

# Sentinel Guard™

Online Analysis and Control of  
ClO<sub>2</sub> and Chlorite Residuals

**CLEAN WATER TECHNOLOGY**



# Sentinel Guard™

## Online Analysis and Control of ClO<sub>2</sub> and Chlorite Residuals

The Scotmas Sentinel Guard™ is the ideal companion to our Chlorine Dioxide generators, and provides for 24/7 monitoring, control and datalogging of ClO<sub>2</sub> and chlorite residuals. Every Sentinel Guard™ unit is provided with access to our InSite™ web based monitoring platform which provides for secure, off-site storage and viewing of datalog graphs for a period of up to 3 years – ideal for compliance and audit purposes.

Installed alongside a Scotmas ClO<sub>2</sub> generator, or as a stand-alone system to monitor ClO<sub>2</sub> residuals at Critical Control Points in the water system or sentinel outlets, the Sentinel Guard™ offers unrivalled monitoring flexibility and control possibilities.

Offering the ability to monitor up to 3 separate parameters such as Chlorine Dioxide, chlorite (the primary disinfection by-product of ClO<sub>2</sub> disinfection), and safety gas alarms, the Sentinel Guard™ provides total safety assurance and secondary monitoring of Chlorine Dioxide residuals, in compliance with the requirements of drinking water quality regulations.

When linked with our Alpha™ and Bravo WA™ range of generators, the Sentinel Guard™ can cut off the ClO<sub>2</sub> dose in the event of a high threshold being reached. When linked with our more advanced WX and MX models, the Sentinel Guard™ can provide a full data stream to the on-board PLC which will automatically adjust the dose rate utilising our Adaptive Dosing™ technology.

SENSOR	PRESSURE / WATER FLOWCELL	TEMPERATURE	TECHNOLOGY	TYPICAL APPLICATIONS
0-2 mg/l ClO <sub>2</sub>	Open cell <1 bar, 15-30 l/hr to drain or tank with no flow variation	<3°C - <50°C	Membrane covered amperometric 2 electrode cell	Clean, cold water. No interference from free chlorine
0-5 mg/l ClO <sub>2</sub>				
0-10 mg/l ClO <sub>2</sub>				
0-20 mg/l ClO <sub>2</sub>				
0-2 mg/l ClO <sub>2</sub>	<8 bar, 90 l/hr to inline flowcell	<5°C - <70°C	Open amperometric potentiostatic 3 electrode cell	Hot or dirty / contaminated water free of chlorine, or where in-line measurement at pressure is required
0-5 mg/l ClO <sub>2</sub>				
0-20 mg/l ClO <sub>2</sub>				
0-2 mg/l Chlorite	<5 bar, 30 l/hr with no pressure impulse or flow variation	<5°C - <40°C	Membrane covered amperometric 2 electrode cell	Clean, cold water. Free of Mn <sup>2+</sup> , Nitrite, Fe <sup>2+</sup> interferants
0-2 mg/l Chlorite	Gas monitoring cell	<40°C Air Temperature	Gas monitoring cell	Monitors plant room air quality / leak detection

The Sentinel Guard™ utilises the latest sensor technology in order to deliver the widest possible range of monitoring options for your process or water system. The membrane covered amperometric measuring cells require no reagents and are free from interference from other common water disinfectants such as chlorine. The hot water probe can be mounted directly within the water line itself, making it ideal for recirculating systems.

The Sentinel Guard™ system is supplied as standard with the following configuration. Extra relays, digital and analog outputs can be specified as options as required.

MEASURING PROBES	FLOWCELL	ANALOG OUTPUT	DIGITAL OUTPUT	RELAY OUTPUT	COMMUNICATIONS	OPTIONS
ClO <sub>2</sub> Chlorite as specified on previous page	Double flowcell, open channel 30 l/hr or In-line	2 Outputs (Optional combined Total Residual Oxidant channel)	2 Outputs (Additional configurable as option)	2 Outputs 12V (Additional configurable as option)	3G Tri Band	Measuring probe as specified Gas alarm Additional analog, digital or relay Modbus TCP or RTU Autoflush probe cleaning

## InSite™

Our InSite™ web access system provides a secure, easy to use portal to rapidly interrogate datalogs recorded by the Sentinel Guard™ unit for up to 3 years. The advanced charting and logging system allows daily, weekly and monthly average residuals to be compared, trended over time and appropriate reports to be exported to PDF or CSV format. The InSite™ system stores data on off-site secure servers and is ideal for compliance, monitoring and audit purposes.





Scotmas Group are world leading manufacturers of Chlorine Dioxide products and dosing systems. Scotmas were the first Company to produce simple, easy to use Chlorine Dioxide products and equipment. With over 30 years' experience, our friendly and approachable team of chemists, microbiologists, engineers and project managers are able to provide "off the shelf" products or a complete turnkey service.

Choose Scotmas for expertise in Chlorine Dioxide solutions.

## Scotmas Group

Purify • Protect • Perform

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Use biocides safely. Always read the label and product information before use.