



**ONYX**



**WATER QUALITY**



WATER QUALITY

VALIDATED OVER THE YEARS  
IN A LARGE FIELD OF  
APPLICATION

Solvay

Rhodia

Ineos

FPG Taiwan

Ciba Geigy

Sanofi

Aventis

PPG

Arkema

Asahi Glass

De Nora

Total

Samsung

Coca Cola

Lafarge

Mitsubishi

Petro Bras

Alstom...

## 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



Environment Organizations, Water production & treatment, Oil & Gas, Petrochemical industry, Refineries, Power stations, Paper mills, Metal, food and other industries, Oil rigs, Tankers, Etc ...



**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.

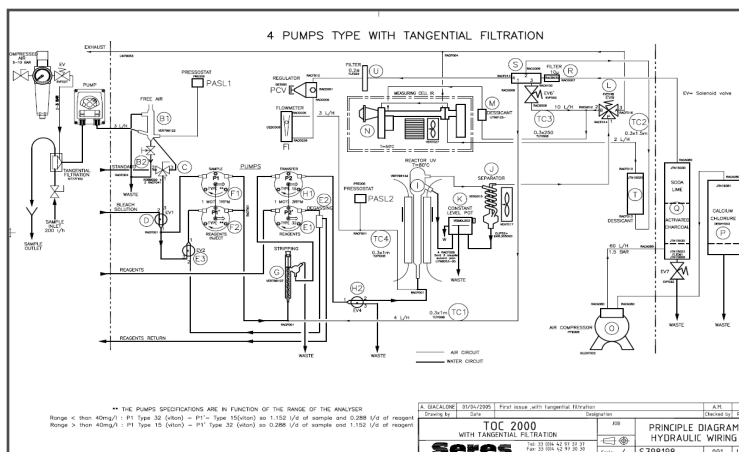


**WATER QUALITY**

**AquaGas Scope of supply**

From a stand alone analyser to a complete monitoring station (stationary or mobile) , AquaGas supplies turnkey systems fully integrated meeting the Australian standards and matching the exact project requirements.

Our system are delivered with a full set of documentation and a minimum warranty of one year which includes 24h/7 days email and phone support.





## ONYX ONLINE WATER QUALITY ANALYSER

### SINGLE PARAMETER - SINGLE STREAM

#### Description

The **ONYX** 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 **ONYX** allows efficient and accurate water quality strict monitoring.

#### Applications

**Control of industrial process** Chlorine production, Soda production, Electro-chlorination, Residual concentration of active chlorine, NaOH/Na<sub>2</sub>CO<sub>3</sub> in a Sodium, Hypochlorite / Soda solution, boiler cooling water

**Drinking and Surface water** Alert stations and environmental monitoring

Urban & industrial effluents

Water treatment

Oil & Gas refineries, oil exploration



From TRACES to HIGH  
CONCENTRATIONS



### PARAMETERS

#### ↪ 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<sub>4</sub> AND MORE

# Fully automated online analyser

## ONYX BENEFITS

AUTOMATIC ONLINE MONITORING

MULTIFUNCTIONAL

EASILY CONFIGURABLE

INTUITIVE INTERFACE

MODULAR AND COMPACT



**User interface** smart & intuitive via Touchscreen

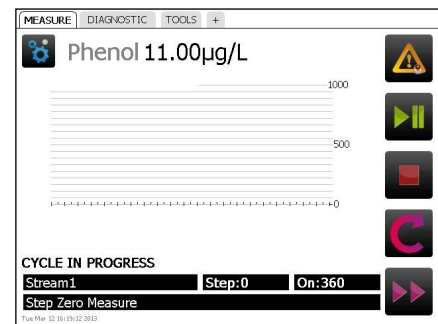
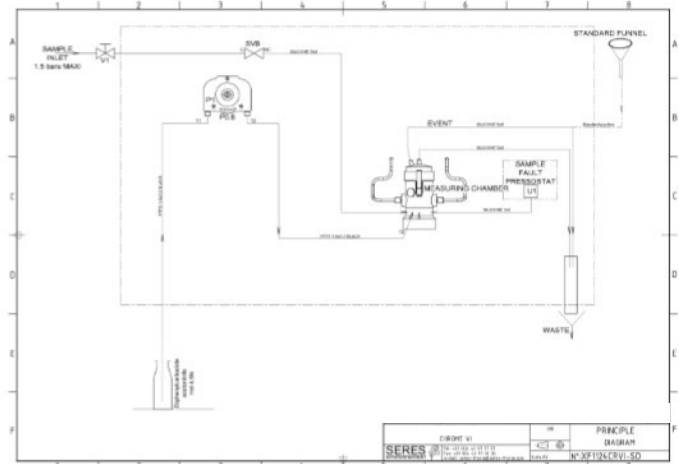
**Measurement** Increased accuracy and response time

