



HI97106  
**Chemical Oxygen Demand  
Portable Photometer**

Low, Medium, High, Ultra High Range



HI97106

# Chemical Oxygen Demand Portable Photometer

Low, Medium, High, Ultra High Range

The HI97106 is a waterproof portable photometer with an advanced optical system that uses a Light Emitting Diode and a narrow band interference filter for accurate, repeatable readings. The optical system is sealed from outside dust, dirt, and water.

The meter uses an exclusive positive-locking system to ensure that the vials are placed into the holder in the same position every time.

With the CAL Check™ functionality, users are able to validate instrument performance at any time. Hanna Instruments® CAL Check cuvettes are certified against NIST-traceable reference instrument(s).

The built-in tutorial mode guides users step-by-step through the measurement process. The tutorial mode includes all steps required for sample preparation, the required reagents, and quantities.

The instrument is a compact and versatile photometer designed to accurately determine chemical oxygen demand.

Suitable for field or bench measurements, the photometer features:

- Sophisticated optical system
- Waterproof IP67, floating case
- Backlit LCD
  - The 128 x 64 Pixel LCD allows for a simplified user interface.
- Meter validation using certified CAL Check cuvettes
- Tutorial mode guides the user step-by-step
- Includes auto-data logging features to easily record water testing results
- Battery status indicator and auto-shut off
  - The auto-off feature automatically shuts off the meter after 15 minutes of inactivity in order to conserve battery life.
- Compact size
  - Measures 142.5 mm (5.6") x 102.5 mm (4") and only 50.5 mm (2") thick.

## Features

### Method and Parameter

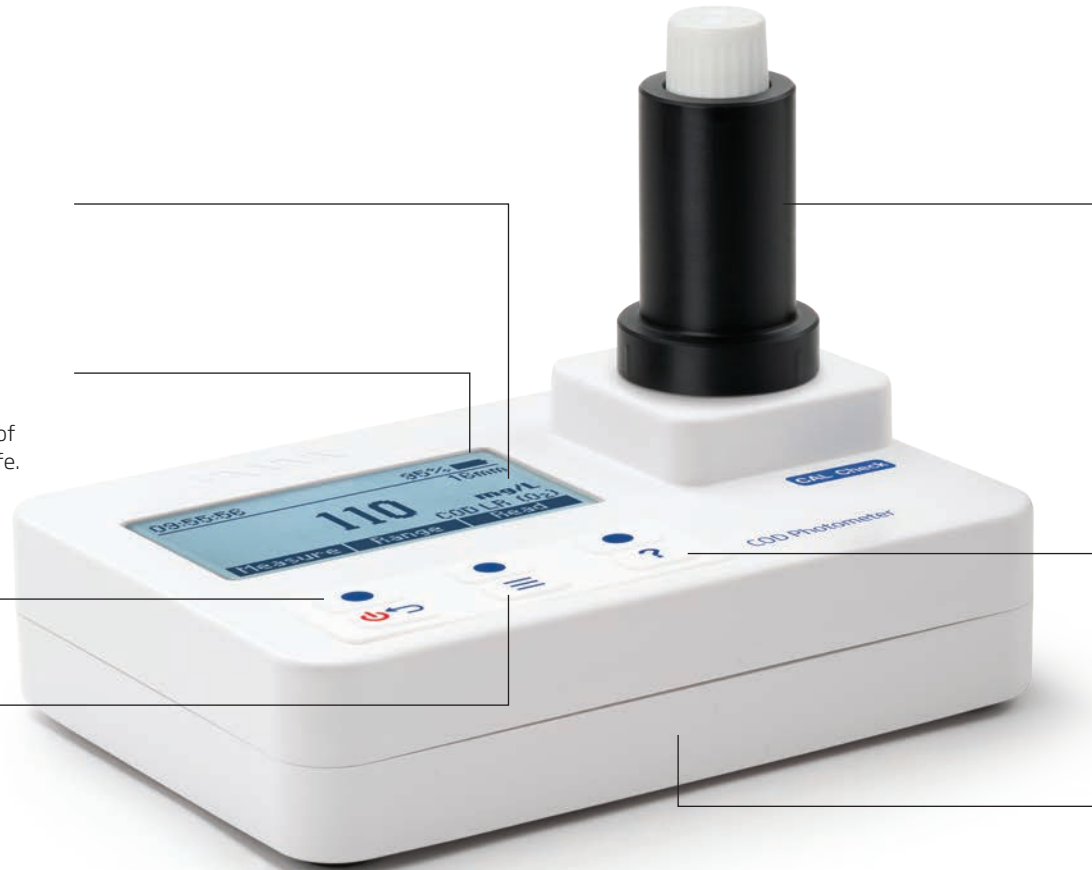
Chosen parameter and method used is displayed along with the reading.

### Battery status indicator and auto-shut off

The auto-off feature automatically shuts off the meter after 15 minutes of inactivity in order conserve battery life.

