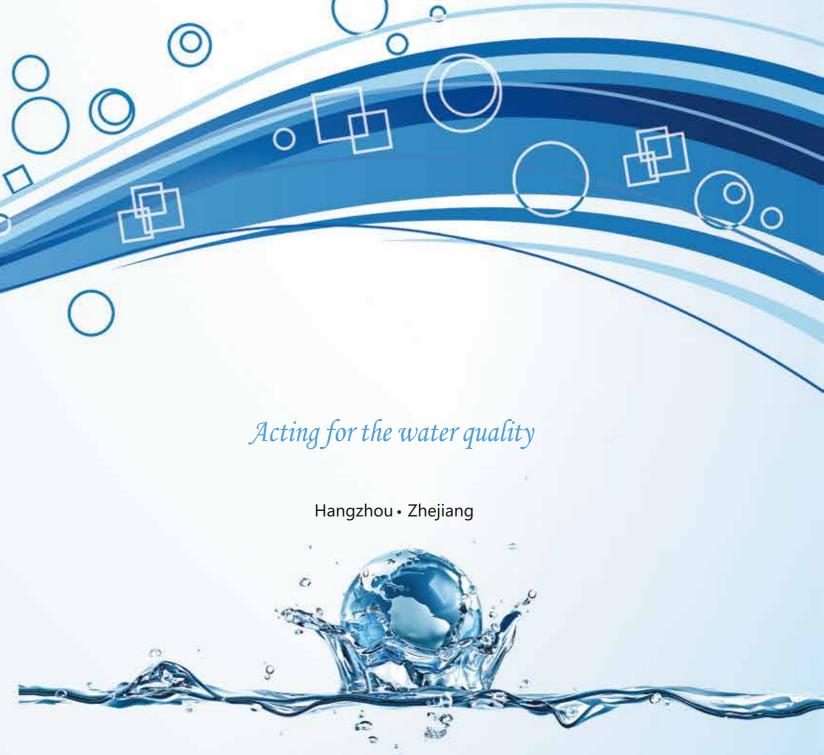




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## HangZhou Lohand Biological Co., Ltd



Estabished in 2008, Hangzhou Lohand Biological Co., Ltd is a professional company that manufactures and exports portable water quality detection meter, rapid test paper, water test kit, DO meter, industrial online test meter, digital refractometer etc. We obtained many national patents, which is the symbol of water quality test industry.

Our products are exported to many countries like European market, Southeast Asia, South Africa, Brazil and so on.

Our Lohand products are widely used for the water quality rapid test of water-supply system, food and beverage processing, environmental detection, water treatment project, aquiculture, sewage plant, scientific research, biotechnology, fermentation process, textile dipdye, petrochemical industry etc.

Lohand insists on the principle 'Quality first, user supreme, good service'. Supplying the most efficient, the fastest, the most affordable water test products and service is our aim.



**け時に生物**<sup>®</sup> Hangzhou Lohand Biological Co., Ltd.

#### About us

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## **Multi-parameter water** quality detection meter



#### ntroduction

Multi-parameter water quality detection meter is a new detection meter which is promoted by ourselves Hangzhou Lohand Biological Co., Ltd in 2017. Rapid digestion spectrophotometry, Nexler's reagent spectrophotometry and molybdic acid spectrophotometry were used to test the concentrations of COD, ammonia nitrogen, total phosphorus and permanganate in the water.

The reacting is used by digestion tube. The digestion and color comparison are combined in one. The operation is easy. And the result is accurate and effective. It has the features of small size, light weight and portability.

#### Packing details

## LH-C3 luxury set 1、C3 detector host----1 SET 2、Four vials reactor----1 SET 3、lithium battery----1 PIECE 4、Pipetting device----1 PIECE 9、Ammonia nitrogen reagent 40 times----1 KIT 5、Pipette tip----40 PIECES

