

# Palintest

## PRODUCT CATALOGUE





## Safeguarding water for everyone, every day.



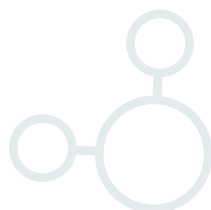
**At Palintest, we design, manufacture, supply and service water analysis instruments and consumables for drinking & wastewater, recreational, industrial and humanitarian water.**

Providing products and services for water quality monitoring and disinfection control, our equipment empowers individuals to make water quality decisions with confidence. Manufactured in the UK, our technologies are used globally in a variety of applications to protect lives and the environment.



**A Proud Member of Halma's  
Life- Saving Technology Group**

Palintest is a member of Halma, a global group of life-saving technology companies. Halma comprises around 50 businesses that deliver innovative solutions to some of the world's most critical challenges.



# Where we make a difference



## Drinking Water and Wastewater

Safeguard public health with Palintest's advanced testing solutions for drinking water and wastewater.

## Recreational Water

Ensure impeccable water quality in your recreational facilities with our water testing solutions.



## Industrial Water

Enhance industrial water processes with our cutting-edge solutions.

## Humanitarian Water

Palintest provides essential testing tools for rapid water quality assessment in humanitarian efforts.





# Products & Solutions

1

## PHOTOMETERS



LUMISO EXPERT

10



LUMISO POOLTEST EXPERT

14



LUMISO CHLORINE

18



LUMISO CHLORINE DIOXIDE

20



LUMISO OZONE

22



LUMISO AMMONIA

24



LUMISO POOLTEST 3

26



LUMISO POOLTEST 6

28



LUMISO POOLTEST 9

30



TABLET REAGENTS

32



LIQUID REAGENTS

34



ACCESSORIES

36

2

## ELECTROCHEMICAL METERS



KEMIO DISINFECTION

42



KEMIO HEAVY METALS

48



KEMIO MULTI

52



SENSORS & LIQUID REAGENTS

56



KEMIO ACCESSORIES

58



CHLORINE SENSOR SELECTOR

60



MICRO 800 MULTIPARAMETER

62



PH, CONDUCTIVITY, TDS AND  
MULTIPARAMETER POCKET METERS

66

3

## TURBIDITY METERS



TURBIDITY EXPERT

74



TURBIDITY EXPERT & LUMISO  
CHLORINE KIT

78



TURBIDITY EXPERT ACCESSORIES

82



## 4

## MICROBIOLOGICAL KITS



WAGTECH POTATECH+

88



WAGTECH POTALAB+

94

WAGTECH POTALAB  
WITHOUT ARSENIC

100



WAGTECH POTACHECK

104



WAGTECH POTATEST DUAL

108



WAGTECH POTAKIT

110



WAGTECH POTATEST CLASSIC

116



WAGTECH CONSUMABLES

122

MICROBIOLOGICAL TESTING  
ACCESSORIES

124



WAGTECH KIT COMPARISON

126

## 5

## VISUAL KITS



CONTOUR COMPARATORS

132



TEST STRIPS

136



POOLTEST KITS

138



POCKET KITS

140



SEWAGE EFFLUENT KIT

142



VISUAL ACCESSORIES

144

## 6

## PALINTEST CONNECT

148

## 7

## AFTER SALES

152

SERVICING

152

LEGACY TRADE-IN

154

APPROVALS AND CERTIFICATIONS

156

PALINTEST WARRANTY POLICY

158

TERMS AND CONDITIONS

160





PHOTOMETERS

ELECTROCHEMICAL  
METERS

TURBIDITY  
METERS

MICROBIOLOGICAL  
KITS

VISUAL KITS

PALINTEST  
CONNECT

AFTER SALES

1

# PHOTOMETERS



# PHOTOMETERS

A photometer is an essential tool in water analysis, used to measure the concentration of various substances by detecting the amount of light that passes through a water sample.

It helps determine water quality by using reagents that change colour in the presence of specific chemicals, allowing for accurate and reliable assessment of different water parameters.



## PHOTOMETERS



LUMISO EXPERT

10



LUMISO POOLTEST EXPERT

14



LUMISO CHLORINE

18



LUMISO CHLORINE DIOXIDE

20



LUMISO OZONE

22



LUMISO AMMONIA

24



LUMISO POOLTEST 3

26



LUMISO POOLTEST 6

28



LUMISO POOLTEST 9

30



TABLET REAGENTS

32



LIQUID REAGENTS

34



PHOTOMETER ACCESSORIES

36



## LUMISO EXPERT

Lumiso Expert is a robust multi-parameter photometer with an extensive range of testing parameters. For users operating in water maintenance industries, such as drinking water and wastewater, who need to perform water analysis testing in-situ or in laboratory environments.







### Intuitive Interface

Intuitive and accessible touchscreen navigation, which also works with wet and gloved hands, and simple to follow onscreen instructions, meaning the Lumiso Expert can be used with little to no prior training.



