

# Palintest

Water Analysis Technologies



SENSOR TECHNOLOGY RANGE

About us

Palintest is a leading company in the design and manufacture of water analysis technologies, supplying a comprehensive range of precision instruments for multidisciplinary analysis.

OVERVIEW

75  
YEARS OF  
RESEARCH

A Halma plc company, Palintest has long been a leader in the supply of water analysis technologies, with a rich history of innovation and research.

OUR ROLE



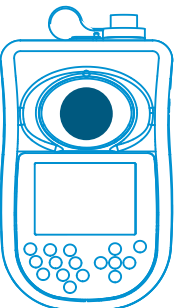
It is our goal to support global efforts in meeting the ever-increasing demands on water resources through the use of efficient monitoring and control technologies.

A global company with a local approach

•USA •UK •China •Australia

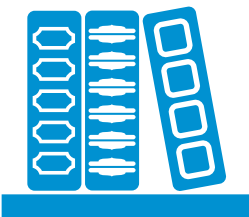


Product range



From multiparameter photometers to visual test kits. Palintest has a wide range of solutions for every application.

Water testing library



Our online library contains research and insight articles about our products and the applications they are used in.

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Photometer feature key



US EPA approved

This method has been approved by the United States Environmental Protection Agency.



Single use sensor icon

The sensors are disposable and can only be used once.



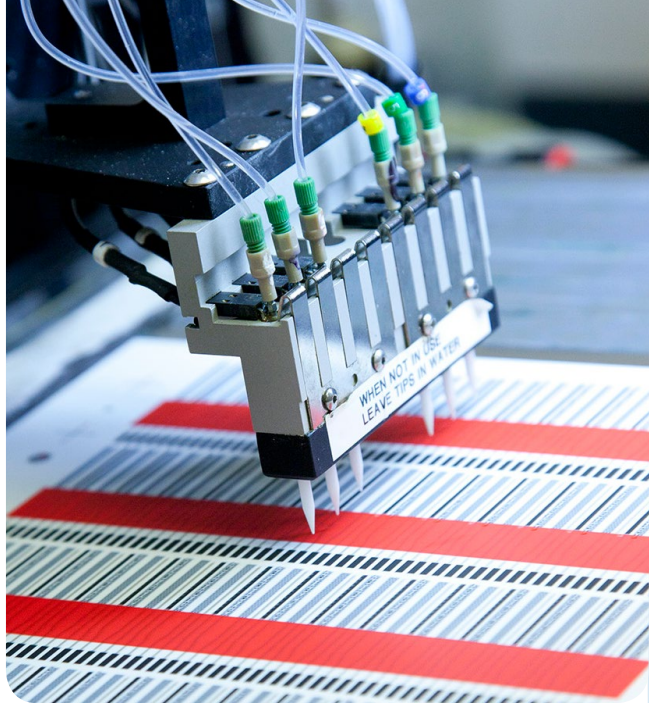
USB icon

This instrument includes a data transfer function via USB.



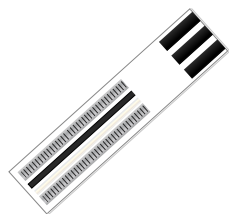
# Sensor technology

Sensor technology offers significant advantages compared to alternative techniques for disinfection control and heavy metals determination.



*Quicker - Safer - Traceable*

## Why choose sensor technology?



### Sophisticated electrochemical measurement technique

The instrument delivers repeatable and reliable measurements



### Designed for users of all skill level and expertise

The simple test method is easy to follow and does not require special skills or chemistry knowledge.



### Suitable for a wide range of sample types and environments

No interference from solids, colour, turbidity or light quality.



