

The FluoriSystem range of Fluoride Monitors from PM utilise the very latest and best Fluoride sensors available in the world today for measuring the online Fluoride of any potable water. They are ion selective electrodes (ISEs) with solid polymeric junction, which use no reagents, are extremely stable, and have reduced maintenance and reduced whole life costs.

- **Up to 2 years continuous operation**
- **Stable and reliable - excellent process control**
- **Suitable for all potable waters**



The FluoriSystem sensors and flow cells are available with different controllers giving you the same great performance with different communication, display, and control options. With the FluoriSystem range of online Fluoride meters, you get everything that you need - and nothing that you don't.

"The Fluoride sensors are much more stable than others we've tried and give excellent results"

Principle of Operation

Nearly all Fluoride Analysers are based on Fluoride ISEs. In some the accuracy is increased by continually dosing the sample with an Ionic Stabilising Solution, typically known as TISAB (Total Ionic Strength Adjustment Buffer). These buffers do help "fix" the ionic strength of a solution but in doing so introduce a cost and complexity that is considered by many to be unnecessary in drinking water fluoride dosing control.

The FluoriSense does not use TISAB and therefore is only suitable for use in applications where pinpoint accuracy is not critical and where the ionic strength of the water is relatively stable.

In many applications the FluoriSystem is used primarily to ensure that the flow proportional dosing is working well and in these applications the FluoriSystem is ideal, providing a relatively low cost, easy to install and monitor, reliable solution. Pairing the FluoriSystem sensor with the Single/ Multichannel controller means this kind of flow proportional dosing can be done without the need for PLCs or programming as it can all be controlled through the controller out of the box.



Fluoride Sensor with cap

Adding the SMART pump integration from the Multichannel controller means you can get a fully integrated dosing system for a fraction of the overall cost of existing systems.

Even with the additional functionality that this unit has to offer, the purchase costs are typically significantly less than its competitors.



Multi-Sensor Systems

The whole range of FluoriSense analysers can be fitted with additional sensors such as chlorine, ORP or pH. Please ask your PM contact for more details.

Installation

The FluoriSense can be installed in a variety of auxiliary flow cells.

Specification*

Type:	ISE (Ion Specific Electrode)
Reference Type:	Solid polymer junction
Measurand:	Fluoride
Slope:	-56 ± 4mV at 25°C
Concentration Range:	1x10 ⁻⁶ M to saturation (0.02 ppm - saturation)
pH Range:	5 to 7 pH at 1 x 10 ⁻⁶ M 5 to 11 pH at saturation
Temperature range:	0 to 80°C continuous 80 to 100°C intermittent
Electrode Resistance:	less than 50 MΩ
Reproducibility:	±2%
Minimum Sample Size:	300ml min ⁻¹
Size:	Electrode length - 155mm Body diameter - 12mm Cap Diameter - 16mm
Cable Length:	100cm
Calibration:	Manual using a test kit
Short Term Storage:	Rinse the electrode thoroughly with DI water and place the tip back in its cap.
Long Term Storage:	Rinse thoroughly with DI water and store dry.

