HI83099

COD Meter and Multiparameter Photometer

- Easy COD measurement
- Outstanding measurement quality
- Compact, multiparameter meter
- PC compatible
- 47 methods

The HI83099 is one of the most versatile photometers on the market. In addition to COD, this meter measures 44 of the most important water quality parameters using liquid or powder reagents. The amount of reagent is precisely dosed to ensure maximum reproducibility.

The HI83099 bench photometer can be connected to a PC via a USB cable. The optional HI92000 Windows® Compatible Software helps users manage their data.

The HI83099 features a powerful interactive user support to assist during each step of the analysis process. A tutorial mode is also available in the setup menu.

Specifications	HI83099
Light Source	tungsten lamps with narrow band interference filters
Light Life	the life of the instrument
Light Detector	silicon photocell
Environment	0 to 50°C (32 to 122°F); RH max 90% non-condensing
Power Supply	external 12 VDC power adapter or built-in rechargeable battery
Dimensions	235 x 200 x 110 mm (9.2 x 7.87 x 4.33")
Weight	0.9 kg (2 lbs.)
Ordering Information	**HI83099-01** (115V) and **HI83099-02** (230V) is supplied with glass cuvettes with caps (4), cell protective cap, batteries, 12 VDC adapter, sample preparation kit (for turbidity or concentrated samples), cloth for wiping cuvettes, 60mL glass bottle for DO analysis, scissors, and instructions.

ADP
Application Designed Photometers

COD Test	Range	Method	Reagent Code
COD LR	0 to 150 mg/L	dichromate EPA‡ dichromate mercury-free◊◊ dichromate ISO◊	**HI93754A-25** **HI93754D-25** **HI93754F-25**
COD MR	0 to 1500 mg/L	dichromate EPA‡ dichromate mercury-free◊◊ dichromate ISO◊	**HI93754B-25** **HI93754E-25** **HI93754G-25**
COD HR	0 to 15000 mg/L	dichromate	**HI93754C-25**

Water Quality Test	Range	Method	Reagent Code†
Alkalinity	0 to 500 mg/L (ppm) as $CaCO_3$	bromocresol green	**HI93755-01**
Aluminum	0.00 to 1.00 mg/L	aluminon	**HI93712-01**
Ammonia MR	0.00 to 10.00 mg/L	Nessler	**HI93715-01**
Ammonia LR	0.00 to 3.00 mg/L	Nessler	**HI93700-01**
Bromine	0.00 to 8.00 mg/L	DPD	**HI93716-01**
Calcium	0 to 400 mg/L	oxalate	**HI937521-01**
Chlorine Dioxide	0.00 to 2.00 mg/L	chlorophenol red	**HI93738-01**
Chlorine, Free	0.00 to 2.50 mg/L	DPD	**HI93701-01***
Chlorine, Total	0.00 to 3.50 mg/L	DPD	**HI93711-01***
Chromium VI HR	0 to 1000 µg/L	diphenylcarbohydrazide	**HI93723-01**
Chromium VI LR	0 to 300 µg/L	diphenylcarbohydrazide	**HI93749-01**
Color of Water	0 to 500 PCU	colorimetric platinum cobalt	–
Copper HR	0.00 to 5.00 mg/L	bicinchoninate	**HI93702-01**
Copper LR	0 to 1000 µg/L	bicinchoninate	**HI95747-01**
Cyanuric Acid	0 to 80 mg/L	turbidimetric	**HI93722-01**
Fluoride	0.00 to 2.00 mg/L	SPADNS	**HI93729-01**
Hardness, Calcium	0.00 to 2.70 mg/L	calmagite	**HI93720-01**
Hardness, Magnesium	0.00 to 2.00 mg/L	EDTA	**HI93719-01**
Hydrazine	0 to 400 µg/L	p-dimethylaminobenzaldehyde	**HI93704-01**
Iodine	0.0 to 12.5 mg/L	DPD	**HI93718-01**
Iron HR	0.00 to 5.00 mg/L	phenantroline	**HI93721-01**
Iron LR	0 to 400 µg/L	TPTZ	**HI93746-01**
Magnesium	0 to 150 mg/L	calmagite	**HI937520-01**
Manganese HR	0.0 to 20.0 mg/L	periodate	**HI93709-01**
Manganese LR	0 to 300 µg/L	PAN	**HI93748-01**
Molybdenum	0.0 to 40.0 mg/L	mercaptoacetic acid	**HI93730-01**
Nickel HR	0.00 to 7.00 g/L	photometric	**HI93726-01**
Nickel LR	0.000 mg/L to 1.000 mg/L	PAN	**HI93740-01**
Nitrate	0.0 to 30.0 mg/L	cadmium reduction	**HI93728-01**
Nitrite HR	0 to 150 mg/L	ferrous sulfate	**HI93708-01**
Nitrite LR	0.00 to 1.15 mg/L	diazotization	**HI93707-01**
Oxygen, Dissolved (DO)	0.0 to 10.0 mg/L	Winkler	**HI93732-01**
Ozone	0.00 to 2.00 mg/L	DPD	**HI93757-01**
pH	6.5 to 8.5 pH	phenol red	**HI93710-01**
Phosphate HR	0.0 to 30.0 mg/L	amino acid	**HI93717-01**
Phosphate LR	0.00 to 2.50 mg/L	ascorbic acid	**HI93713-01**
Phosphorus	0.0 to 15.0 mg/L	amino acid	**HI93706-01**
Potassium HR	20 to 200 mg/L	turbidimetric tetraphenylborate	**HI93750-01**
Potassium MR	10 to 100 mg/L	turbidimetric tetraphenylborate	**HI93750-01**
Potassium LR	0.0 to 20.0 mg/L	turbidimetric tetraphenylborate	**HI93750-01**
Silica	0.00 to 2.00 mg/L	heteropoly blue	**HI93705-01**
Silver	0.000 to 1.000 mg/L	PAN	**HI93737-01**
Sulfate	0 to 150 mg/L	turbidimetric	**HI93751-01**
Zinc	0.00 to 3.00 mg/L	zincon	**HI93731-01**

HI3898

Chloride Test Kit

Quick Chloride Tests

The HI3898 is a chloride concentration test kit developed according to the ISO 15705:2002 method.

This very important test is recommended by ISO, since an excessive presence of chloride can interfere with the COD analysis.

This test gives a fast YES/NO reply to the question if chloride will interfere with the COD analysis. If chloride concentration is greater than the official maximum level, the solution turns yellow and the sample needs to be diluted before performing the COD test, otherwise if the solution is orange-brown, the sample doesn't need to be diluted.

The maximum level allowed is 1000 ppm of Cl^- following ISO methods, or 2000 ppm of Cl^- for US EPA, APHA, AWWA and WEF methods.

Specifications	HI3898
Range	1000 ppm Cl^- (ISO) 2000 ppm Cl^- (EPA)
Analysis Method	visual evaluation
Sample Volume	2 mL
Number of Tests	100
Dimensions	120 x 110 x 90 mm (4.7 x 4.3 x 3.5")
Weight	200 g (7.0 oz.)

Ordering Information

HI3898 is supplied with 25 mL chloride titrant (4), chloride Indicator 7 mL (1), glass cuvette with plastic stopper (1) and calibrated syringe with tip (2).

Notes:
‡ Method with chromium-sulfuric acid is officially recognized by EPA for wastewater analysis.
◊ The HI93754F-25 and HI93754G-25 method follows the official method ISO 15705.
◊◊ This method is recommended for general purpose analysis with no chloride interference.
* For Chlorine, liquid reagents also available.