



# Blue Green Algae 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 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.

# Y513-A BGA Sensor



Y513-A Blue Green Algae Sensor



- 0 – 270,000 cells/ml
- 0~50 °C; IP68 rating
- Fluorescence method
- RS-485; MODBUS protocol compatible
- One or two point user calibration
- Optical fiber type structure, strong ability to resist external light interference

Ordering:

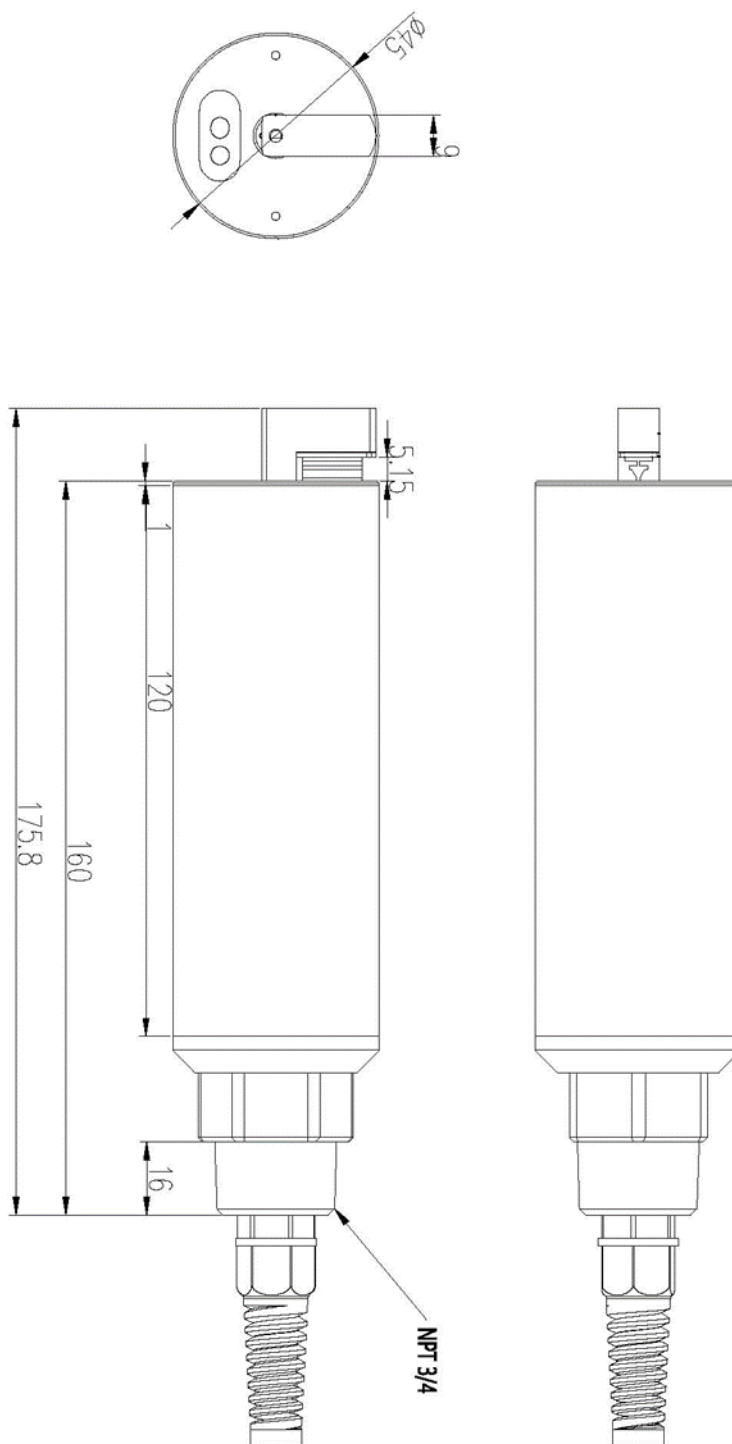
Model Description	Model #
Blue Green Algae Sensor	Y513-A
Controller	Y610-A

# Y513-A Specifications



Item	parameter
Interface	Support RS-485, MODBUS protocols
Range	1 – 270,000 cells/ml
MDL	300 cells/ml
Linearity	$R^2 > 0.999$
Operating temperature	0 ~ 50°C
IP rating	IP68
Depth Rating	10 m
Calibration	One or two-point
Power Requirement	DC 5~12V, current<50mA
Sensor OD/Length	22/120 mm
Cable Length	5m
Body Materials	POM

# Y513-A Sensor Dimension



## Maintenance schedule and methods

### 1、Maintenance Schedule

cleanliness is very important for maintaining accurate readings.

### 2、Maintenance

#### 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) **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.
- 3) Check the sensor measurement window whether have smudge and cleaning wiper whether is normal or not
- 4) Check the sensor shell whether is damaged or not.

#### Attention:

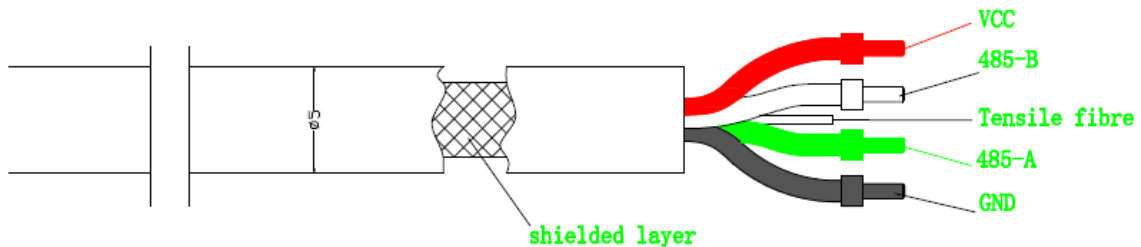
Probe contains sensitive optical components and electronic components. Ensure that the probe far away from severe mechanical impact.

## 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

Yosemite Technologies online self-cleaning chlorophyll 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



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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