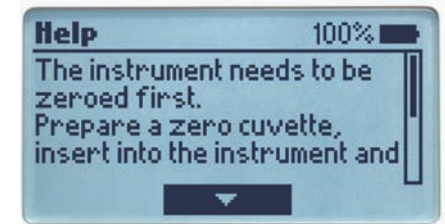
### Virtual keys

### Menu available at the touch of a button



### Removable vial adapter

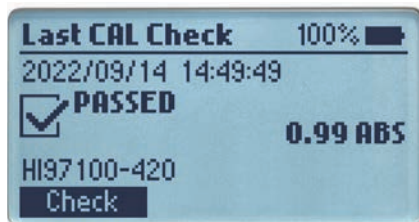
The vial adapter can be removed to accommodate HI97106-11 CAL Check™ cuvettes for validation.



### Dedicated help

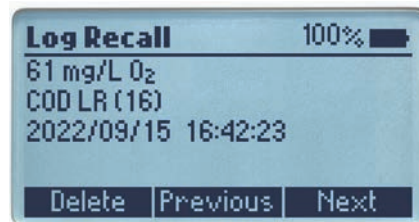
A dedicated help key provides information relating to the current meter operation, and can be used at any stage in the setup or measurement process to show contextual help.

### Waterproof and floating, IP67 meter design



### CAL Check™ validation

Validate instrument performance at any time using CAL Check cuvettes made with NIST traceable standards.



### Auto-data logging

Data autolog helps users keep track of all measurements. Data is automatically saved every time a measurement is made.

The data log can hold 200 individual measurements. When the data log is full, the meter will rewrite the oldest data point.



### Setup Menu

Setup options for meter personalization include date and time format, language, and enabling the tutorial mode.



### On-Screen tutorials

Step-by-step on-screen guidance.

## Specifications

## HI97106

Chemical Oxygen Demand LR	Range	0 to 150 mg/L (as O <sub>2</sub> )		
	Resolution	1 mg/L		
	Accuracy	±5 mg/L or ±4 % of reading at 25 °C, whichever is greater		
	Method	Adaptation of the US EPA 410.4 Approved Method for the COD Determination on Surface Waters and Wastewaters		
	LED	420 nm		
Chemical Oxygen Demand MR	Range	0 to 1500 mg/L (as O <sub>2</sub> )		
	Resolution	1 mg/L		
	Accuracy	±15 mg/L or ±4 % of reading at 25 °C, whichever is greater		
	Method	Adaptation of the US EPA 410.4 Approved Method for the COD Determination on Surface Waters and Wastewaters		
	LED	610 nm		
Chemical Oxygen Demand HR	Range	0 to 15000 mg/L (as O <sub>2</sub> )		
	Resolution	1 mg/L		
	Accuracy	±150 mg/L or ±2 % of reading at 25 °C, whichever is greater		
	Method	Adaptation of the US EPA 410.4 Approved Method for the COD Determination on Surface Waters and Wastewaters		
	LED	610 nm		
Chemical Oxygen Demand UHR	Range	0 to 60.0 g/L (as O <sub>2</sub> )		
	Resolution	0.1 g/L		
	Accuracy	±0.5 g/L ±3 % of reading at 25 °C		
	Method	Adaptation of the US EPA 410.4 Approved Method for the COD Determination on Surface Waters and Wastewaters		
	LED	610 nm		
Measurement system	Light source	LED		
	Bandpass filter	wavelength	420 nm & 610 nm	
		bandwidth	8 nm	
		wavelength accuracy	±1.0 nm	
	Light detector	silicon photocell		
	Cuvette Type	round, 16 mm diameter		
Photometer Specifications	Auto logging	200 readings		
	Display	128 x 64 pixel B/W LCD with backlight		
	Auto-off	After 15 minutes of inactivity (after 30 minutes of inactivity if a Zero has been done but not a Read)		
	Battery type / Life	1.5 V AA alkaline (3 pcs.) / > 10000 measurements (without backlight)		
	Environment	0 to 50 °C (32 to 122 °F); 0 to 100 % RH, non-serviceable		
	Dimensions	142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")		
	Weight	380 g (13.4 oz.); with batteries		
	Casing	IP67 rating, floating		
Ordering Information	<b>HI97106</b> is supplied with adapter for 16 mm vial, 1.5V AA Alkaline batteries (3 pcs.), instrument quality certificate, and quick reference guide with instructions for manual download.			
Reagents, Standards, and Accessories	<b>HI97106-11</b> CAL Check™ standards for HI97106	<b>HI93754C-25</b> Reagents High Range for 25 tests	<b>HI93754F-25</b> Reagents ISO Low Range for 25 tests	
	<b>HI93754A-25</b> Reagents EPA Low Range for 25 tests	<b>HI93754D-25</b> Reagents Hg Free Low Range for 25 tests	<b>HI93754G-25</b> Reagents ISO Medium Range for 25 tests	
	<b>HI93754B-25</b> Reagents EPA Medium Range for 25 tests	<b>HI93754E-25</b> Reagents Hg Free Medium Range for 25 tests	<b>HI93754J-25</b> Reagents Ultra High Range for 25 tests	