

Electroanalytical Measuring techniques

Sensor	Advantages	Disadvantages	Example
Conductivity Cells	+ Can be installed in-line	- Doesn't work with higher concentrations - Not suitable for solutions with more than one ion	Measure electrolytes in de-ionized water
pH	+ Highly accurate if properly calibrated	- Can't distinguish between multiple bases or acids	Monitor pH of pool water
Ion Specific	+ Highly selective	- Only good for one specific ion - Can have interference from other ions	Measure fluorine in water treatment plants
ORP	+ Highly selective	- Only works for multiple oxidation state ions	Measure levels of Fe ⁺² and Fe ⁺³
Polarographic	+ Highly accurate + Reproducible	- Can't be done in-line - Requires a calibration curve	Measure O ₂ in flue gases