**JBus/ModBus module** retrieval data / steering

**Supervision data storage**

**Low Operating cost** Minimum reagents' consumption

**Integration** Compact ABS case



## ONYX Specifications

### CONSTRUCTION & ENVIRONMENT

<b>Dimensions</b>	Wall cabinet ABS: 460 x 606 x 226 mm (W x H x D)
<b>Weight &amp; Material</b>	20 kg approx. - ABS
<b>Environment</b>	Installation in safe and sheltered area, away from corrosive atmosphere. IP55.
<b>&amp; Protection</b>	
<b>Ambient T°</b>	5 to 40°C (depend method)
<b>Relative humidity</b>	10 to 80%

### ELECTRICAL UTILITIES

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

### ANALYSIS

<b>Parameters</b>	Refer to list on reverse page / Consult
<b>Range</b>	Depend on parameter / Consult
<b>Method</b>	Continuous, on line measurement
	Colorimetry, titrimetry, potentiometry or absorption Selection based on parameter and/or range
<b>Reagents</b>	Depend on parameter and method
<b>Number of streams</b>	1
<b>Number of</b>	1
<b>Cycle duration</b>	15 min on average
<b>Accuracy</b>	± 1 to 2% end of range (colo, titri, pot.)
<b>Repeatability</b>	± 1 to 2% end of range (colo, titri), ± 3 to 5% (pot.)

### CONNECTIVITY, ALARMS & COMMUNICATION

<b>User interface</b>	Colour LCD display, 5.7", 160 x 230 mm, touch-screen
	Windows interface
<b>Data storage</b>	Data storage in analyser memory
<b>and retrieval</b>	Transfer via USB port (historic)
<b>Input / Output &amp; Communication</b>	4 - 20 mA, dry contacts—JBus/Modbus RS232
	On option : support converter RS485
<b>Alarms</b>	Thresholds per stream (HI-LO), sample & analyser failure
<b>Remote control</b>	JBus/ModBus protocol or dry contact: end of cycle stop,

### SAMPLING

<b>Preparation</b>	Filtration if needed / Dilution, depending on application
<b>Sample inlet</b>	Flow : min 30 l/h - optimum 46 l/h (4 l/h with water saver)
	Pressure : 2 bar maximum / Free outlet
	Temperature : 5 to 45°C
<b>Hydraulic</b>	Sample : Inlet 1/4" BSP F / Outlet soft tubing D INT 9
<b>connections</b>	Waste : soft tubing D INT 12
<b>Cell volume</b>	25 ml for potentiometry, otherwise 8 to 10 ml

### OPERATION

<b>Zero</b>	Automatic at end of each measurement cycle
<b>Semi-automatic calibration</b>	Required upon renewal of reagents
	Otherwise : depends on method

