

# Y4000 Multiparameter Sonde (V2.0)



# Y4000 Second Generation Multiparameter Sonde

## Overview

Yosemitech's second generation Multiparameter Water Quality Sonde with integrated wiper system is an easy solution for in-situ water quality monitoring for rivers, lakes, streams, estuaries, or oceans. The wiper can effectively clean debris, bubbles and prevent bio-fouling for extended instrument deployment. All calibration data is saved in sensor memory and the system supports sensor field calibrations and field exchange. Total of 7 parameters (6 sensors) can be measured simultaneously, which include DO, CT, Turbidity, pH, ORP, Chlorophyll, Oil-in-Water, and NH3.



## Key Features

- Digital sensors, support RS485, MODBUS
- All calibration data is stored in sensors, sensors can be replaced in field easily
- With integrated anti-fouling wiper for extended period of deployment
- Optical DO, 4-electrode CT, Turbidity, pH, Chlorophyll, BGA and many other  
Yosemite's digital sensors can be chosen
- Support 6 sensors, measure 7 parameters simultaneously



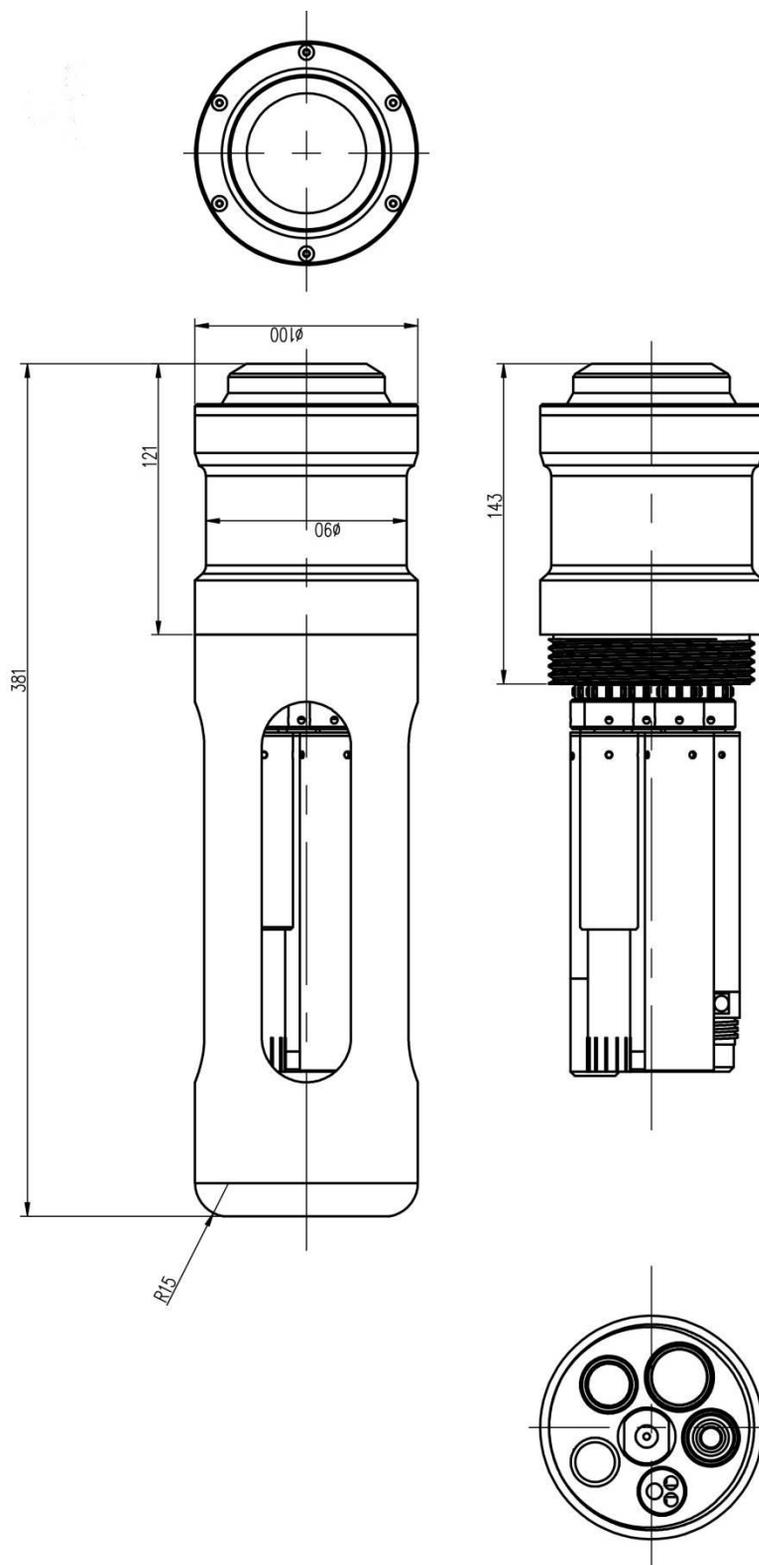
# Y4000 Specifications

SPECIFICATIONS		
Optical Oxygen	Range	0-20mg/L or 0-200% SAT
	Precision	±0.3mg/L
	Resolution	0.01mg/L
Turbidity	Range	0-1000 NTU
	Precision	< 5% or 0.3NTU
	Resolution	0.1NTU
4-electrode Conductivity	Range	1μS/cm-200mS/cm      1μS/cm-100mS/cm
	Precision	1% FS
	Resolution	0-1000μS/cm: 0.1μS/cm; 1mS/cm-100mS/cm: 0.1mS/cm
Chlorophyll	Range	0~400 μg/L or 0~100RF
	Precision	0.1 μg/L
	Resolution	0.1 μg/L or 0.1% RFU
Digital pH	Range	0-14pH
	Precision	±0.1pH
	Resolution	0.01
Digital ORP	Range	-999~999mV
	Precision	±20mV
	Resolution	1mV
Oil-in-Water	Range	0-500ppb or 0-5000ppb
	Precision	5%
	Resolution	0.1ppb
NH3	Range	0-1000mg/L
	Precision	±10%
	Resolution	0.1mg/L
SONDE	Operating Temperature	0~50°C
	Output	One channel, RS485
	Self-cleaning Wiper	Yes/ optional
	Input Power	12V ±5%
	Current required	100 mA
	IP Rating	IP68
	Cable Length	10m default, custom length available

# Ordering

Name	PN	Description
Multiparameter Sonde	Y4000	Including CT, turbidity, digital pH, temperature sensors(or other Yosemite digital sensors) and wiper. DC 12V input, IP68, RS485 output
Optical DO	Y504-B	Range 0~20mg/L or 0~200% SAT, RS485, waterproofing connector, IP68
4-electrode CT	Y520-B	Range 1 $\mu$ s/cm~200ms/cm, PEEK sensor body and Nickel electrodes, RS485, waterproofing connector, IP68
Turbidity	Y510-C	Fiber structure , Range:0.1~1000NTU, Accuracy:<5% or 0.3NTU, RS485, waterproofing connector, IP68
digital pH	Y532-A	pH 0-14, RS485, waterproofing connector, IP68
