

# **ORPSense**

# **Continuous Online ORP Meter**

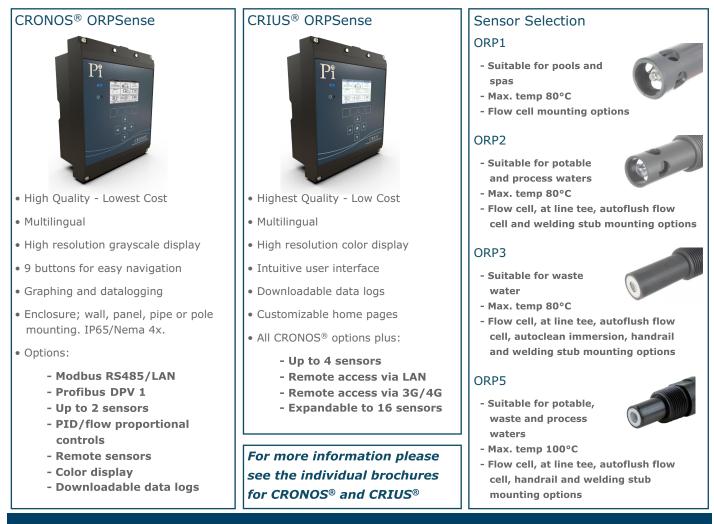
The ORPSense range of ORP Meters from Pi utilize the very latest and best ORP sensors available in the world today for measuring the online Redox potential of any aqueous solution. They are platinum based sensors with integral reference electrodes which use no reagents, are extremely stable, and have reduced maintenance and reduced whole life costs.

- Up to 3 years continuous operation
- Stable and reliable excellent process control
- Suitable for all potable and process waters
- Suitable for very low conductivity waters
- Suitable for use in Autoflush (see separate brochure)



### "The ORP sensors from Pi are much more reliable than others and they have a very long life." **Bhupendra Patel, Africa**

The ORPSense sensors and flow cells are available with different controllers giving you the same great performance with different communication, display, and control options. With the ORPSense range of redox controllers, you get everything that you need - and nothing that you don't.



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### **Principle of Operation**

At the heart of the ORPSense are the ORP electrodes. These electrodes are filled with a polymeric gel. This innovative design makes the electrodes more responsive and with a longer life than ordinary electrodes (up to 3 years).

ORP operates by measuring the potential between 2 electrodes. The potential tells operators the tendency of the water to oxidize (or reduce) pollutants. Tendency can be seen as a useful measure of the rate of oxidation.

Despite all of the additional functionality that this unit has to offer, the purchase costs are less than or comparable to, its competitors!

## **Automatic Cleaning**

As described in a separate brochure (ISB36 Autoflush), the ORPSense can come equipped to automatically clean itself at user defined intervals. The Autoflush is particularly useful in food preparation, pulp and paper, and many applications where there is likely to be a build up of solids in the sample. Automatic cleaning is available for at line, and in line versions including dip and screw in Autoclean pipe versions. Please see the Autoflush brochure (ISB36) available on our website, or if you are online, please click here.

### Water Treatment

- Remote Sites
- Chemical Process
- Cooling Towers • Paper Mills
- Food Preparation
- Mining

Anywhere you have a requirement to measure ORP is a suitable application for the ORPSense. The ORPSense ORP meter range is particularly suited to working in sites where reliability and ease of use are most important.

### **Multi-Sensor Systems**

The whole range of ORPSense ORP meters can be fitted with additional sensors such as chlorine or pH. Please ask your local distributor for more details.

"Multi-sensor systems can save considerable sums without compromising measurement integrity" **Dr Craig Stracey, UK** 

#### Installation

The ORPSense can be installed in a variety of auxiliary flow cells and self-cleaning devices. Please see the ORP Selection guide (ISB57) available on our website, or if you are online, please click here.

#### **Recommended Reading**

An ORP Selection Guide is available on our website, or if you are online, please click here.





ORP2 sensor in a single closed flow cell

ORP2 sensor in a double open flow cell alongside a total chlorine probe

### Specification\*

	ORP1	ORP2	ORP3	ORP5
Туре:	Combined reference, and measuring		Combined reference, and measuring	
	electrode		electrode	
Reference Type:	Ag/AgCl gel filled	Ag/AgCl gel filled	Ag/AgCl gel filled	Ag/AgCl gel filled
ORP Range:	-1200 to 1200mV	-1200 to 1200mV	-1200 to 1200mV	-1200 to 1200mV
Pressure Range:	0-7 Bar	0-7 Bar	0-7 Bar	0-7 Bar
Response Time:	Application specific, typically full response within 30-45 seconds			
Temperature Range:	0-80°C	0-80°C	0-80°C	0-100°C
Conductivity:	>100µS/cm	>100µS/cm	>100µS/cm	>100µS/cm**
Wetted Surface:	PVC/Glass/Pt	PVC/Glass/Pt	PVC/Glass/Pt	Ryton/Glass/Pt
Junction:	Single Gelled	Single Gelled	Double Gelled	Double Gelled
Cable Length:	1m	6m	6m	3m
Shelf Life:	12 months	12 months	12 months	12 months
Estimated Life (Application	12-18	12-18	12-18	18 months
Dependent):	months	months	months	
Warranty:	3 months	3 months	3 months	3 months

\*All subject to change without notice

\*\*For applications below 100µS/cm, please contact us

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