### EPA approved, externally validated test method

Approved by the US Environmental Protection Agency (EPA)



### The simple test method reduces potential errors

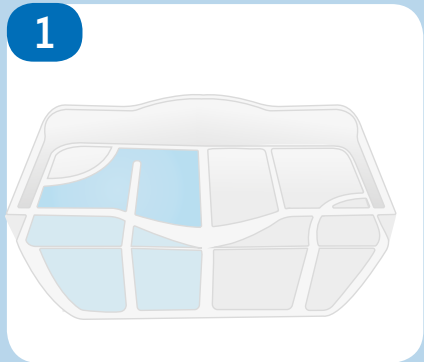
Giving users confidence to make critical water quality decisions.



### Integrated data log

Go paperless and store up to 500 results on one instrument. Perfect for auditing data.

## The sensor method



1. Fill sample to brim

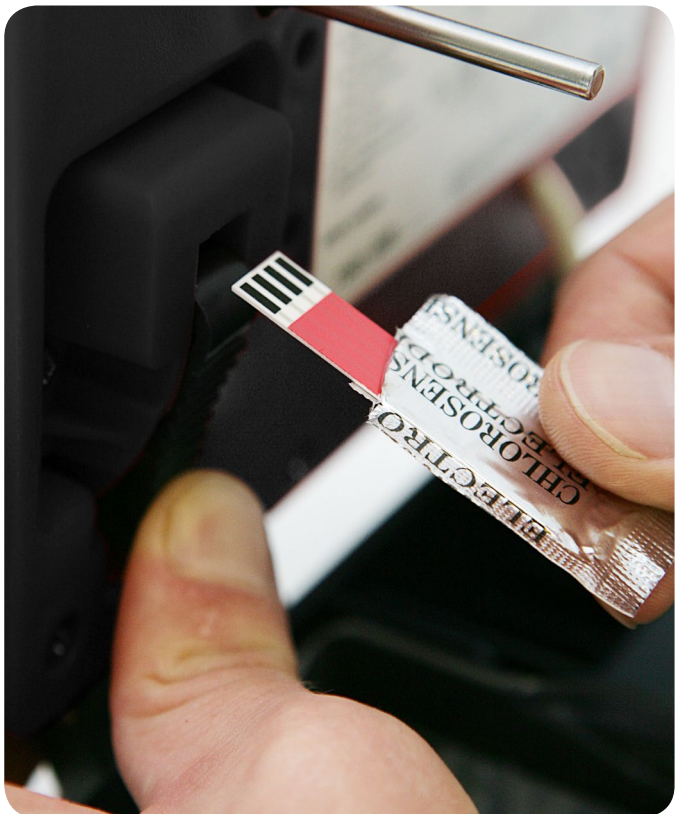


2. Insert sensor



3. Close lid

## How does it work?



Sensor technology is driven by disposable single use sensors which utilise chronoamperometry and electrochemistry to measure the electrical current generated by chemical reactions.

Chronoamperometry involves applying a fixed voltage to an electrode and recording the resulting current over time. The magnitude of the current is proportional to the concentration of chlorine in the test sample.







# ChloroSense

The simplest, portable method for accurate measurement of free and total chlorine – with USEPA approval.

This instrument can test for the following:

Chlorine  
Cl



The revolutionary ChloroSense boasts unique sensor technology – developed specifically for measuring free and total chlorine. Designed for field analysis, the instrument is portable, waterproof and battery powered.

Ideal for drinking water and food processing plants, the ChloroSense is free from glassware, and uses no reagents. The simple measurement technique and integrated data log means users can make critical water quality decisions with confidence.



- Simple measurement technique, displaying results for free and total chlorine in one minute.
- No reagents and no glassware – ideal for controlled manufacturing environments.
- Connect your instrument to a PC via USB to export results, upgrade software and fix the instrument settings.

