

Copper Portable Photometers

- CAL CHECK™
- User calibration
- Certified calibration and verification standards
- BEPS (Battery Error Prevention System)
- TIMER function
- Auto shut-off
- GLP Features

HI 96747 is a auto-diagnostic photometer engineered to measure a wide range of copper concentrations. Due to the specially formulated powder reagent with long-term stability, copper analysis is possible even where iron and calcium is present, such as in sea water.

The HI 96702 meter measures the copper content in water and wastewater.

Both meters use an exclusive positive-locking system to ensure that the cuvette is in the same position every time it is placed into the measurement cell. It is designed to fit a cuvette with a larger neck making it easier to add both sample and reagents. The cuvette is made from special optical glass to obtain best results.



Copper is one of the most abundant metals in the earth's crust. Because of its malleability, thermal and electrical conductivity, corrosion resistance, and other useful qualities, it is used in a large variety of industrial and technological applications.

Copper is found in effluents and natural water both as suspended solids and salt. A high concentration is toxic for plants and animals, which accounts for its rigorous monitoring by the authorities and industry. Lower concentrations are often employed to contain the growth of plankton and algae.

ORDERING INFORMATION

HI 96747 and HI 96702 are supplied with sample cuvettes (2) with caps, 9V battery and instruction manual.

CAL CHECK™ standards and testing reagents sold separately

HI 96747C and HI 96702C include photometer, sample cuvettes (2) with caps, 9V battery, scissors, cuvette cleaning cloth, instrument quality certificate, instruction manual and rigid carrying case.

CAL CHECK™ standards and testing reagents sold separately

REAGENTS AND STANDARDS

HI 96747	
HI 96747-11	CAL CHECK™ standard cuvettes
HI 95747-01	Reagents for 100 tests
HI 95747-03	Reagents for 300 tests
HI 96702	
HI 96702-11	CAL CHECK™ standard cuvettes
HI 93702-01	Reagents for 100 tests
HI 93702-03	Reagents for 300 tests

SPECIFICATIONS	HI 96747 Copper, Low Range	HI 96702 Copper, High Range
Range	0.000 to 1.500 mg/L (ppm)	0.00 to 5.00 mg/L (ppm)
Resolution	0.001 mg/L (ppm)	0.01 mg/L (ppm)
Accuracy @ 25°C (77°F)	±0.010 mg/L ±5% of reading	±0.02 mg/L ± 4% of reading
Light Source	tungsten lamp	
Light Detector	silicon photocell with narrow band interference filter @ 560 nm	silicon photocell with narrow band interference filter @ 575 nm
Power Supply	9V battery	
Auto-off	after ten minutes of non-use in measurement mode; after one hour of non-use in calibration mode; with last reading reminder	
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing	
Dimensions	192 x 104 x 69 mm (7.6 x 4.1 x 2.7")	
Weight	360 g (12.7 oz.)	
Method	adaptation of the USEPA approved bicinchoninate method	

The reagents are in powder form and are supplied in packets. The amount of reagent is precisely dosed to ensure the maximum repeatability.

For a complete list of Reagents, see Reagents Section 18.