



HI 83214 COD Meter for Wastewater Analysis

9

PHOTOMETERS

Great Feature Set for Wastewater Professionals

• Easy COD measurement

HI 83214 multi-parameter photometer is pre-calibrated to measure COD levels at three ranges at the touch of a key pad.

• Outstanding measurement quality

HI 83214 employs an advanced optical system, assuring high accuracy measurements throughout the entire range.

• Save space in your laboratory.

The compact size of the HI 83214 photometer allows the user to eliminate the clutter of bulkier and more costly spectrophotometers.



ORDERING INFORMATION

HI 83214-01 (115V) and **HI 83214-02** (230V) is supplied with glass cuvetts (5), batteries, 12 Vdc adapter and instructions

SOLUTIONS

HI 93703-50 Cuvet cleaning solution, 250 mL

ACCESSORIES

HI 3898	Test kit for fast analysis of chloride concentration
HI 839800-01	HANNA reactor (115 Vac)
HI 839800-02	HANNA reactor (230 Vac)
HI 151-00	Thermometer with stainless steel probe
HI 710005	115 Vac/12 Vdc pwr adapter (US)
HI 710006	230 Vac/12 Vdc pwr adapter (EURO)
HI 731311	Cuvetts with caps for HI 83214
HI 731318	Cuvet cleaning cloth (4)
HI 731321	Measurement cuvet (4)
HI 731325N	Cuvet cap (4)
HI 731340	200 µL automatic pipette
HI 731341	1000 µL automatic pipette
HI 731342	2000 µL automatic pipette
HI 731350	Tips for 200 µL automatic pipette (25)
HI 731351	Tip for 1000 µL automatic pipette (25)
HI 731352	Tip for 2000 µL automatic pipette (4)
HI 740216	Test tube cooling rack (25 tube capacity)
HI 740217	Laboratory bench safety shield
HI 740219	COD test tube adapter for HI 83099
HI 92000	Windows® compatible application software
HI 920010	Serial cable for PC connection (9 pin)

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

A Complete Wastewater Analysis System

The HI 83214 multi-parameter photometer is a compact instrument featuring different ranges and methods, suitable for a wide range of applications.

HI 83214 is designed and built to perform COD analysis in accordance with EPA 410.4 and ISO 15705:2002 standards. Ensuring accurate and repeatable results, it is the ideal tool for documenting waste treatment processes.

Besides the fundamental parameter of COD, HI 83214 also measures total ammonia, free and total chlorine, nitrate, nitrogen and total reactive phosphorus.

HI 83214 allows for a complete wastewater analysis in a single powerful instrument.

SPECIFICATIONS

Light Source	3 tungsten lamps with narrow band interference filters at 420/525/610 nm
Light Detector	3 Silicon Photocells
Power Supply	(2) 9V battery or 12 Vdc adapter
Auto-off	after 10 minutes of non-use
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing
Dimensions	230 x 165 x 70 mm (9 x 6.5 x 2.8")
Weight	640 g (22.6 oz.)

PARAMETER	RANGE	METHOD	REAGENT CODE
Ammonia, LR	0.00 to 3.00 mg/L	Nessler	HI 93764A-25
Ammonia, HR	0 to 100 mg/L	Nessler	HI 93764B-25
Chlorine, free	0.00 to 5.00 mg/L	DPD	HI 93701-01, HI 93701-03
Chlorine, total	0.00 to 5.00 mg/L	DPD	HI 93711-01, HI 93711-03
Nitrate	0.0 to 30.0 mg/L	Chromotropic acid	HI 93766-50
Nitrogen, total	0.0 to 25.0 mg/L	Chromotropic acid	HI 93767A-50
Nitrogen, total HR	10 to 150 mg/L	Chromotropic acid	HI 93767B-50
COD LR, EPA*	0 to 150 mg/L	Dichromate	HI 93754A-25
COD MR, EPA*	0 to 1500 mg/L	Dichromate	HI 93754B-25
COD HR	0 to 15000 mg/L	Dichromate	HI 93754C-25
COD LR, Mercury-free†	0 to 150 mg/L	Dichromate, mercury-free	HI 93754D-25
COD MR, Mercury-free†	0 to 1500 mg/L	Dichromate, mercury-free	HI 93754E-25
COD LR, ISO**	0 to 150 mg/L	Dichromate	HI 93754F-25
COD MR, ISO**	0 to 1000 mg/L	Dichromate	HI 93754G-25
Phosphorus, reactive	0.00 to 5.00 mg/L	Ascorbic acid	HI 93758A-50
Phosphorus, acid hydrolyzable	0.00 to 5.00 mg/L	Ascorbic acid	HI 93758B-50
Phosphorus, total	0.00 to 3.50 mg/L	Ascorbic acid	HI 93758C-50
Phosphorus, reactive HR	0.0 to 100.0 mg/L	Vanadomolybdophosphoric acid	HI 93763A-50
Phosphorus, total HR	0.0 to 100.0 mg/L	Vanadomolybdophosphoric acid	HI 93763B-50