable :** The cable should not be tight when work properly, otherwise it easy to make the internal wire break and the sensor can't work normally.
- 4) Check the sensor shell** whether is damaged or not.

Attention:

Probe contains sensitive optical components and electronic components. Ensure that the probe far away from severe mechanical impact.

FAQ:

ERROR	POSSIBLE CAUSE	SOLUTION
Unstable turbidity reading	connection error	Reconnect controller and cable
	Cable failure	Contact customer service
Measured value is too high, too low or instability	Sensor outside window is attached	Wash the surface

Y510-B Cable Definition



1、 Turbidity Sensor Dimensions

22x120 mm(Φ xL)

2、 Power Supply Requirements

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

3、 Sensor Cable

4 wire AWG-24 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

Quality Assurance



Yosemite Technologies online self-cleaning turbidity sensor and controller are warranted for one (1) year from date of purchase against any material and manufacturing workmanship.

If there are defects found during the warranty period, Yosemite technologies promises to repair or replace the defective products, or return the payment of product except the charge for the first time for transport and related formalities. In the warranty period, repair or replacement of any product will only enjoy the rest of the original warranty.

This warranty does not apply to consumables, such as the consumption parts (including but not limited to the lamp, piping, etc.).

Contact Yosemite technologies or your agents to start technical support within the guarantee period.

After receiving feedback for the product quality problems from the customer, Yosemite technologies will confirm whether the product need repair within two weeks; It can't be returned without approval to repair the product.

Limitation of Warranty

This warranty does not include the following

- Damage caused due to force majeure, natural disasters, social unrest, war (published or unpublished), terrorism, civil war or any government forced.
- Damage caused due to improper use, negligence, accident, or caused by the improper application and installation.
- Freight for the product shipped back to Yosemite technologies
- Freight for parts or products express or express delivery within the warranty.
- Travel expense for repair in local in warranty

Quality Assurance



The quality assurance includes all content of products provided by Yosemite technologies

It constitutes the final, complete and exclusive statement about the quality guarantee, no person or agent is authorized in the name of Yosemite technologies to develop other warranty.

As described above, the remedial measures such as repair, replacement or return the payment for product is not in violation of the warranty, and it aim at our own products only. Based on the strict liability or other legal theory, Yosemite technologies is not responsible for defects or any other damage due to careless operation , including the subsequent damage with a causal connection between these situations.



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