## Technical Specification

Measuring System	Chronoamperometry
Range	0 – 10 mg/L free chlorine 0 – 100 mg/L total chlorine
Optimum Temperature	5 – 25°C
Display	High clarity LCD with backlight
User Interface	English, French, Spanish, German and Italian language options
Connectivity	USB-B
Data Storage	500 results including date, time, test ID and sample ID
Size (W x L x H) & Weight	170 x 126 x 116mm, 975g (including batteries)
Power Supply	4 x AA batteries



Product	Code	Contents
ChloroSense kit	CS100	ChloroSense instrument, USB cable, 100 chlorine sensors including calibration chip, sample bottle, check standards, and instructions. Supplied in a protective shoulder case.
Replacement sensors (100/pk)	CS110	Chlorine sensors (free and total) (100/pk)
Replacement sensors (500/pk)	CS150	Chlorine sensors (free and total) (500/pk)

## Simple measurement process – with minimal training required.

1



7 Fill sample to brim

2



Insert sensor

3



Close lid



## Accessories

Accessories	Code
ChloroSense check standards	CS180



# ChloroSense HR

Measure high concentrations of chlorine with this easy to use portable instrument. Ideal for validation of disinfection dosing.

This instrument can test for the following:

Chlorine  
high range  
**Cl**



The ChloroSense HR boasts unique sensor technology - developed specifically for measuring high concentrations of free and total chlorine. The wide measurement range reduces the requirement for dilution, offering an accurate measurement for critical applications.

With no glassware and no reagents, the ChloroSense HR is ideal for complex operating environments including fresh produce washing plants. The simple measurement technique and integrated data log means users can make critical water quality decisions with confidence.

US EPA approved

Single use sensor

USB data transfer

- Quick and simple test for measuring high concentrations of chlorine; reducing the demand for dilution of samples
- Ideal for food processing applications, with no reagents or glassware required.
- Go paperless with the integrated results log, perfect for auditing data.
- Connect your instrument to a PC to export results, upgrade software and fix the instrument settings.

## Technical Specification

Measuring System	Chronoamperometry
Range	0 – 25 mg/L free chlorine, 0 – 500 mg/L total chlorine
Optimum Temperature	5 – 25°C
Display	High clarity LCD with backlight
User Interface	English, French and Mandarin language options
Connectivity	USB-B
Data Storage	500 results including date, time, test ID
Size (W x L x H) & Weight	170 x 126 x 116mm, 975g (including batteries)
Power Supply	4 x AA batteries
Rating	IP67 waterproof



Product	Code	Contents
ChloroSense HR kit	CS800	ChloroSense HR instrument, USB cable, chlorine HR sensors (x100) including calibration chip, dilution tube, syringe, check standards and instructions. Supplied in a protective shoulder case
Replacement sensors (100/pk)	CS810	Chlorine HR sensors (free and total) (100/pk)
Replacement sensors (500/pk)	CS850	Chlorine HR sensors (free and total) (500/pk)

## Accessories

ChloroSense HR check standards	CS182
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## Simple measurement process - with minimal training required.

1

Fill sample to brim

2

Insert sensor

3

Close lid





# PAASense

Make light work of peroxyacetic acid disinfection monitoring, using our unique disposable sensor method

This instrument can test for the following:

Peroxyacetic acid



Validate your PAA dosing system in three simple steps, with our straightforward test method designed for users of any skill level. With minimal training for operators and a result displayed in one minute, the PAASense helps to generate cost and time efficiencies for even the most structured manufacturing procedures.

With a fully traceable integrated data log and straightforward measurement process, operators use their results to make critical water quality and disinfection decisions with confidence.



Single use disposable sensor

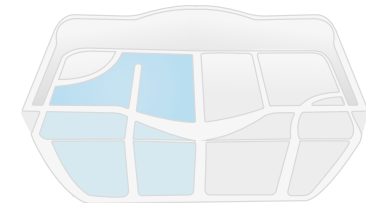


USB data transfer

- Quick and simple test for measuring peroxyacetic acid, with minimal training required.
- Ideal for food and beverage processing facilities, the method is free from reagents and glassware.
- Go paperless with the integrated results log, perfect for auditing data.
- Connect your instrument to a PC to export results, upgrade software and fix the instrument settings.

Simple measurement process - with minimal training required.

