

HI 96700 • HI 96715 • HI 96733

Ammonia Portable Photometers

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

The HI 96700 and HI 96715 meters measure the ammonia-nitrogen ($\text{NH}_3\text{-N}$) content in water samples. The HI 96733 measures the ammonium ion (NH_4^+) content in water, wastewater and seawater.

These meters use an exclusive positive-locking system to ensure that the cuvette is in the same place every time it is placed into the measurement cell.

Ammonia is often an excellent indication of the presence of animal or plant microbiological decay. It is tested in fish farms (fresh and salt water tanks) due to the damaging effects of its toxic nature. Its presence in rivers and reservoirs normally points to agricultural and/or civil pollutants. Ammonia is tested in lakes, rivers, portable water, boiler feed water, sewage, industrial and waste water.

ORDERING INFORMATION

HI 96700, HI 96715 and HI 96733 are supplied with sample cuvettes (2) with caps, 9V battery and instruction manual.

CAL CHECK™ standards and testing reagents sold separately

HI 96700C, HI 96715C and HI 96733C includes photometer, sample cuvettes (2) with caps, 9V battery, cuvette cleaning cloth, instrument quality certificate, instruction manual and rigid carrying case.

CAL CHECK™ standards and testing reagents sold separately

REAGENTS AND STANDARDS

For HI 96700

- HI 96700-11 CAL CHECK™ standard cuvettes
- HI 93700-01 Reagents for 100 tests (N-NH_3 LR)
- HI 93700-03 Reagents for 300 tests (N-NH_3 LR)

For HI 96715

- HI 96715-11 CAL CHECK™ standard cuvettes
- HI 93715-01 Reagents for 100 tests (N-NH_3 MR)
- HI 93715-03 Reagents for 300 tests (N-NH_3 MR)

For HI 96733

- HI 96733-11 CAL CHECK™ standard cuvettes
- HI 93733-01 Reagents for 100 tests (NH_4^+ HR)
- HI 93733-03 Reagents for 300 tests (NH_4^+ HR)



Ammonia - nitrogen, in the form of NH_3 and NH_4^+ , is often present in water as a component of nitrogen cycle. In the metabolism of proteins and amino acids, many heterotrophic bacteria, actinomycetes, and fungi (occurring in both soil and water) excrete what for them is excess nitrogen: ammonia. Generally, in unpolluted waters, ammonia and ammonium compounds occur in relatively small quantities, on the order of 0.1 mg/L, while higher levels usually indicate organic pollution. Ammonia is also recognized to be toxic to diatoms in the 7.4-8.5 pH range at a level of 1.1 mg/L, and to fish, in the same pH range, at a level of 2.5 mg/L.

SPECIFICATIONS	HI 96700 Ammonia LR	HI 96715 Ammonia MR	HI 96733 Ammonia HR
Range	0.00 to 3.00 mg/L (ppm) (as $\text{NH}_3\text{-N}$)	0.00 to 9.99 mg/L (ppm) (as $\text{NH}_3\text{-N}$)	0.0 to 50.0 mg/L (ppm) (as NH_4^+)
Resolution	0.01 mg/L (ppm)	0.01 mg/L (ppm)	0.1 mg/L (ppm)
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	360 g (12.7 oz.)		
Method	adaptation of the ASTM Manual of Water and Environmental Technology, D1426-92, Nessler method		

The reagents are in liquid form and are supplied in bottles. The amount of reagents is precisely dosed to ensure maximum repeatability.

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