INDUSTRIAL AND SURFACE WATER MONITORING

AQUAGAS MONITORING SYSTEMS

CRISTALLITE Online Analyser

Description

The CRISTALLITE analyser is designed to fulfil your basic automatic and continuous monitoring needs (**single parameter sampled from one stream**). Thanks to its concept using a combination of analytical methods (**Colorimetry**, **Titrimetry** and **Potentiometry** or **selected absorption**) the CRISTALLITE allows efficient and accurate water quality strict monitoring at a reduced cost.

Applications

Control of industrial process Boiler cooling water / Process water

Drinking and Surface water Alert stations and environmental monitoring

Urban & industrial effluents

Water treatment

Oil & Gas refineries, oil exploration

Cost effective monitoring solutions

SERES environnement

Key functions for enhanced monitoring

COLORIMETRY

- AMMONIUM, FREE AND/OR TOTAL CHLORINE, CHROMIUM IV
- TOTAL IRON, HYDRAZINE, PHENOL
- PHOSPHATES (ORTHOPHOSPHATES), SILICA, HARDNESS

ABSORPTION

- COLOUR

TITRIMETRY

- TH, TAC, TA

POTENTIOMETRY

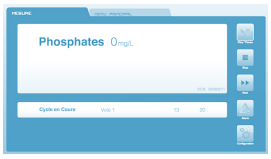
- AMMONIUM, CHLORIDES, CYANIDES, FLUORIDES AND MORE

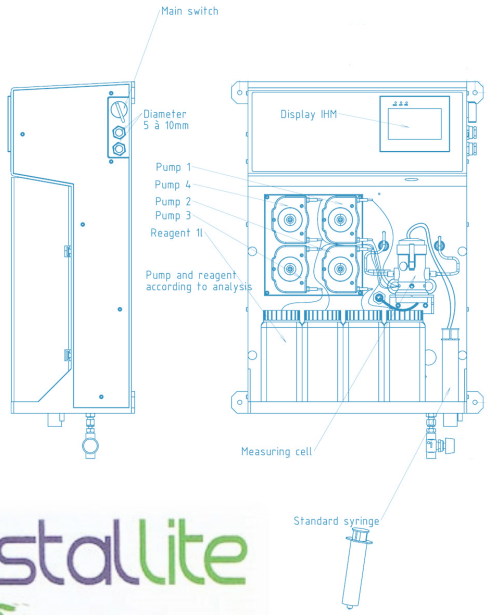
SPECIFIC METHOD CAN BE ADAPTED FOR PROCESS AND BRINES MONITORING

- PERACETIC ACID, VFA, CA MG, NH_4 AND MORE

Fully automated online analyser

- STANDALONE ANALYSER
- ACCURATE ANALYSIS
- ONLINE MONITORING
- LIMITED MAINTENANCE
- LOW OPERATING COSTS
- INTUITIVE INTERFACE
- MODULAR & COMPACT





Technical Specifications

CONSTRUCTION & ENVIRONMENT

Dimensions	Wall cabinet: 460 x 606 x 226 mm (W x H x D)
	Overall dimensions (with sample inlet valve): 460 x 689 x 226 mm
Weight	7 kg approx.
Material	ABS and Polycarbonate
Environment & Protection	Installation in safe and sheltered area, away from corrosive atmosphere
Ambient T°	5 to 40°C (depend method)
Relative humidity	10 to 80%

ELECTRICAL UTILITIES

Power supply	110 - 240 VAC 50 / 60 Hz
Consumption	Typical 150 VA - Maximum 300 VA

ANALYSIS

Parameters	Refer to list on reverse page / Consult
Range	Depend on parameter / Consult
Method	Continuous, on line measurement
	Colorimetry, titrimetry, potentiometry or absorption Selection based on parameter and/or range
Reagents	Depend on parameter and method
Number of streams	1
Number of parameter	1
Cycle duration	15 min on average
Accuracy	± 1 to 3% end of range (colo, titri, pot.)
Repeatability	± 1 to 3% end of range (colo, titri), ± 3 to 5% (pot.)

