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# 水中オキシダント計

塩水や汽水中の塩素やオゾンなどによる酸化化合物を、試薬不要で迅速かつ正確に測定する先進的な測定器をご紹介します。革新的な自己洗浄機能と三電極技術により、過酷な海洋環境下でも高い信頼性を発揮します。この頑丈でメンテナンス容易な測定器が、産業・環境・研究分野における水質モニタリングの新たな基準を確立します。



## 水中オキシダント計

水中オキシダント測定器

- 🗸 試薬不要測定 化学薬品不要
- 🕶 自動電極洗浄
- 🗸 1分以内の迅速な測定
- Suitable for a variety of water conditions
- 📿 様々な水質に適応
- 🗸 過酷な環境への耐性
- 🗸 既存システムへの容易な統合
- 🗸 様々な用途に対応
- 🗸 壁掛け設置(配管取り付け可能)

#### 水中オキシダント計の機能とは?

水中酸化化合物測定器は、試薬を必要とせずに塩水および汽水中の酸化化合物を検出する 先進的な測定機器です。3電極を用いた電位パルスボルタンメトリ技術により、高速かつ 正確な測定を実現し、革新的な自己洗浄システムにより信頼性を維持します。

水中オキシダント計はORP/酸化還元電位計と混同してはなりません。技術概要を参照の **군と:** 

Potential Pulse

測定原理 Voltammetry (PPV) with

three electrodes

Direct measurement of

対象 oxidants (e.g., chlorine,

ozone, H<sub>2</sub>O<sub>2</sub>)

必要試薬 ⊠No reagents required

Typically less frequent 校正 due to stable design

塩水/汽 図Yes, optimized for

水用設計 marine environments 耐汚損性 Self-cleaning system

helps avoid biofouling

⊠Submersible and 耐圧深度

rugged

応答時間

detection

選択性

between oxidants

ORP / 酸化還元電位計

**Electrochemical potential** 

difference between two

electrodes

General oxidation-reduction

potential (a combined effect of

all redox species)

⊠No reagents, but indirect

reading

Needs regular calibration for

accuracy

△ Can be affected by high ionic

strength and biofouling ⊠Prone to fouling, requires

regular maintenance

△ Limited submersion, not always pressure-rated

Moderate to slow, stabilizes

over time

 $\square$ High — can distinguish  $\square$ Low — gives a general redox

state on慶次安経過時間



技術概要 水中オキシダント計

経時安定 ②Excellent with pulse 性 tachnology

性 technology

ORP / 酸化還元電位計 図Can drift, affected by contamination or coating on the probe

#### Why an Underwater Oxidant Meter?

In various industrial and environmental applications, it is essential to monitor the presence of oxidants in water. The Underwater Oxidant Meter allows you to control water quality parameters, allowing you to efficiently:

- Avoid unnecessary water consumption
- Works sustainably and is environmentally friendly without chemical reagents
- · Saves costs on maintenance through automatic cleaning

### Applications of the Underwater Oxidant Meter.

The Underwater Oxidant Meter is used in various industries and applications. When you're looking for general water quality or are on a budget, consider an ORP meter. Perfect applications for the Underwater Oxidant Meter:

- Water Treatment Plants Optimize Disinfection Processes.
- Aquaculture in seawater
- **Precise** oxidant monitoring (e.g., ozone dosing)
- Seawater sterilization in fisheries Ensure a clean environment for aquaculture
- Wastewater treatment in factories Meet environmental standards
- Swimming pools and spas Maintain safe water quality
- Drinking water supply and sewage management Prevent contamination
- Industrial processes Control oxidation-related chemical reactions

### **Specifications**

Alarm outputs

Feature	Details		
Measurement Purpose	Oxidants in seawater and brackish water		
Measurement Principle	Three-electrode potential pulse voltammetry		
Measuring method	Microelectrode system with self-cleaning beads		
Measuring range	0-2.00 mg/L (Standard) - Optional: 1.00/3.00/5.00 mg/L		
Repeatability	±5% of full scale plus one digit		
Response time	1 minute (90% response)		
Temperature compensationAutomatic compensation with a thermistor			
<b>pH range:</b> 5.8-8.6 (variation within $\pm$ 0.5 pH)			
	<b>Conductivity:</b> $\geq$ 10 mS/m (variation within $\pm$ 10 mS/m)		
Conditions	Water temperature: 0 - 45°C (no freezing)		
Ambient temperature: -10 - 45°C			
	<b>Humidity:</b> ≤90% RH (no condensation)		
Installation	Wall mounting (Optional: Tube mounting with U-bolt kit)		
Resolution	0.01 mg/L		
Signal Output	DC 4- 20mA (Isolated, maximum load 500Ω)		

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Upper and lower limit alarms (1a each)



**Details Feature** Adjustable range: -  $\pm 10\%$  of full scale Control output -  $\pm 5\%$  of full scale -  $\pm 2.5\%$  of full scale AC 100-240V ( $\pm 10\%$  variation) 50/60Hz Power supply Pressure resistance 0.5 MPa 1. Stainless steel Tube Stand (1500 mm long) 2. Attachment kit for tube (50A) Optional accessories 3. Connection box (sensor cable extension). **4.** Dedicated extension cable (available in 10 m lengths).

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## eoxi-40

	詳細	メートル法	ヤードポンド法
1	製品名	EOXI-40	EOXI-40
2	製品番号	EOXI-40	EOXI-40
	液体	メートル法	ヤードポンド法
3	ろ過器の有無とサイズ		
	ガス	メートル法	ヤードポンド法
4	排出ガス		
5	使用ガス		
	接続	メートル法	ヤードポンド法
6	給水		
7	排水		
8	吸気		

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