

## Chlorine, Total Portable Photometers

10

## PHOTOMETERS



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

The HI 96711 meter measures the free and total chlorine ( $\text{Cl}_2$ ) content in water and wastewater. The HI 96761 meter measures the traces of total chlorine ( $\text{Cl}_2$ ) content in drinking water samples.

This meter uses an exclusive positive-locking system to ensure that the cuvette is in the same place every time it is placed into the measurement cell.

Chlorine is integrated into water supplies in its molecular form for the purpose of destroying unwanted microorganisms. Once introduced to the water, chlorine will form into three different forms; free chlorine, hypochlorous acid, and hypochlorous ions. Free chlorine will combine itself with ammonia and nitrogen compounds, creating combined chlorine. When chlorine and ammonia combine, it creates chloramines (monochloramine, dichloramine, and nitrogen trichloride). Proper testing should be administered when chlorinating any water supply, as potentially harmful compounds such as chloroform may be formed. N, N-diethyl-p-phenylenediamine (DPD) as well as other methods are available for measuring total residual chlorine.

## ORDERING INFORMATION

HI 96711 and HI 96761 are supplied with sample cuvettes (2) with caps, 9V battery and instruction manual.

UL 0-400°C standards and testing reagents sold separately

HI 96711C and HI 96761C include photometer, sample cuvettes (2) with caps, 9V battery, scissors, cuvette cleaning cloth, instrument quality certificate, instruction manual and rigid carrying case.

UL 0-400°C standards and testing reagents sold separately

## REAGENTS AND STANDARDS

HI 96711	
HI 95701-11	CAL CHECK™ standard cuvettes
HI 93701-01	Reagents for 100 tests
HI 93701-03	Reagents for 300 tests
HI 96711-11	CAL CHECK™ standard cuvettes
HI 93711-01	Reagents for 100 tests
HI 93711-03	Reagents for 300 tests
HI 96761	
HI 96761-11	CAL CHECK™ Standard cuvettes
HI 95761-01	Reagents for 100 tests
HI 95761-03	Reagents for 300 tests

SPECIFICATIONS	HI 96711 Chlorine, Free and Total	HI 96761 Chlorine, Total Low Range
Range	0.00 to 5.00 mg/L (ppm)	0.000 to 0.500 mg/L (ppm)
Resolution	0.01 mg/L from 0.00 to 3.50 mg/L (ppm); 0.10 mg/L above 3.50 mg/L (ppm)	0.001 mg/L (ppm)
Accuracy @ 25°C (77°F)	±0.03 mg/L ±3% of reading	±0.020 mg/L ±3% of reading
Light Source	tungsten lamp	
Light Detector	silicon photocell with narrow band interference filter @ 525 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 method 330.5 and Standard Method 4500-ClG	

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