1



Fill sample to brim

2



Insert sensor

3



Close lid

## Technical Specification

Measuring System	Chronoamperometry
Range	02- 2000 mg/L peroxyacetic acid
Temperature range	5 - 30° C
Display	High clarity LCD with backlight
User Interface	English, French and Mandarin language options.
Connectivity	USB-B
Data Storage	500 results including date, time and test ID
Size (W x L x H) & Weight	170 x 126 x 116mm, 975g (including batteries)
Power Supply	4 x AA batteries
Rating	IP67 waterproof



Product	Code	Contents
PAASense Kit	CS700	PAASense instrument, USB cable, PAA sensors (x100) including calibration chip, sample bottle, Check Standards and instructions. Supplied in a protective shoulder case.
PAASense replacement sensors (100 pack)	CS710	PAA replacement sensors (x100)
PAASense replacement sensors (500 pack)	CS750	PAA replacement sensors (x500)

## Accessories

PAASense check standards	CS181
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# ChlordioXense

Measure chlorine dioxide with optimal precision and accuracy, ideal for drinking water, institutional hygiene, cooling towers and food manufacturing applications.

This instrument can test for the following:

Chlorine dioxide  
 $\text{ClO}_2$



Chlorine dioxide has a number of advantages as a disinfectant but traditional field measurement techniques are often unreliable. The ChlordioXense uses unique disposable sensor technology delivering reliable results by reducing potential errors from operators.

Supported with a full range of calibration check standards and technical advice, the ChlordioXense is an integral part of any chlorine dioxide control programme.



US EPA approved



Single use sensor



USB data transfer

- Measure 0 – 50 mg/L of chlorine dioxide in only a couple of minutes, with no lengthy measurement time
- Go paperless with the integrated results log, perfect for auditing data.
- Connect your instrument to a PC to export results, upgrade software and fix the instrument settings.

## Technical Specification

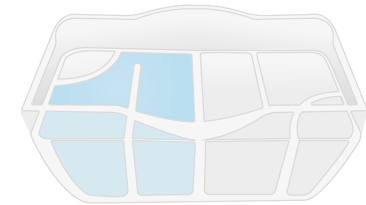
Measuring System	Chronoamperometry
Range	0 – 50 mg/L chlorine dioxide
Display	High clarity LCD with backlight
User Interface	English, French, Spanish, German and Italian language options
Connectivity	USB-B
Data Storage	500 results including date, time, test ID and sample ID
Size (W x L x H) & Weight	170 x 126 x 116mm, 975g (including batteries)
Power Supply	4 x AA batteries



Product	Code	Contents
ChlordioXense kit	CS 300	ChlordioXense instrument, USB cable, 100 CDX sensors including calibration chip, glycine solution, sample bottle, stirring rods, Check Standards, and instructions. Supplied in a protective shoulder case.
Replacement sensors (100/pk)	CDX310	Chlorine dioxide sensors (100/pk)
Replacement sensors (500/pk)	CDX350	Chlorine dioxide sensors (500/pk)

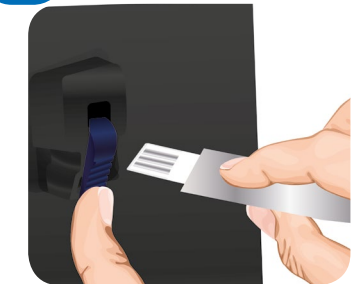
## Simple measurement process - with minimal training required.

1



Fill sample to brim

2



Insert sensor

3



Close lid

## Accessories

ChlordioXense check standards	CS190
Glycine reagent	PT549





# ChlordioX Plus

The advanced ChlordioX Plus combines testing for chlorine dioxide, free chlorine and chlorite in one portable instrument - with EPA approval.

This instrument can test for the following:

Chlorine  
**Cl**

Chlorine dioxide  
**ClO<sub>2</sub>**

Chlorite  
**ClO<sub>2</sub><sup>-</sup>**



Measuring chlorite is a regulatory requirement when using chlorine dioxide as a drinking water disinfectant. The ChlordioX Plus has been designed to provide full analysis and control for all samples including solutions containing free chlorine.