**PROCESS CONTROL**

*Manufacturing industries*

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**Surface water**

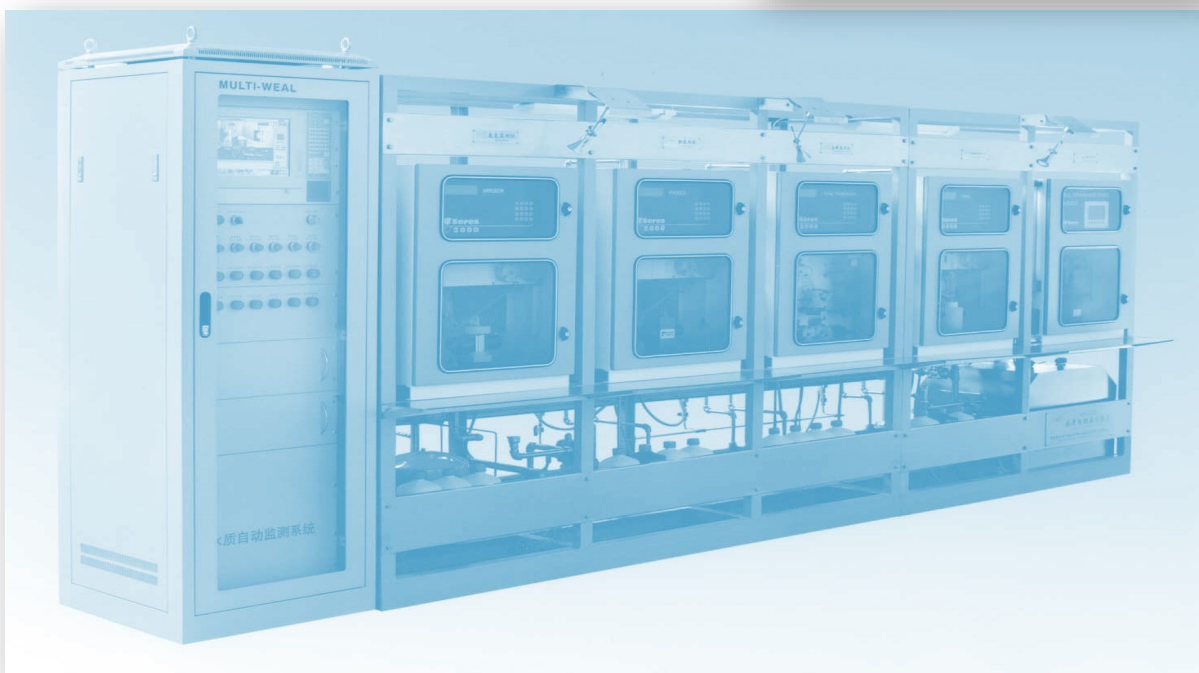
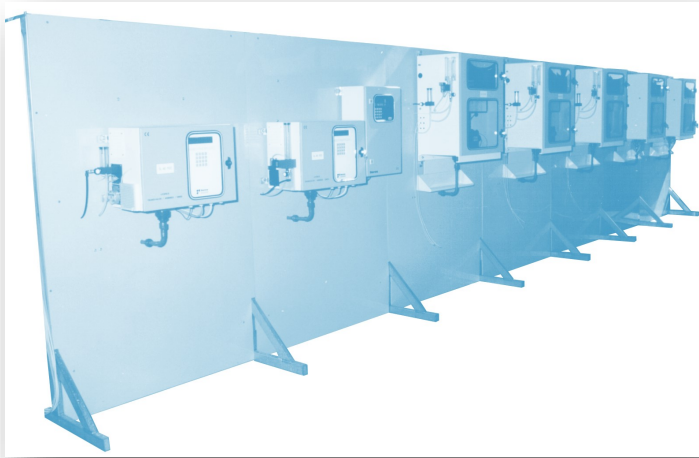
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**WATER QUALITY**

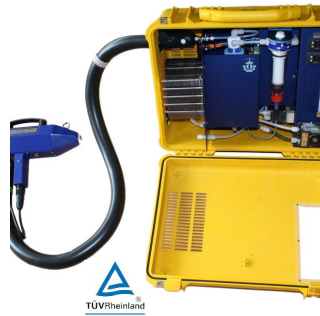


# AquaGas Products and Services



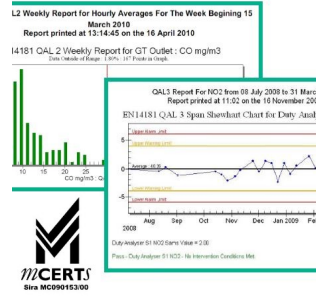
CEMS

System INTEGRATION  
& Innovative  
SAMPLING solutions



STACK TESTING

Portable equipment  
for short term  
measurement



DATA ACQUISITION

States EPA approved  
Data Acquisition and  
Handling Software



ONSITE

Maintenance  
commissioning  
Training



*"For the Environnement,  
excellence comes as a standard"*

## AQUAGAS SYSTEM INTEGRATION

More than 14 years of experience in **environmental monitoring**, AquaGas commitment in implementing innovative, reliable and cost effective solutions is undeniable. Our main focus is to meet your application requirements in due time while maintaining high quality service and relationship.

We have the **skills, products and services** in house with a full dedication to your monitoring needs, so please contact us when it comes to **environmental monitoring and industrial analysis**.

## SERES Environnement analysers

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.

The ideal partner for Australian water quality monitoring.

## Contact Us

Give us a call for more information about our services and products

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