

HI83214

# COD Meter and Multiparameter Photometer

for Wastewater Analysis

- **Easy COD measurement**
  - The HI83214 multiparameter photometer is pre-calibrated to measure COD levels at three ranges at the touch of a button
- **Outstanding measurement quality**
  - An advanced optical system assures high accuracy measurements throughout the entire range
- **Save space in your laboratory.**
  - The compact size of the HI83214 allows users to eliminate the clutter of bulky and costly spectrophotometers

The HI83214 multiparameter photometer is a compact instrument featuring different ranges and methods, suitable for a wide range of applications.

The HI83214 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, HI83214 also measures total ammonia, free and total chlorine, nitrate, nitrogen and total reactive phosphorus.

The HI83214 allows for a complete wastewater analysis in a single, powerful instrument.



## Specifications

### HI83214

Light Source	tungsten lamps with narrow-band interference filters
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.)

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

Parameter	Range	Method	Reagent Code
Ammonia, LR	0,00 to 3,00 mg/L	Nessler	HI93764A-25
Ammonia, HR	0 to 100 mg/L	Nessler	HI93764B-25
Chlorine, Free	0,00 to 5,00 mg/L	DPD	HI93701-01, HI93701-03
Chlorine, Total	0,00 to 5,00 mg/L	DPD	HI93711-01, HI93711-03
Nitrate	0,0 to 30,0 mg/L	chromotropic acid	HI93766-50
Nitrogen, Total	0,0 to 25,0 mg/L	chromotropic acid	HI93767A-50
Nitrogen, Total HR	10 to 150 mg/L	chromotropic acid	HI93767B-50
Phosphorus, Reactive	0,00 to 5,00 mg/L	ascorbic acid	HI93758A-50
Phosphorus, Acid Hydrolyzable	0,00 to 5,00 mg/L	ascorbic acid	HI93758B-50
Phosphorus, Total	0,00 to 3,50 mg/L	ascorbic acid	HI93758C-50
Phosphorus, Reactive HR	0,0 to 100,0 mg/L	vanadomolybdophosphoric acid	HI93763A-50
Phosphorus, Total HR	0,0 to 100,0 mg/L	vanadomolybdophosphoric acid	HI93763B-50

## Ordering Information

HI83214-01 (115V) and HI83214-02 (230V) is supplied with glass cuvettes (5), 9V batteries (2), 12 VDC adapter and instructions



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.