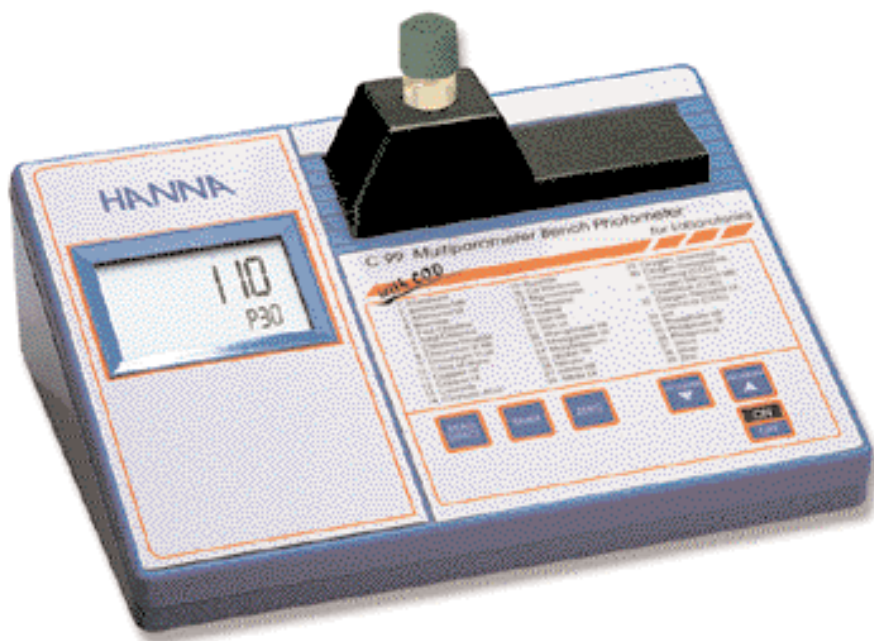


## C 99 Meter for COD and 36 Additional Parameters



This compact photometer operates in three different ranges to cover virtually every COD application: 0-150 mg/L, 0-1500 mg/L and 0-15000 mg/L.

The **HI 83099** meets the design requirements of USEPA 410.4, guaranteeing high quality measurements to be used for reporting purposes.

The **HI 83099** can be operated manually or from the PC via a built-in RS232 port and data can be downloaded for analysis and documentation purposes with the **HI 92000** application software.

- **Easy COD measurement**

The **HI 83099** multi-parameter photometer is pre-calibrated to measure COD levels at three ranges at the touch of a key pad. Simply use the scroll button to select the desired range and begin reading. The **HI 83099** automatically selects the correct wavelength for the chosen range.

- **Outstanding measurement quality**

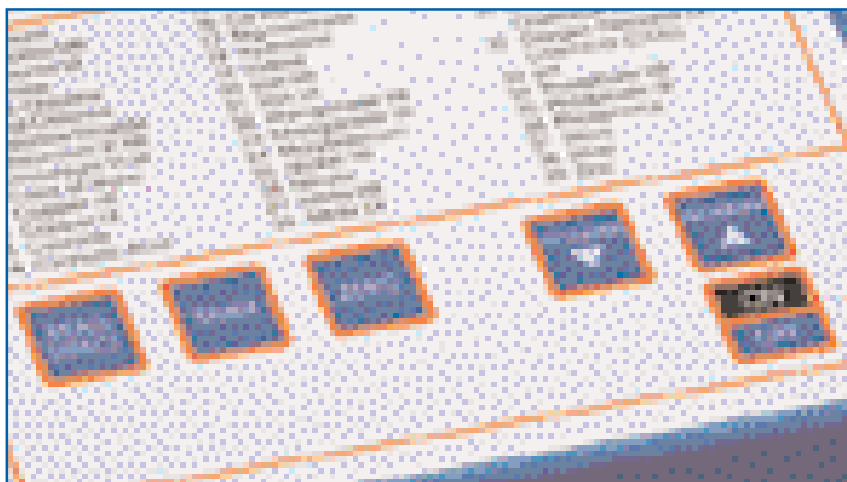
The **HI 83099** employs an advanced optical system, assuring high accuracy measurements in the entire measurement range. The optics combine the power of a miniature light source with the precision of a narrow band interference filter.

- **Save space in your laboratory**

The compact size of the **HI 83099** photometer allows the user to eliminate the clutter of bulkier and more costly spectrophotometers currently being used. Measuring 23 x 17 x 7 cm and weighing less than 700 grams, the **HI 83099** can be easily transported from place to place.

### Specifications

HI 83099	
Light source	4 tungsten lamps with narrow-band interference filters at 420/525/575/610 nm
Light detector	4 silicon photocells
Power supply	2 x 9V batteries or 12 Vdc adapter
Auto-off	after 10 minutes of non-use
Environment	0 to 50°C (32 to 122°F); RH max 95%
Dimensions	230 x 165 x 70 mm
Weight	640 g (1.4 lb.)



## C 99 Complete Laboratory at your Fingertips

HI 83099 is one of the most versatile photometers on the market. In addition to COD, this meter measures up to 36 of the most important water quality parameters.

