



Water Quality Analysers



CRIUS[®] 4900 Chlorine Dioxide Monitor



Key Benefits

- **No reagents or moving parts**
- **No maintenance for up to 12 months**
- **Low purchase cost**
- **Low cost of ownership**
- **SMS text alarms**
- **Chlorite sensor option**
- **PID control options**
- **Optional automatic cleaning**

Principle Of Operation

The membraned amperometric chlorine dioxide sensor, has an applied voltage which eliminates zero drift. Its unique design means that pH correction is not required at all, completely eliminating reagents. Suitable for all applications the sensor is highly stable and resistant to surfactants. The CRIUS[®] 4900 can come equipped with an additional chlorite sensor for dirty water applications.

In addition to the state of the art amperometric sensors, the CRIUS[®] 4900 offers a vast array of communication protocols including Modbus over TCP/IP, Modbus out RS 485 and serial USB data download, SMS texting, remote access over the internet, relays and 4-20mA outputs. Despite all of the additional functionality that this unit has to offer, the purchase costs are less than, or comparable to its competitors.

Water Treatment

- Remote sites
- Automatic Calibration
- Dosing control
- Secondary Chlorination
- PID control

Anywhere you have a requirement to measure the residual chlorine dioxide is a suitable application for the CRIUS[®] 4900. The CRIUS[®] 4900 is particularly suited to working in remote sites where reliability and ease of use are paramount.

Multiple Probes

- Reduced cost per point
- ClO₂ and chlorite on the same instrument
- Add pH and/or ORP (see CRIUS[®] pHybrid)

The CRIUS[®] 4900 comes equipped to take up to two probes as standard while the CRIUS[®] 4900+ takes up to four probes thereby greatly reducing the cost per point. Probes can be mixed so you can select, for example, a single analyser with two ClO₂ sensors and two pH sensors.

Industrial Applications

Chlorine Dioxide is being used more frequently for disinfection of water supplies outside the water industry in:

- Cooling towers
- Legionella control
- Boiler water
- Food preparation water

The CRIUS[®] 4900 Chlorine Dioxide Analyzer is suitable for all of the applications and more.

Specification

Type:	Membrane covered amperometric two-electrode system
Measurand:	Chlorine Dioxide (chlorite optional)
Range:	0-5, 0-1, 0-2, 0-5, 0-10, 0-20mg/l (ppm)
Resolution:	0.01mg/l (ppm)
Reproducibility:	±5 %
Stability:	-2 % per month (without calibration)
Working electrode:	Gold
Reference electrode:	Silver/silver halide
Membrane material:	Micro-porous hydrophilic membrane
Flow rate:	Approximately 0.5l/min (Min 0.2l/min)
Sample temp. range:	>0 up to 50 °C
Temperature compensation:	Automatically by an integrated thermistor
pH-range:	pH 4 up to pH 10
Permissible overpressure:	0.5 bar
First-polarisation time:	60 min
Re-polarisation time:	30 min
Zero-point adjustment:	Not necessary
Calibration:	Manual using DPD
Material of construction:	PVC, silicone, polycarbonate stainless, Perspex
Dimensions:	Diameter approx. 25mm, length 175mm
Maintenance intervals:	
Membrane:	Yearly
Electrolyte:	Quarterly
Interferences:	High levels of other oxidants such as Ozone



Analyser

Power:	100-240VAC (12/24 VDC optional)
Display:	LCD Backlit 128x64 graphical
Outputs:	4 configurable alarms (relays). 2 x 4-20mA outputs
Inputs:	1 x low flow alarm
Comms:	RS485 TCP/IP
Datalogging:	One year at 15 min intervals (equiv.)
Eventlogging:	100 events
Ambient temp. range:	-10°C to +50°C

Autocalibrator & Autoflush

see separate brochure

GSM/GPRS Modem

Power:	100-240VAC (12/24 VDC optional)
Sim card:	User supply
Region:	Quad band

ACCESSORIES

Polarizer Power

Power:	100-240VAC +12V + Quad Band
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