Model No.	LH-C1	LH-C2	LH-C3	LH-C5	LH-P35	LH-D65		
Test Item	COD	COD, Ammon ianitrogen	COD, Ammonia nitrogen, Total phosphorus	COD,Ammonia nitrogen, Total phosphorus, Total nitrogen, Permanganate	Tota <b>l</b> phosphorus	Total nitrogen		
Measuring Range (mg/l)	0 - 15000 (Subsection)	COD:0 - 15000 (Subsection) Ammonia nitrogen: 0.00-50.00 (Subsection)	COD: 0 - 15000 (Subsection) Ammonia nitrogen: 0.00-50.00 (Subsection) Total phosphorus: 0.00-20.00 (Subsection)	COD: 0 - 15000 (Subsection) Ammonia nitrogen: 0.00-30.00 (Subsection) Total phosphorus: 0.00-10.00 Total nitrogen: 0.00-25.00 Permanganate: 0.00-10.00	0.00-20.00 mg/L	0.00-25.00 mg/L		
Wave Length	0-150mg/L: 450nm 100-1500mg/L: 610nm 1000-15000mg/L: 610nm	420nm/450nm/610nm	420nm/450nm/610nm	445nm/450nm /520nm/610nm	610nm	Blue light 445nm		
Method		Spectrophotometer						
Precision		±5%						
Light Source		Silicon diode						
Operating Conditions	Temp0 to 50°C, RH0 to 80%							
Life of Battery	More than 30h							
Size	90mmX70mmX125mm							
Weight	280g ( including battery )							

#### Application

Multi-parameter water quality detection meter is widely used in water plants, sewage treatment plants, rivers and lakes water quality monitoring stations, laboratory research and testing, water treatment engineering, agriculture, pharmaceuticals, chemicals, metallurgy, forging, dyeing and other industries.

#### Packing details

#### LH-C3 standard set

- 1、C3 detector host----1 SET
- 2、Four vials reactor----1 SET
- 3、COD reagent (LR 0-150 mg/l)----25 TIMES
- 4、COD reagent(HR100-15000mg/l)----25 TIMES
- 5, Ammonia nitrogen reagent 40 times----1 KIT
- 6、Total phosphorus reagent 40 times----1 KIT



## **Multi-parameter water** quality detection meter

6、Aluminum packaging box----1 BOX 7、COD reagent (LR 0-150 mg/l)----25 TIMES 8、COD reagent(HR100-15000mg/l)----25 TIMES 10、Total phosphorus reagent 40 times----1 KIT





Introduction

## Outdoor multiple in one detection meter

In order to integrate resources, and easy to carry, it is necessary to develop an outdoor portable multifunctional COD detector. Outdoor multiple in one detection meter is a new generation multiple in one meter which is promoted by ourselves Hangzhou Lohand Biological Co., Ltd in 2017. It solves the problem that when people detect outside without electricity power. It is suitable for test COD/Total phosphorous/Ammonia nitrogen of surface water, underground water, drinking water, domestic sewage and industrial waster water.





	Detector							
Test Item	Measuring Method	Measuring Range	Wave Length	Accuracy	Operating Temperature	Responding Time	Ambient Temperature	Power Supply
COD		0-15000 mg/L	420nm	≤5%	165℃	20min	0-50℃	DC 12V/10A (outdoor), DC 220V 50Hz (indoor)
Ammonia nitrogen	Rapid digestion spectrophotometry	0-50 mg/L	420nm	±5%	/	/		
Total phosphorus		0-20 mg/L	620nm	±5%	150℃	15min		



	Parameter								
Operating Temperature	Accuracy	Temperature Range	Temperature Accuracy	Responding Time	Temperature Region	Capacity	Power Consumption	Display Screen	Power Supply
50-200℃	≤±0.5℃	Room temperature-200°C, Over-temperature protection device	≤±0.5℃	1-999min	2 (two temperature regions can be set)	16Vials (8+8)	<300W	4.3 inch color screen	DC 24V/10A

## XC-200 COD reactor

#### Introduction

XC-200 COD reactor is researched and produced by ourself Hangzhou Lohand Biological Co Ltd which is a kind of Jaboratory instrument used together with chemical oxygen demand(COD) detection meter It is. widely used in the fields of electroplating, sewage plant, coal carbonization, paper making, petrochemical, pelage, process hides, pharmacy, food processing, etc, when the reactor is requested chemical oxygen demand(COD) detection.

#### Features

- 1. Structure is compact, the reactor can react 4 samples at the same time.
- 2. The reactor using sealed with micro-return line for reacting without condensed water.
- 3. The reactor can set the heating temperature between 20-180°C, and contains a thermal fuse that prevents overheating.
- 4. The reactor can set the heating period between 0-120mins, and turning off the heating element automatically with warning beep.
- 5. The reactor equips transparent plastic protection shield to protect the operator, and each tube is subjected by pressuring and heating test.

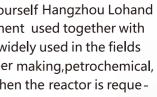


## LH-TX6 desktop reactor

#### Introduction

LH-TX6 desktop reactor, is a new detection meter which is promoted by ourselves Hangzhou Lohand Biological Co., Ltd in 2017. It is widely used in the fields of electroplating, sewage plant, coal carbonization, paper making, petrochemical, pelage, process hides, pharmacy, food processing, etc.

