HI96700 · HI96715 · HI96733

Ammonia Portable Photometers

- CAL Check™
  - Allows for performance verification and calibration of the meter using NIST traceable standards.
- GLP
  - Review of the last calibration date.
- Auto-shut off
  - Automatic shut off after 10 minutes of non-use when the meter is in measurement mode. Prevents wastage of batteries in the event the meter is accidentally left on.
- Battery status indicator
  - Indicates the amount of battery life left.
- Built-in timer
  - Display of time remaining before a measurement is taken. Ensures that all readings are taken at the appropriate reaction intervals for the test being performed.
- Error messages
  - Messages on display alerting to problems including no cap, high zero, and standard too low.
- Cooling lamp indicator
  - To maintain the desirable wavelength to be used for absorbance, it is necessary to ensure components are not overheated from the heat generated by the tungsten lamp. Each photometer is designed to allow a minimal amount of time for components to cool. The cooling lamp indicator is displayed prior to a reading being taken.
- Units of measure
  - Appropriate unit of measure is displayed along with reading.

Specifications	HI96700 Ammonia LR	HI96715 Ammonia MR	HI96733 Ammonia HR
Range	0.00 to 3.00 mg/L (ppm) (as NH_3–N)	0.00 to 9.99 mg/L (ppm) (as NH_3–N)	0.0 to 50.0 mg/L (ppm) (as NH_4^+)
Resolution	0.01 mg/L	0.01 mg/L	0.01 mg/L
Accuracy @25°C (77°F)	±0.04 mg/L ±4% of reading	±0.05 mg/L ±5% of reading	±0.5 mg/L ±5% of reading
Light Source	tungsten lamp	light emitting diode	tungsten lamp
Light Detector	silicon photocell with narrow band interference filter @ 420 nm	silicon photocell with narrow band interference filter @ 466	silicon photocell with narrow band interference filter @ 420 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	320g (11.3 oz.)		
Method	adaptation of the ASTM Manual of Water and Environmental Technology, D1426-93, Nessler method		
Ordering Information	**HI96700**, **HI96715** and **HI96733** are supplied with sample cuvettes (2) with caps, 9V battery, instrument quality certificate and instruction manual. CAL Check standards and testing reagents sold separately **HI96700C**, **HI96715C** and **HI96733C** include photometer, CAL Check standards, sample cuvettes (2) with caps, 9V battery, cuvette wiping cloth, instrument quality certificate, instruction manual and rigid carrying case. Reagents sold separately		

Reagents and Standards			
	HI96700	**HI96700-11**	CAL Check standard cuvettes
		HI93700-01	reagents for 100 tests (N-NH_3 LR)
		HI93700-03	reagents for 300 tests (N-NH_3 LR)
	HI96715	**HI96715-11**	CAL Check standard cuvettes
		HI93715-01	reagents for 100 tests (N-NH_3 MR)
		HI93715-03	reagents for 300 tests (N-NH_3 MR)
	HI96733	**HI96733-11**	CAL Check standard cuvettes
		HI93733-01	reagents for 100 tests (NH_4^+ HR)
		HI93733-03	reagents for 300 tests (NH_4^+ HR)

These photometers are for the measurement of ammonia nitrogen in freshwater samples.

Significance of Use

Present naturally in surface and wastewaters, ammonia mainly results from the deamination of organic nitrogen-containing compounds and hydrolysis of urea. Ammonia may also be present from water treatment processes that utilize chloramines for disinfection, where ammonia is added to the water to react with chlorine. Ammonia is less likely to appear in groundwater due to adsorption to soil particles.

See page 10.90 for standard reagents; see page 10.91 for CAL Check kits; see page 10.42 for general accessories