The HI 83099 runs for hours on two common 9V batteries. In addition, it can operate continuously with input voltage of 12-20 Vdc.

HI 83099 is extremely simple to use. The front mask lists all the parameters in a numerical order and the display shows the same numbers for a quick reference during testing.

The meter can be zeroed in seconds and the reagents cost much less than what you have been used to paying.

All this and much more at a fraction of the cost of expensive and complex spectrophotometers!

Parameter	Range	Method	Reagent Code*****
Alluminum	0.00 to 1.00 mg/L	Aluminon	HI 93712-01
Ammonia LR	0.00 to 3.00 mg/L	Nessler	HI 93700-01
Ammonia MR	0.00 to 9.99 mg/L	Nessler	HI 93715-01
Bromine	0.00 to 8.00 mg/L	DPD	HI 93716-01
Chlorine, free****	0.00 to 2.50 mg/L	DPD	HI 93701-01
Chlorine, total****	0.00 to 3.50 mg/L	DPD	HI 93711-01
Chlorine dioxide	0.00 to 2.00 mg/L	Chlorophenol red	HI 93738-01
Chromium VI LR	0 to 300 µg/L	Diphenylcarbohydrazine	HI 93749-01
Chromium VI HR	0 to 1000 µg/L	Diphenylcarbohydrazine	HI 93723-01
COD LR	0 to 150 mg/L	Dichromate EPA*	HI 93754A-25
		Dichromate Hg-free***	HI 93754D-25
		Dichromate ISO**	HI 93754F-25
COD MR	0 to 1500 mg/L	Dichromate EPA*	HI 93754B-25
		Dichromate Hg-free***	HI 93754E-25
	0 to 1000 mg/L	Dichromate ISO**	HI 93754G-25
COD HR	0 to 15000 mg/L	Dichromate	HI 93754C-25
Color	0 to 500 PCU	Platinum Cobalt	—
Copper LR	0 to 990 µg/L	Bicinchoninate	HI 95747-01
Copper HR	0.00 to 5.00 mg/L	Bicinchoninate	HI 93702-01
Cyanide	0.000 to 0.200 mg/L	Pyridine-Pyrazolone	HI 93714-01
Cyanuric acid	0 to 80 mg/L	Turbidimetric	HI 93722-01
Fluoride	0.00 to 2.00 mg/L	SPADNS	HI 93729-01
Hardness (Calcium)	0.00 to 2.70 mg/L	Calmagite	HI 93720-01
Hardness (Magnesium)	0.00 to 2.00 mg/L	EDTA	HI 93719-01
Hydrazine	0 to 400 µg/L	p-Dimethylaminobenzaldehyde	HI 93704-01
Iodine	0.0 to 12.5 mg/L	DPD	HI 93718-01
Iron LR	0 to 400 µg/L	TPTZ	HI 93746-01
Iron HR	0.00 to 5.00 mg/L	Phenantroline	HI 93721-01
Manganese HR	0.0 to 20.0 mg/L	Periodate oxidation	HI 93709-01
Manganese LR	0 to 300 µg/L	PAN	HI 93748-01
Molybdenum	0.0 to 40.0 mg/L	Mercaptoacetic acid	HI 93730-01
Nickel HR	0.00 to 7.00 g/L	Photometric	HI 93726-01
Nitrate	0.0 to 30.0 mg/L	Cadmium reduction	HI 93728-01
Nitrite LR	0.00 to 0.35 mg/L	Diazotation	HI 93707-01
Nitrite HR	0 to 150 mg/L	Ferrous sulfate	HI 93708-01
Oxygen, dissolved	0.0 to 10.0 mg/L	Winkler	HI 93732-01
pH	6.5 to 8.5 pH	Phenol red	HI 93710-01
Phosphate LR	0.00 to 2.50 mg/L	Ascorbic acid	HI 93713-01
Phosphate HR	0.0 to 30.0 mg/L	Amino acid	HI 93717-01
Phosphorus	0.0 to 15.0 mg/L	Amino acid	HI 93706-01
Silica	0.00 to 2.00 mg/L	Dimolybdate	HI 93705-01
Silver	0.000 to 1.000 mg/L	PAN	HI 93737-01
Zinc	0.00 to 3.00 mg/L	Zincon	HI 93731-01

Notes:

- \* Method with chromium-sulfuric acid is officially recognized by EPA for wastewater analysis.
- \*\* The HI 93754F-25 and HI 93754G-25 method follows the official method ISO 15705.
- \*\*\* This method is recommended for general purpose analysis with no chloride interference.
- \*\*\*\*\* For chlorine analysis, liquid reagents are also available, see section V.

### Ordering Information

HI 83099 is supplied complete with 3 glass cuvetts, cell protective cap, batteries, 12 Vdc adapter and instructions.

### Accessories

- HI 92000 Windows® compatible application software
- HI 920010 Serial cable for PC connection
- HI 3898 Test kit for fast analysis of chloride concentration