

High Resolution Turbidity Monitoring for Protection Against Cryptosporidium – Using a Photometer for Continuous Measurement

It is widely known that parasites such as Cryptosporidium in potable water are dangerous for human health: diarrhoea, head-ache, sickness, and even death if the immune system of the affected person is compromised. It is therefore a critical duty of all potable water supply companies that these parasites are not allowed to contaminate the public water supply networks.

It has been shown that using the best possible abatement technologies for the removal of Cryptosporidium and monitoring the very lowest Turbidity levels of potable waters, offer the most reliable and practical approach to help safeguard against possible contamination by Cryptosporidium

Direct measurement of such tiny parasites is almost impossible for today's process instruments since they are too small (5-7 microns). However high resolution turbidity measurement offers an excellent method since these parasites typically are enclosed by larger non-parasitic particles in the water. Hence, if no particles are detected after filtration – meaning measuring very low turbidity values - there is high reliability that no Cryptosporidium are present.



Turbidity monitor AquaScat of SIGRIST-PHOTOMETER AG

As a matter of fact this measurement is extremely challenging for the average turbidity meter as very low values have to be measured accurately over time. The AquaScat of SIGRIST-PHOTOMETER AG perfectly fits this more demanding requirement, its design with a free-fall non-contact water stream, and auto-recalibration offers long term performance even down at the lowest possible turbidity values

This concept offers many tangible benefits as it is close to being maintenance free offering the best costs of ownership in class while keeping reliability up at high level.