

HI 96705 • HI 96770

Silica Portable Photometers

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

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 scale. In particular, high pressure turbines are highly effected by this factor.

Heating systems and reverse osmosis plants also require monitoring of silica.

The HI 96705 meter measures the silica (SiO_2) content in water and wastewater in the 0.00 to 2.00 mg/L (ppm) range. HI 96770 measures silica (SiO_2) content from 0 to 200 mg/L.



ORDERING INFORMATION

HI 96705 and HI 96770 are supplied with sample cuvettes (2) with caps, 9V battery and instructions.

GLP CHECK™ standards and testing reagents sold separately.

HI 96705C and HI 96770C include photometric sample cuvettes (2) with caps, 9V battery, scissors, cuvette cleaning cloth, instrument quality certificate, instruction manual and rigid carrying case.

GLP CHECK™ standards and testing reagents sold separately.

REAGENTS AND STANDARDS

For HI 96705

HI 96705-11 CAL CHECK™ standard cuvettes

HI 93705-01 Reagents for 100 tests

HI 93705-03 Reagents for 300 tests

For HI 96770

HI 96770-11 CAL CHECK™ standard cuvettes

HI 96770-01 Reagents for 100 tests

HI 96770-03 Reagents for 300 tests

SPECIFICATIONS	HI 96705 Silica	HI 96770 Silica HR
Range	0.00 to 2.00 mg/L (ppm)	0 to 200 mg/L (as SiO_2)
Resolution	0.01 mg/L (ppm)	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	192 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 method of 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

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

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