Digital ORP	Y533-A	Range: -999~999 mV, water proofing connector, IP68
Chlorophyll	Y515-B	range: 0~400ug/L or 0~100RF, Accuracy: 0.09ug/L Chlorophyll, RS485, waterproofing connector, IP68
Oil-in-Water	Y516-B	Range: 0-500 ppb, or 0-5000 ppb, precision 5%, resolution: 0.1 ppb
Wiper	Y541-A	waterproofing connector, IP68
Sonde	Y603-A	DC 12V,RS485, waterproofing connector, IP68, with protection cup.

# Y4000 Mechanical Dimensions



## Sonde Dimensions

# Y4000 Wire Terminal Definition

## Sensor Dimensions

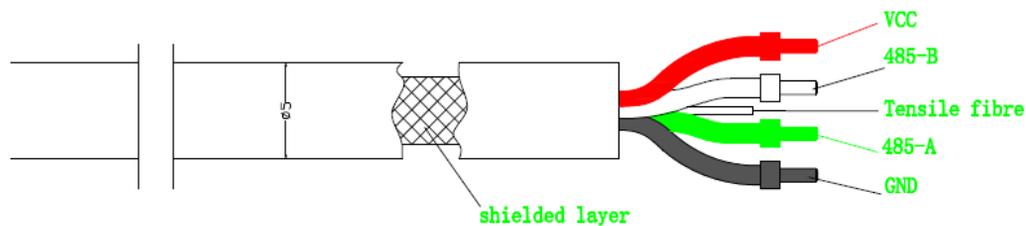
100x388 mm( $\Phi$  x L)

## Power Requirement

DC 12V  $\pm$ 5%

## Cable

4 wire AWG-24 or AWG-26 shielding wire



1. Red: Power (VCC)
2. White: 485 DATA\_B ( 485\_B)
3. Green: 485 DATA\_A (485\_A)
4. Black: Ground (GND)
5. Bare Wire: Shielding

# Warranty Period

Warranty Period	
<b>Optical DO sensor</b>	1 Year
<b>Turbidity Sensor</b>	1 Year
<b>4-electrode CT sensor</b>	1 Year
<b>Digital pH sensor</b>	3 months
<b>Digital ORP sensor</b>	3 months
<b>Blue Green Algae sensor</b>	1 Year
<b>Oil-in-Water sensor</b>	1 Year
<b>Temperature sensor</b>	1 Year
<b>Sonde</b>	3 Years
<b>Consumable</b>	3 months

Please note self-cleaning wiper has o-ring seal for rotating shaft. Yosemitech recommends factory replacement of the shaft seal after 18 month of use. Yosemitech will not responsible for any water leakage and sensor damage after 18 months.

# Quality Assurance

Yosemite Technologies Multiparameter Sonde and sensors are warranted for the time listed above from date of purchase against any material and manufacturing workmanship.

Within the warranty period, Yosemite Technologies will repair or replace, free of charge, any product that Yosemite Technologies determines to be covered by the warranty.

Yosemite Technologies will response to customer request within two weeks. Please do not ship without Yosemitech's confirmation. Warranty service can only be performed by Yosemite Technologies or an authorized agent.

## Limitation of Warranty

The limited warranty covers manufacturing defects in materials and workmanship encountered in normal use of this product. This Warranty does not apply to any Yosemite Technologies product damage or failure caused by:

1. Failure to install, operate or use properly according to Yosemite Technologies' product instructions;
2. Abuse or misuse of the product;
3. Failure to maintain the product in accordance with Yosemite Technologies' maintain instructions, or standard industry procedure;
4. Modification of the product in any way not expressly authorized by Yosemite Technologies.