

Portable multi-parameter water quality Instruments

LH-C600



Product Introduction

Lianhua LH-C600 is a water quality instrument for outdoor detection of users. It uses a spectrophotometry method and built-in lithium batteries. It is an instrument that integrates colorimeter and reactor. 7 inch touch screen, built-in printer.

Features

- 1) More than 38 items: direct analysis of chemical oxygen demand (COD), ammonia nitrogen, total phosphorus, total nitrogen, suspended solids, color, turbidity, heavy metals, organic pollutants and inorganic pollutants, etc. direct reading;
- 2) 360° rotating colorimetry: support 25mm, 16mm colorimetric tube rotation colorimetric, support 10-30mm cuvette colorimetric;
- 3) Built-in curves: 600 curves, including 480 standard curves and 120 regression curves, which can be called as needed;
- 4) Calibration function: multi-point calibration, support for making standard curves; automatically save calibration records, which can be called directly;
- 5) Recent mode: Intelligent memory of the 8 most frequently used measurement modes recently, no need to manually add selection;
- 6) Dual temperature zone design: 6+6 dual temperature zone design, 165°C and 60°C are simultaneously operated without interfering with each other, and independent

work and colorimetry do not interfere with each other;

7) Permissions management: built-in administrators can set user permissions by themselves to facilitate management and ensure data security;

8) Portable in the field: Portable design, built-in lithium battery, with a professional accessory box, to achieve field measurement without power supply.

Specification

Name	Portable multi - parameter water quality analyzer					
Model	LH-C600					
Item	COD	Ammonia nitrogen	Total phosphorus	Total nitrogen	SS	Turbidity
Range	0-15000mg/L (subsection)	0— 160mg/L (subsection)	0— 100mg/L (subsection)	0— 150mg/L (subsection)	0.5-1000 mg/L	0.5-400 NTU
Measurement accuracy	COD<50mg/L,≤±10%	≤±5%	≤±5%	≤±5%	≤±5%	≤±5%
	COD>50mg/L,≤± 5%					
	COD>50mg/L,≤± 5%					
Limits of detection	0.1mg/L	0.01mg/L	0.002mg/L	0.1mg/L	1mg/L	0.5NTU
Determination time	20min	10~15min	35~50min	45-50min	1min	1min
Batch processing	12	no limit	12	12	no limit	no limit
Repeatability	≤±5%	≤±5%	≤±5%	≤±5%	≤±5%	≤±5%
Lamp life	100000 hours					
Optical stability	≤±0.001A/10min					
Anti chlorine interference	[Cl-]< 1000mg/Lhas no effect	—	—	—	—	—
	[Cl-]< 4000mg/L(optional)					
Colorimetric method	16mm/25mm Tube,10mm/30mm Cuvette					
Data storage	50 million					
Curve data	600					
Display mode	7-inch 1024×600 touch screen					
Communication interface	USB					
Digestion temperature	165℃±0.5℃	—	120℃±0.5℃	122℃±0.5℃	—	—
Digestion time	10min	—	30min	40min	—	—

Time switch	Automatic
Power supply	Power adapter/high energy battery / 220V ac power/car power supply
Reactor temperature range	RT \pm 5-190°C
Reactor Heating up time	Up to 165 degree in 10 minutes
Temperature indication error	$< \pm 2^{\circ}\text{C}$
Uniformity of temperature field	$\leq 2^{\circ}\text{C}$
Timing range	1-600 min
Timing accuracy	0.2 s/hour
Display screen	7-inch 1024×600 touch screen
Printer	Thermal Line Printer
Weight	Host:11.9Kg; Test box:7Kg
Size	Host: (430×345×188) mm;Experiment box: (479×387×155) mm
Ambient temperature and humidity	(5-40) °C, $\leq 85\%$ (no condensation)
Rated voltage	24V
Power consumption	180W

Measurement items(Others is 9-40)			
No.	Item name	Analysis method	Range (mg/L)
1	COD	Rapid digestion spectrophotometry	0-15000
2	Permanganate index	Potassium permanganate oxidation spectrophotometry	0.3-5
3	Ammonia Nitrogen - Nessler	Nessler's reagent spectrophotometry	0-160 (segmented)
4	Ammonia nitrogen-salicylic acid	Salicylic acid spectrophotometry	0.02-50

5	Total Phosphorus-Ammonium Molybdate	Ammonium molybdate spectrophotometry	0-12 (segmented)
6	Total phosphorus-vanadium molybdenum yellow	Vanadium molybdenum yellow spectrophotometry	2-100
7	Total nitrogen	Chromotropic Acid Spectrophotometry	0-150
8	Turbidity	Formazine spectrophotometry	0-400NTU
9	Chroma	Platinum cobalt color	0-500Hazen
10	Suspended solids	Direct colorimetry	0-1000
11	Copper	BCA photometry	0.02-50
12	Iron	o-phenanthroline spectrophotometry	0.01-50
13	Nickel	Diacetyl oxime spectrophotometry	0.1-40
14	Hexavalent chromium	Diphenylcarbazide spectrophotometry	0.01-10
15	Total chromium	Diphenylcarbazide spectrophotometry	0.01-10
16	Lead	Xylenol Orange Spectrophotometry	0.05-50
17	Zinc	Zinc reagent spectrophotometry	0.1-10
18	Cadmium	Dithizone spectrophotometry	0.1-5
19	Manganese	Potassium periodate spectrophotometry	0.01-50
20	Silver	Cadmium Reagent 2B Spectrophotometry	0.01-8
21	Antimony	5-Br-PADAP spectrophotometry	0.05-12
22	Cobalt	5-Chloro-2-(pyridylazo)-1,3-diaminobenzene spectrophotometry	0.05-20
23	Nitrate nitrogen	Chromotropic Acid Spectrophotometry	0.05-250
24	Nitrite nitrogen	Naphthylethylenediamine hydrochloride spectrophotometry	0.01-6
25	Sulfide	Methylene blue spectrophotometry	0.02-20
26	Sulfate	Barium chromate spectrophotometry	5-2500
27	Phosphate	Ammonium molybdate spectrophotometry	0-25
28	Fluoride	Fluorine Reagent Spectrophotometry	0.01-12

29	Cyanide	Barbituric acid spectrophotometry	0.004-5
30	Free chlorine	N,N-diethyl-1.4phenylenediamine spectrophotometry	0.1-15
31	Total chlorine	N,N-diethyl-1.4phenylenediamine spectrophotometry	0.1-15
32	Carbon dioxide	DPD spectrophotometry	0.1-50
33	Ozone	Indigo spectrophotometry	0.01-1.25
34	Silica	Silicon molybdenum blue spectrophotometry	0.05-40
35	Formaldehyde	Acetylacetone spectrophotometry	0.05-50
36	Aniline	Naphthylethylenediamine azo hydrochloride spectrophotometry	0.03-20
37	Nitrobenzene	Determination of total nitro compounds by spectrophotometric method	0.05-25
38	Volatile phenol	4-Aminoantipyrine spectrophotometry	0.01-25
39	Anionic surfactant	Methylene blue spectrophotometry	0.05-20
40	Trimethylhydrazine	Sodium ferrocyanide spectrophotometry	0.1-20