This product has two temperature control regions, which can meet the needs of different operating temperature.Later we will develop new improved products.





## Portable Water Quality Detection Meter



#### Name

Portable water quality detection meter

#### Introduction

Portable water quality detection meter is one of the most important products from Lohand.It can detect and analyse the sample very fast by only three steps:start,zeroing and reading with small capacity(only 220g with battery).The quality is as good as the similar products imported,while the cost only one-third of them. At present,the water quality detection meters for test residual chlorine,ammonia nitrogen,total phosphorus,COD ozone,nitrite nitrogen,sulfur dioxide,Chromium VI, multiple in one are available.

#### Application

Portable water quality detection meter is widely used in the fields of waterworks, drinking water plant, sewage plant, river and lake water quality monitoring station, laboratory research, water treatment project, agriculture, pharmacy, chemical industry, metallurgy, smithing, textile dipdye, etc.

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#### Classification

- 1、Residual chlorine meter----LH-C01
- 2、Residual chlorine meter----LH-C10
- 3、Ammonia nitrogen meter-----LH-N11
- 4、Ammonia nitrogen meter----LH-N12
- 5、Total phosphorus meter----LH-P35
- 6、Nitrite nitrogen meter----LH-A015
- 7、Chromium VI meter----LH-CR6
- 8、Chlorine dioxide meter----LH-C03
- 9, Ozone meter----LH-DO1
- 10、Phosphate meter----LH-P30



	Parameter						
Model NO.	Name	Measuring range (mg/l)	Accuracy	Theory of work			
LH-C01	Residual chlorine meter	0.00~3.00	±0.05mg/l(conc.≤1mg/l) ±0.1mg/l(conc.>1mg/l)	DPD spectrophotometry.Solu- tion with reagent and residual chlorine turns red			
LH-C10	Residual chlorine meter	0.00~10.00	±5%	DPD spectrophotometry.Solu- tion with reagent and residual chlorine turns red			
LH-N11	Ammonia nitrogen meter	0.00~10.00	±5% (conc.<5mg/l ) ±10%(conc.≥10mg/l )	Nessler's reagent colorime- try.Solution with reagent and ammonia nitrogen turns yellow			
LH-N12	Ammonia nitrogen meter	0.00~2.00	±5%	Salicylic caid method. Using for aquaculture.			
LH-P35	Total phosphorus meter	0.00~5.00	±5%	Molybdenum antimony spectrophotometry.Solution with reagent and total phos- phorus turns blue			
LH-A015	Nitrite nitrogen meter	0.00~0.30	±5%~±0.02mg/L	N- naphthyl - ethanediamine spectrophotometry.Solution with reagent and nitrite turns red			
LH-CR6	Chromium VI meter	0.00~2.00	±0.02mg/l(conc.<0.5mg/l) ±5%(conc.>0.5mg/l)	Diphenylcarbazide spectro- photometry.Solution with reagent and chromium VI turns red			
LH-C03	Chlorine dioxide meter	0.00~5.00	±5%	DPD spectrophotome- try.Solution with reagent and chlorine dioxide turns red			
LH-DO1	Ozone meter	0.00~2.50	±0.05mg/l (conc.<1mg/l ) ±0.1mg/l (conc.≥1mg/l )	DPD spectrophotome- try.Solution with reagent and ozone turns red			
LH-P30	Phosphate meter	0.00~2.00	±5%	Molybdenum antimony spectrophotometry.Solution with reagent and total phos- phorus turns blue			



## DO Meter

#### Introduction

New type waterproof water treatment instrument satisfies the demand of most users with high rate between price and performance. There are three types:portable dissolved oxygen (DO)meter LH-D9, portable PH/ORP meterLH-P5,portable conductivity meter LH-C6 with classification of waterproof IP67 and shockproof design. It is suitable for the fields of monitoring under rugged environment and underwater works.

#### Application

Portable DO meter can test the dissolved oxygen in water, which is used in many fields like aquaculture, water treatment, environmental monitoring, river regulation and so on.

	Parameter of DO meter				
Mode	Saturation%	Oxygen( mg/L )	Temperature		
Range	0 to 199.9	0~19.99	0.0-50.0°C(32-122°F)		
Resolution	0.1	0.01	0.1°F (0.1°C)		
Accuracy	±1.5% full range	±1.5% full range	±0.9°F(±0.5°C)		
Responding Time	1 min	1 min	1 min		
Calibration	2 Points at most				
Temperature Compensation	Auto (ATC) 32-122°F or 0-50°C				
Operating Temperature	e 32-122°F ( 0~50°C )				
Battery	2xAA				
Probe	Plastic electrode				



The main application



Test the liquid sugar content of food, beverage to promote green life.

