

HI 96728 • HI 96786

Nitrate Portable Photometers

www.easeongear.com
[click to buy: www.hannameters.com](http://www.hannameters.com)

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

Nitrates are present in nature as a result of decomposition of organic microorganisms or due to their use as fertilizers. Nitrates reduce to nitrites, which in turn easily combine to form substances dangerous to man.

A maximum level of 45 mg/L (ppm) is established as a worldwide guideline for nitrate concentration in water. In Europe, the maximum consented level of nitrates in potable water is 50.0 mg/L (ppm), while in the USA the EPA has established a guideline for the maximum level of nitrate-nitrogen of 10 mg/L ($\text{NO}_3\text{-N}$), which corresponds to 45.0 mg/L of nitrates.

The HI 96728 and HI 96786 meter measures the nitrate content in water and wastewater.

Both 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.



Nitrogen is abundant in Earth's atmosphere, and is present in water in the form of nitrate, nitrite and ammonia. Plants use nitrogen as a nutrient to build proteins by taking it in through their root system. Nitrate is formed in water mainly through rainfall, decomposition of organic matter, and runoff from man made pollutants such as sewage waste and fertilizers.

Almost all the surface waters have some measurable level of nitrate, and a moderate amount is considerate beneficial. Large amounts of nitrate can lead the eutrophication that may result in decreased levels of dissolved oxygen in the water.

ORDERING INFORMATION

HI 96728 and HI 96786 are supplied with sample cuvettes (2) with caps, 9V battery and instruction manual.

CAL CHECK™ standards and testing reagents sold separately

HI 96728C and HI 96786C include photometer, sample cuvettes (2) with caps, 9V battery, scissors, cuvette cleaning cloth, instrument quality certificate, instruction manual and rigid carrying case.

CAL CHECK™ standards and testing reagents sold separately

REAGENTS AND STANDARDS

HI 96728-11 CAL CHECK™ standard cuvettes

HI 96786-11 CAL CHECK™ standard cuvettes

HI 93728-01 Reagents for 100 tests

HI 93728-03 Reagents for 300 tests

SPECIFICATIONS	HI 96728 Nitrate (as nitrogen)	HI 96786 Nitrate
Range	0.0 to 30.0 mg/L (ppm)	0.0 to 100 mg/L
Resolution	0.1 mg/L (ppm)	1 mg/L
Accuracy @ 25°C (77°F)	±0.5 mg/L ±10% of reading	±5 mg/L ±5% 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 cadmium reaction method	

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

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