Whether measuring drinking water production or quality, cooling tower applications or produce washing, the ChlordioX Plus delivers the critical information needed for compliance and control.

EPA Approved  
US EPA approved

x1 use  
Single use sensor

USB  
data transfer

- Electrochemical measurement technique - no interference from sample colour or solids
- No glassware - ideal for controlled manufacturing environments
- Superb performance - report results with confidence.

Simple measurement process - with minimal training required.

1  
A white plastic container with a blue lid and a handle.

2  
A hand inserting a blue sensor into the instrument.

3  
The instrument with its lid closed.

Fill sample to brim

Insert sensor

Close lid

## Technical Specification

Measuring System	Chronoamperometry
Range	0 - 50 mg/L chlorine dioxide 0 - 10 mg/L free chlorine 0 - 50 mg/L chlorite
Display	High clarity LCD with backlight
User Interface	English, French, Spanish, German and Italian language options
Connectivity	USB-B
Data Storage	500 results including date, time, test ID and sample ID
Size (W x L x H) & Weight	170 x 126 x 116mm, 975g (including batteries)
Power Supply	4 x AA batteries



Product	Code	Contents
ChlordioX Plus Kit	CS400	ChlordioX Plus instrument, USB cable, de-gasser assembly and battery operated pump, batteries, 200 CDX sensors including calibration chip, 100 CS sensors including calibration chip, glycine solution, CR-1 reagent, CR-2 reagent, sample bottle, stirring rods, check standards, and instructions.
Chlorine sensors (100/pk)	CS110	Chlorine sensors free and total (100/pk)
Chlorine sensors (500/pk)	CS150	Chlorine sensors free and total (500/pk)
Chlorine dioxide and chlorite sensors (100/pk)	CDX310	Chlorine dioxide and chlorite sensors (100/pk)
Chlorine dioxide and chlorite sensors (500/pk)	CDX350	Chlorine dioxide and chlorite sensors (500/pk)

## Accessories

ChlordioX Plus check standards	CS184
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# Heavy metals



# SA1100 Scanning Analyzer

The SA1100 Scanning Analyzer is the only US EPA approved portable measurement of lead and copper. Utilising disposable sensor technology, get results in a matter of minutes.

This instrument can test for the following:

Lead  
Pb

Copper  
Cu



Using the principle of voltammetry, the SA1100 Scanning Analyzer can accurately determine concentrations of lead and copper in a wide range of sample types.

The SA1100 Scanning Analyzer has a waterproof USB port for instrument set-up and data download of the result memory. USEPA-approved, field analysis for lead and copper has never been so simple.



US EPA approved



Single use sensor

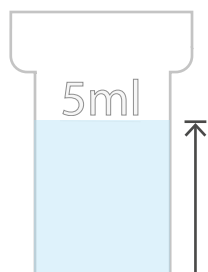


USB data transfer

- Accurate and sensitive – with a lower limit of detection of 2 ppb of lead or 50 ppb of copper, the SA1100 can detect the smallest heavy metal contamination.
- Waterproof and battery powered field instrument – supplied in a shoulder case with all accessories required for immediate testing.
- Connect your instrument to a PC to export results, upgrade software and fix the instrument settings.

Simple measurement process – with minimal training required.

1



Fill sample to 5ml

2



Insert sensor

3



Close lid

## Technical Specification

Measuring System	Voltammetry
Range	2 – 100 µg/l Lead 50 – 2000 µg/l Copper
Display	High clarity LCD with backlight
Optimum Temperature	15 – 30°C
User Interface	English, French, Spanish, German and Italian language options
Connectivity	USB-B
Data Storage	500 results including date, time, test ID and sample ID
Size (W x L x H) & Weight	170 x 126 x 116mm, 975g (including batteries)
Power Supply	4 x AA batteries



