

# BONT<sup>®</sup>

Bont Technologies GmbH

## Fluoride Water Quality Online Analyzer FL1000



## Principle

When fluorine electrode contacts with test solution containing fluorine, battery electromotive force E changes with the change of fluorine ion activity in the solution (comply with the Nernst equation). When the total ion strength of solution is the fixed value and enough, it obeys the relation:

$$E = E - \frac{2.303RT}{F} \log c_f$$

Slope: Within the linear range, when the activity of the ions under test changes an order of magnitude, it causes electrode potential change value (mV), which called the slope of electrode to a given ion, also called the slope of E - logai curve. The theoretical value is represented:

$$S = 2.303RT/(nF)$$

## Application

It is suitable for determination of the fluoride in surface water, ground water and industrial wastewater (including semiconductor manufacturing, solar cells and metallurgical).

## Product Features

- Design on the principle of single chip solid selective electrode, the electrode is easy to clean.
- Built-in reference electrode, high measurement accuracy.

## Technical Specifications

Method	Ion selective electrode method
Range	0 ~ 2000 ~ 20000mg/L, other also be triggered by a serial port
Interval	Continuous, 1,2,3...24 hours, can also be triggered by a serial port
Zero Drift	± 5%
Span Drift	± 5%
Linearity	± 5%
Repeatability	± 5%
Period	20 minutes
Reagent	A single set of reagents can measure 250 samples
External Interface	Analog Output: 1 x4-20mA output (Expandable to 2), the maximum load 500 ohms. Analogue Input : 1 x 4-20mA input (expandable to 2), compatible with 0-5V input Relay Output: 4 (can be flexible configuration)
Interface	RS485/RS232/USB interface (Optional)
Maintenance	< 2 hour per month
Working Temp	5°C ~ 40°C
Power	200W (220±10%VAC 50Hz), regardless of the pump

## Distributor