



HI96705 • HI96770 Silica Portable Photometers

- **CAL Check™**
 - Enables users to check validity of calibration
- **BEPS**
 - Alerts the user of low battery power that could adversely affect reading
- **GLP Features**
 - Meets Good Laboratory Practices

Silica is found in all natural waters in the dissolved mineral form. Silica is only slightly soluble in water; solubility, and therefore the form of silica in water, depends on the pH level of the water and on the minerals containing silica in contact with water.

Silica's presence in industrial applications is undesirable since it causes scaling. In particular, high pressure turbines are highly affected by this factor. Heating systems and reverse osmosis plants also require monitoring of silica.

The HI96705 meter measures the silica (SiO₂) content in water and wastewater in the 0.00 to 2.00 mg/L (ppm) range. The HI96770 measures silica (SiO₂) content from 0 to 200 mg/L (ppm).

Specifications	HI96705 Silica	HI96770 Silica HR
Range	0.00 to 2.00 mg/L (ppm)	0 to 200 mg/L (ppm)
Resolution	0.01 mg/L	1 mg/L
Accuracy @ 25°C (77°F)	±0.03 mg/L ±3% of reading	±1 mg/L ±5% of reading
Light Source	tungsten lamp	light emitting diode
Light Detector	silicon photocell with narrow band interference filter @ 610 nm	silicon photocell with narrow band interference filter @ 466 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	193 x 104 x 69 mm (7.6 x 4.1 x 2.7")	
Weight	360 g (12.7 oz.)	
Method	adaptation of the ASTM D859, heteropoly blue method	adaptation of the USEPA method 370.1 for drinking, surface and saline waters, domestic and industrial wastes and Standard Method 4500-SiO ₂ C
Ordering Information	<p>HI96705 and HI96770 are supplied with sample cuvettes (2) with caps, 9V battery, instrument quality certificate and instructions. CAL Check™ standards and testing reagents sold separately</p> <p>HI96705C and HI96770C include photometer, CAL Check™ standards, sample cuvettes (2) with caps, 9V battery, scissors, cuvette wiping cloth, instrument quality certificate, instruction manual and rigid carrying case. Reagents sold separately</p>	
Reagents and Standards	HI96705	<p>HI96705-11 CAL Check™ standard cuvettes</p> <p>HI93705-01 reagents for 100 tests</p> <p>HI93705-03 reagents for 300 tests</p>
	HI96770	<p>HI96770-11 CAL Check™ standard cuvettes</p> <p>HI93770-01 reagents for 100 tests</p> <p>HI96770-03 reagents for 300 tests</p>

Standard reagents begin on page 10.70; CAL Check™ standard reagents begin on page 10.71