Product	Code	Contents
Lead Scanning Analyzer Kit	PT430	SA1100 Scanning Analyzer instrument, sensor pack (PT 435), check standard (CS 640), calibration chip, instructions
Copper Scanning Analyzer Kit	PT431	SA1100 Scanning Analyzer instrument, sensor pack (PT 436), check standard (CS 640), calibration chip, instructions
Replacement lead sensor pack	PT435	Replacement lead sensor pack containing x10 sensors, x10 tablets, x10 graduated tubes, crushing rods and calibration chip.
Replacement copper sensor pack	PT436	Replacement copper sensor pack containing x10 sensors, x10 tablets, x10 graduated tubes, crushing rods and calibration chip.

## Accessories

Scanning Analyzer check standards CS640





# Sensors and accessories

Replacement sensor packs	Part Code	Compatible with
Chlorine sensors (free and total) (100/pk)	CS110	ChlordioX Plus, ChloroSense
Chlorine sensors (free and total) (500/pk)	CS150	ChlordioX Plus, ChloroSense
Chlorine HR sensors (free and total) (100/pk)	CS810	ChloroSense HR
Chlorine HR sensors (free and total) (500/pk)	CS850	ChloroSense HR
PAASense sensors (100/pk)	CS710	PAASense
PAASense sensors (500/pk)	CS750	PAASense
Chlorine dioxide and chlorite sensors (100/pk)	CDX310	ChlordioX Plus, ChlordioXense
Chlorine dioxide and chlorite sensors (500/pk)	CDX350	ChlordioX Plus, ChlordioXense
Replacement lead sensors pack (10/pk)	PT435	Scanning Analyzer
Replacement copper sensors pack (10/pk)	PT436	Scanning Analyzer



## Accessories

## Part Code

ChloroSense check standards	CS180
ChloroSense HR check standards	CS182
PAASense check standards	CS182
ChlordioXense check standards	CS190
ChlordioX Plus check standards	CS184
CR-1 reagent (for chlorite test)	PT546
CR-2 reagent (for chlorite test)	PT547
Glycine reagent	PT549
SA1100 check standards	CS640



See [www.palintest.com](http://www.palintest.com) for the full range of spares and accessories



# Servicing and Maintenance

**2  
Year  
Warranty**

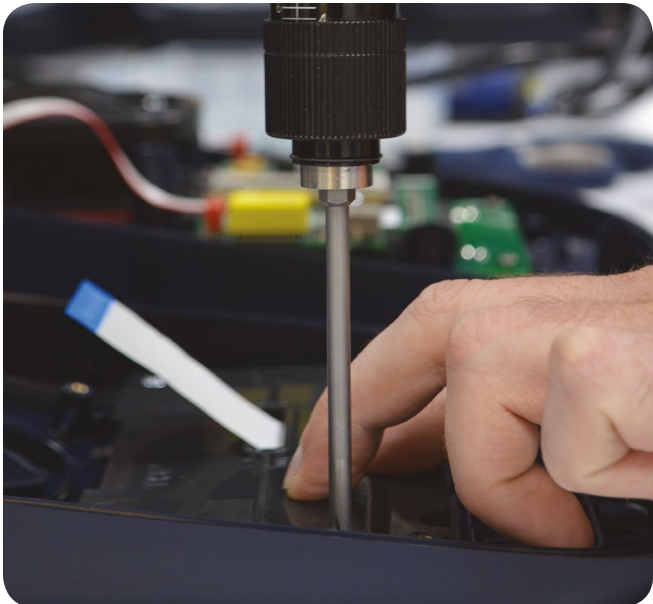
Register your instrument and take advantage of the 2 year warranty and access our full range of technical support.

Visit:  
[www.palintest.com/en/product-registration](http://www.palintest.com/en/product-registration)

Or scan below:



Regular service will keep your instrument operating at the peak of performance. To find out more about our options for servicing email: [sales@palintest.com](mailto:sales@palintest.com)



For further information and support, get in touch with a member of our team:



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Stay in touch @Palintest



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Water Analysis Technologies

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