

Eutrophication Meter
(Measurement of nitrogen and phosphorous)

HC-1000



An increase in nutritious substances in water gives rise to abnormal growth of water-bloom or red tide. This in turn gives rise to harmful effects, for example, giving foul smell to drinking water and causing death to fish. This is a portable photoelectric instrument allowing quick and easy quantification of the phosphorus and nitrogen content of the water. Both substances are factors that regulate the growth of plant plankton.

■Set

- Deluxe Type Standard accessories
Autohandling pipette
Carrying case
- A Type Standard accessories
Autohandling pipette
- B Type Standard accessories

■Features

- Measurements are obtained by merely adding a special reagent and are displayed on a digital display to ensure no misreading.
- Per-measurement cost is very low.
- Can be operated on AC or DC power.

■Specifications

Measuring items:

Nitrous acid nitrogen (NO₂-N)
Nitric acid nitrogen (NO₃-N)
Ammonia nitrogen (NH₄-N)
Inorganic phosphate (PO₄-P)

Measuring range:

Nitrous acid nitrogen:
0-0.2 mg/L. 3 digits below decimal point.
Nitric acid nitrogen:
0-2.0 mg/L. 2 digits below decimal point.
Ammonia nitrogen:
0-0.7 mg/L. 2 digits below decimal point.
Inorganic phosphate:
0-1.0 mg/L. 2 digits below decimal point.

Measuring accuracy:

Nitrous acid nitrogen:
±0.01 mg/L. about 10 minutes of coloration time.
Nitric acid nitrogen:
±0.05 mg/L. about 5 minutes of coloration time.
Ammonia nitrogen:
±0.02 mg/L. about 20 minutes of coloration time.
Inorganic phosphate:
±0.02 mg/L. about 20 minutes of coloration time.

Measuring method:

Absorptiometry using coloration reagent.

Light source:

Light-emitting diode (LED), switching system
Green (central wavelength: 555nm) for NO₂-N and NO₃-N measurement
Red (central wavelength: 695nm) for NH₄-N, PO₄-P measurement

Light sensor:

Silicon Bluecell

Display:

Direct display of concentration in mg/L units. 3-digit digital.

Power supply:

Can be operated on either DC or AC power (battery: Ni-Cd UM-3 × 4).
AC: 100V, 50/60Hz, Approx. 3VA
DC: UM-3 Ni-Cd × 4 (usable during recharge)

Dimensions:

160(W) × 255(D) × 130(H)mm

Weight:

Approx. 2.9kg

***The combined use of the decomposition unit (autoclave) allows total nitrogen and total phosphorus to be measured.**