CONNECTIVITY, ALARMS & COMMUNICATION

User interface	Colour LCD display, 4.3'', touch-screen
	Windows interface
Data retrieval	Transfer via USB port
Output signal	4 - 20 mA, galvanic insulation
	2 x relays - dry contact
Alarms	Thresholds per stream (HI-LO), sample & analyser failure

SAMPLING

Preparation	Filtration if needed / Dilution, depending on application
Sample inlet	Flow : min 30 l/h - optimum 46 l/h (4 l/h with water saver)
	Pressure : 0.5 to 2 bar maximum / Free outlet
	Temperature : 5 to 45°C
Hydraulic	Sample : Inlet 1/4''BSP F
connections	Outlet soft tubing 25x28mm
Cell volume	25 ml for potentiometry, otherwise 8 to 10 ml

OPERATION

Zero	Automatic at end of each measurement cycle
calibration	Manual with Syringe (Incl.) at each replacement of reagent

1300 850 862 | www.aquagas.com.au | info@aquagas.com.au | 3 Wirranina Place - Currumbin - 4223 QLD

PROCESS CONTROL

Manufacturing industries

Drinking water

ONLINE Water Quality Monitoring Solutions for upstream and downstream purification processes.

Ensure the optimal quality all along the manufacturing and distribution network.

Process water

Integrated solutions for real-time water quality measurements suited to industrial processes.

ENVIRONMENT

Environmental protection and pollution control.

Surface water

REALTIME Monitoring stations or mobile laboratories, for the protection of surface water, spring water, rivers and groundwater.

Sea water

Prevention of sea water by hydrocarbon wastes: Oil tankers, Oil Rigs, Refinery wastes.

References

SERES Environnement (FRANCE) is one of the major actors in the field of online analysis dedicated to **Water Quality Monitoring** in the industry and the environment. Outstanding experience, attentiveness, innovative and effective solutions are the strengths of SERES while meeting everyday challenges with Environment Organizations, Water production & treatment, Oil & Gas, Petrochemical industry, Refineries, Power stations, Paper mills, Metal, food and other industries, Oil rigs, Tankers, Etc. …

Shell, TOTAL, SOLVAY, SANOFI, Coca-Cola, PETROBRAS, HYUNDAI, WÄRTSILÄ, LAFARGE, SAMSUNG, MITSUBISHI MOTORS, DAEWOO, CITROËN, bp, ALSTOM, Chevron

Environmental Compliance & Online Process Analysis

AQUAGAS MONITORING SYSTEMS

AquaGas Pty Ltd is supporting the global industrial community with high performance **Environmental & Process Monitoring Systems** (Continuous Emissions Monitoring Systems, Air Quality Monitoring Systems, Online process analysers, Water Quality Monitoring Systems) specifically designed and built to meet your application requirements.

With extensive expertise and diverse technical skills acquired around the globe, AquaGas Pty Ltd designs, installs, and supports innovative technical solutions, which respond to the requirements of environmental regulations in terms of pollution monitoring and environmental impact assessment. AquaGas Pty Ltd Systems and Services are available in **Australia, New-Zealand and New Caledonia.**

1300 850 862 | www.aquagas.com.au | info@aquagas.com.au

VALIDATED OVER THE YEARS IN A LARGE FIELD OF APPLICATION

Solvay

Rhodia

Ineos

FPG Taïwan

Ciba Geigy

Sanofi

Aventis

PPG

Arkema

Asahi Glass

De Nora

Total

Samsung

Coca Cola

Lafarge

Mitsubishi

Petro Bras

Alstom...

AQUA GAS

APPLICATIONS

Drinking water

Quality control at all stages : treatment, storage, distribution

Surface water

Study and design of surface water monitoring stations

Waste water

Monitoring of industrial or urban waste water

Process water

Quality control of process water

Oil & Water

Oil in Water Detection & Water in Oil storage tanks

PARAMETERS

TOTAL CHLORINE
FREE CHLORINE
MORPHOLINE
PHOSPHATES
AMMONIA
HYDRAZINE
COLOUR
PHENOLS
SILICA...

CHROMIUM VI
MANGANESE
ALUMINIUM
COPPER
NICKEL
IRON
LEAD
ZINC...

HARDNESS
THT
TA
TAC ...

CHLORIDES
CYANIDES
FLUORIDES
SULFIDES
ARSENIC
SULFATES ...

CERTIFICATIONS

QUALITY MANAGEMENT SYSTEM
ISO 9001:2008 CERTIFIED

ATEX

IMO INTERNATIONAL MARITIME ORGANIZATION

BUREAU VERITAS 1828
L C I E