

Ammonia and nitrate: after NH_3 dissolves in water, it reacts to generate NH_4^+ . Two kinds of substances coexist in solution, respective content of which is influenced by pH value and solution ion concentration. When analyzer detects ammonia and nitrate, convert two kinds of substances into one kind of substance by adjusting pH value. NH_3 is irritant gas that can be easy to dissolve in water and is colorless. Analytic system adopts ammonia analysis digital rod of cast way. Ion-selective electrode membrane will detect partition of test sample and interior solution of electrode. Gas can penetrate membrane, but the water can not do this. NH_3 dissolved solution penetrates membrane of interior solution until the bilateral pressure of the membrane achieves a balance. Expanding NH_3 solubility is related to dissolved hydrogen ion of electrode interiority. Detecting result is expressed by ppm. It is with self-cleaning function.

NH_4^+ is formed by the decomposition under the function of bacteria from protein in organics. It is very common in natural water. According to ion, NH_4 detection selects electrode and reference electrode. Ion selection electrode contains NH_4^+ ion selectivity membrane, when appearing NH_4^+ in pattern, diaphragm generates voltage, which is monitored by reference electrode. Each time when analyzer is calculating detection result, adopt two points' calibration method. Calibration result is metered by device, and detection result is expressed by ppm. It is with self-cleaning function.



Digital ammonia measure meter

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Applications

- process control
(e.g. food and chemical Industry)
- water monitoring
- wastewater control

Technische Daten

Measuring range	0.1...1200ppm NH_4 0.3...30000ppm NO_3
Measuring principle	Ion selective electrodes for NH_4 , NO_3
Compensation	Fixed value or online compensation of pH, K^+ , Na^+ , Cl^- , NO_2^- .
Reference electrode	KCL double reference system
Automatic cleaning	Valve included in sensor holder Air hose connection $\frac{1}{4}$ " Max. air pressure 3.5 bar / 50.8 psi Air volume for 10 sec: max 50 litre
Measuring accuracy	$\pm 5\%$ full scale