Test salt content of water in industries such as marine aquaculture to ensure the reproduction and production of aquatic products.

## PH-2110 portable pH meter

#### Introduction

Portable pH meter is used for on-the-spot measuring of the pH and ion potential(mV) in liquid.The functions of two-point automatic calibration, automatic buffer identification, power monitoring, automatic temperature compensation, adaptive ambient light display, data locking and storage.It is widely used in water quality related fields.

PH measuring range: -2.00 —16.00pH PH measuring accuracy: ±0.002pH MV measuring range: 0—±1999mV MV measuring accuracy: ±0.1mV





## Digital Refractometer

## Digital refractometer LH-B55

#### Introduction

Portable digital refractometer LH-B55 is researched and produced by ourself Hangzhou Lohand Biological Co.,Ltd. It is an optical instrument with high accuracy,designed by the theory of different liquids with different refracture indexes.It can test the sugar content of fruit,vegetable,juice,beverage and food processing and honey.

Calculate other physical indicators by testing the refractive index.

Range : 0-55%Resolution : 0.1%; $0.1^{\circ}$ C Accuracy :  $\pm 0.2\%$ Temperature Compensation :  $10-40^{\circ}$ C Test environment :  $10-40^{\circ}$ C , RH < 95%Sample Volume :  $\ge 0.5$ ml Test time : 5sBattery:3xAAA(About 2000 times test)Dimension and weight:  $62 \times 29 \times 140$  mm, 140g



# Rapid Detection Series

### **Product features**

- 1. Visual colorimetric or titration method, fast and simple, without professional equipment and technical personnel.
- 2. The principle of detection base on the national standard method, the results are consistent with international standard.
- 3. Small size, light weight, suitable for field investigation.
- 4. Both seawater and fresh water can be detected, it has a wide range of applications.

## **Rapid test strip series**





#### Product features

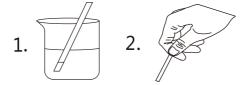
Semi-quantitative test paper, widely used in sewage treatment, agricultural water, industrial wastewater, laboratory research and environmental protection and other fields.

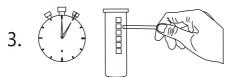
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### Instructions

- 1. Take out a test paper and then cover the lid (don't touch the reaction area)
- 2. Make the reaction area to be immersed in liquid for about 1-3 seconds, then take it out to remove the excess water
- 3. Static the 15-30s, and check with the color card, the closest color to the color card is the concentration value

Note: the specific time according to the operation instructions is on bottle.





Model	Name	
LH1001		
LH1001	Hydrogen Peroxide test paper	-
LH1003		
LH1004		
LH1005	Peracetic acid test paper	-
LH1006	· · · · · · · · · · · · · · · · · · ·	-
LH1007		
LH1008	Residual chlorine test paper	-
LH1009		-
	Ammonia nitrogen test paper	-
LH1010		_
LH1012	Phosphate test paper	
LH1013	Nitrite test paper	
LH1014	Total hardness test paper	
LH1017	Nitrate test paper	
LH1018	Sulfur dioxide test paper	
LH1019	Chlorine dioxide test paper	
LH1020	Urea test paper	
LH1021	Ozone(in air) test paper	
LH1022	Ascorbic acid test paper	
LH1023	Sulphite test paper	
LH1025	Chromium/Cr(VI) test paper	
LH1026	Ferrous(Fell)test paper	
LH1027	Zink test paper	
LH1028	Sulphate test paper	
LH1029	Chloride test paper	
LH1039	Quaternary ammonium salts test paper	+
LH1040	Glutaraldehyde test paper	
	PH test paper	

Warm tips:other specifications can be customized according to the requests

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Measuring range
0.5-2-5-10-25mg/l
1-3-10-30-100mg/l
100-200-400-600-800-1000mg/l
0-0.5-2-5-10-20-40mg/l
25-100-200-300-500mg/l
100-200-500-1000-2000mg/l
0-0.5-1-3-5-10mg/l
25-50-100-200-500mg/l
0-0.5-1-3-5-10-20mg/ l
2-5-10-30-50-70-100mg/ l
10-30-60-100-200-400mg/l
0-5-10-30-60-100-200-400-1000
10-25-50-100-250-500mg/l
1-5-10-20-40-80mg/l
0-25-50-120-250-425mg/l
5-10-25-50-100-250-500mg/l
0-10-40-80-180-400mg/l
0-25-50-100-200-300-800mg/l
0-25-50-100-200-300mg/l
0-5-10-20-30-40 mg/m <sup>33</sup>
0-100-200-300-400-700-1000-2000mg/l
10-40-80-180-400mg/l
0.5-2-5-10-30-50-100mg/l
2-10-25-50-100-250-500mg/l
10-40-100-250mg/l
200-400-800-1200-1600mg/l
500-1000-1500-2000-3000mg/l
0-10-50-100-250-500mg/l
0-3%
0-14PH

# Rapid Detection Series

Model	Name	Measuring range
LH2001	Ozone test kit	0.05-1mg/L
LH2002	Free chlorine test kit	0.05-1mg/L
LH2003	Residual chlorine test kit	0.1-2mg/L
LH2004	Total chlorine test kit	0.05-1mg/L
LH2005	Ozone(chlorine) test kit	0.05-1mg/L
LH2006	Chlorine Dioxide test kit	0.05-2mg/L
LH2007	Ammonia test kit	0.01-1.0mg/L
LH2008	Sulfide test kit	0.02-0.8mg/L
LH2009	Nitrite test kit	0.01-0.5mg/L
LH2011	Low hardness test kit	0.4-20mg/L
LH2012	Total hardness test kit LR	10-200mg/L
LH2013	Total hardness test kit HR	30-600mg/L
LH2014	Purified water Nitrite test kit	0.002mg/L
LH2015	Chloride test kit	20-400mg/L
LH2018	Alkalinity test kit LR	10-200mg/L
LH2019	Alkalinity test kit HR	100-2000mg/L
LH2020	Phosphorus test kit	0.03-0.5mg/L
LH2021	Total iron test kit	0.05-1mg/L
LH2022	Chromium(VI) test kit	0.05-1.0mg/L
LH2023	Copper test kit	0.2-5mg/L
LH2024	Manganese test kit	0.1-10mg/L
LH2025	Nickel test kit	0-0.40mg/L
LH2026	Arsenic test kit	0.004-0.08mg/L
LH2028	Aluminum test kit	0-0.20mg/L
LH2031	Fluorine test kit	0-1.5mg/L
LH2032	Urea test kit	0.5-8mg/L
LH2033	Chemical Oxygen Demand test kit	0-250mg/L
LH2034	Cyanide test kit	0.005-0.5mg/L
LH2037	Aquiculture Set	Ph,Ammonia,Nitrite,Sulfide,DO

Warm tips:other specifications can be customized according to the requests



Model	Name	Measuring range		
LH3001	COD test tube	0-60-120-200-250mg/L		
LH3002	COD test tube	0-100-200-300-500-800mg/L		
LH3003	Cyanide test tube	0.05-0.2-0.5-1-2-5mg/L		
LH3004	Zink test tube	0-0.5-1-2-5-10mg/L		
LH3005	Total phosphorous test tube	0.1-0.5-1-2-5-10mg/L		
LH3006	Total phosphorous test tube	0.5-1-3-5-10-20mg/L		
LH3007	Ozone test tube	0.05-0.1-0.2-0.5-1-2-5-10mg/L		
LH3008	Water hardness test tube	0-10-20-50-100-200mg/L		
LH3009	Nitrate test tube	1-2-5-10-20-45mg/L		
LH3010	Ammonia nitrogen test tube	0-0.5-1-2-5-10mg/L		
LH3011	Nitrite test tube	0-0.05-0.1-0.2-0.5-1-3mg/L		
LH3012	Formaldehyde test tube	0-0.1-0.5-1-2-5 mg/L		
LH3013	Peroxide test tube	0.02-0.1-0.2-0.5-1-5mg/L		
LH3014	peracetic acid test tube	0.1-0.2-0.5-1-2-5-10mg/L		
LH3015	Nickel test tube	0.1-0.2-0.5-1-2-5-10mg/L		
LH3016	Total chromium test tube	0.5-1-2-5-10-20mg/L		
LH3017	Chromium/Cr(VI) test tube	0.05-0.1-0.5-1-2-5mg/L		
LH3018	Arsenic test tube	0.2 -0.5-1-2-5 -10mg/L		
LH3019	Copper test tube	0.1-0.3-0.5-1-3-5mg/L		
LH3020	Cadmium test tube	0.1-0.3-0.5-1-3mg/L		
LH3021	Total iron test tube	0.2-0.5-1-2-5-10mg/L		
LH3022	Total iron test tube	0.03-2mg/L		

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Warm tips:other specifications can be customized according to the requests

# **Color Comparison Tube**