### Rugged Construction

Field ready, featuring a robust IP67 waterproof design and IK08 rated construction making it ideal for use in tough field environments.



### Cloud Connectivity

Compatible with Connect for easy results retrieval and data traceability for auditing and compliance purposes.



### Field Ready

Kit features recycled material case containing accessories required for testing, so you can get testing straight away.

COMPATIBLE WITH

**connect**  
By Palintest

## Kit Contents

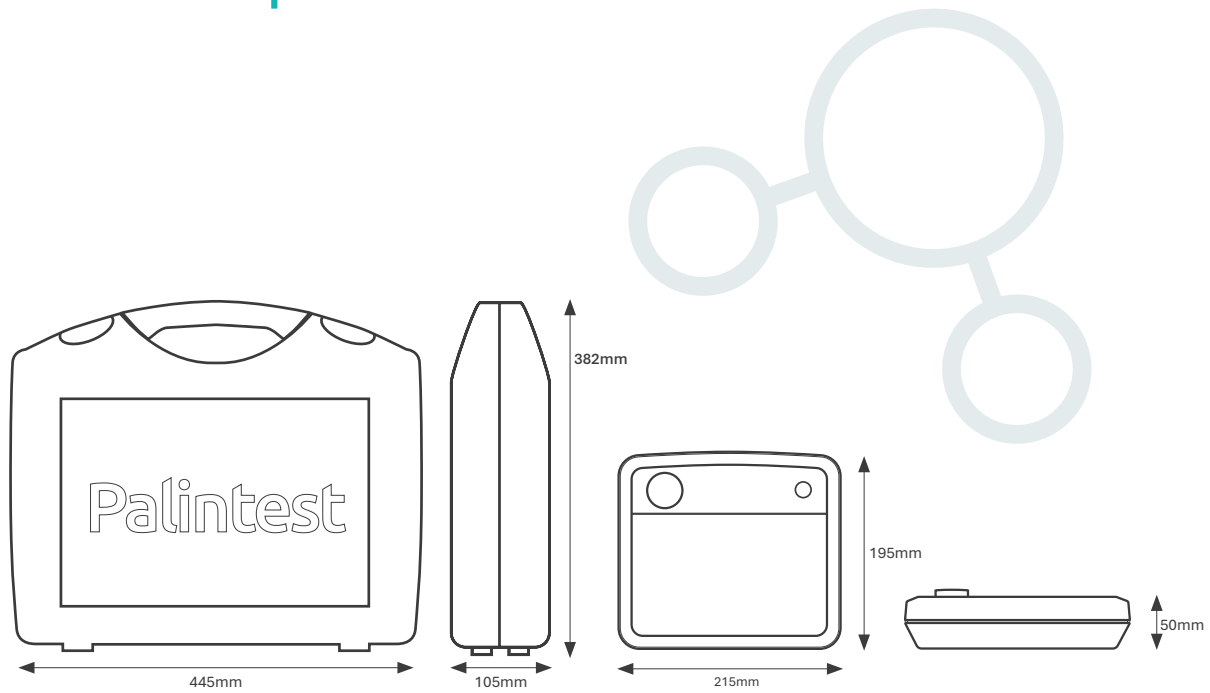


### ORDERING INFORMATION

**PRODUCT CODE: LUM7210**

\*Reagents must be purchased separately. The Lumiso Expert is compatible with every liquid and table reagent we offer, See page 32-35 for reagent list.

# Technical Specification



Instrument Type	Multiparameter Photometer
Wavelengths	430 nm, 465 nm, 530 nm, 575 nm, 620 nm
Peak Wavelengths	±2 nm
Accuracy	±1 %T
Display	Full colour TFT – 16:9 ratio screen, resolution 800x480 px
User Interface	PCAP touch panel
Instrument Weight	0.85kg
Kit Weight	2.56kg
IP Rating & Standards	IP67
Power Supply	6x AA 1.5V batteries or Standalone USB
Connectivity	Via Windows App (USB) or Mobile App (QR Code)
Memory Capacity	Access to 1000 results via device's screen
Battery Life	5000 tests from one set of batteries
Certifications	EN61326, EN61010, IP67 and EN60068-2-78





## LUMISO POOLTEST EXPERT

Lumiso Pooltest Expert is a multi-parameter benchtop photometer designed as an all-round solution for pool and spa water testing needs. From pool managers through to professional engineers, this photometer is suitable for testing multiple times daily, quickly and accurately across key and troubleshooting parameters.





### Intuitive Interface

Efficient and simple to use through a large touchscreen interface and illustrated on-screen instructions for every test, meaning training requirements are minimised and users get quick and accurate results.



### Cloud Connectivity

Compatible with Connect for easy results retrieval and data traceability for auditing and compliance purposes.



### Comprehensive Testing

Cost effective testing with over 30 tests available on the instrument, ensuring all key and troubleshooting parameters are covered.



### Field Ready

Kit features recycled material case containing starter pack of reagents plus all accessories required for testing, so you can get started straight away.

COMPATIBLE WITH

**connect**  
By Palintest



# Kit Contents



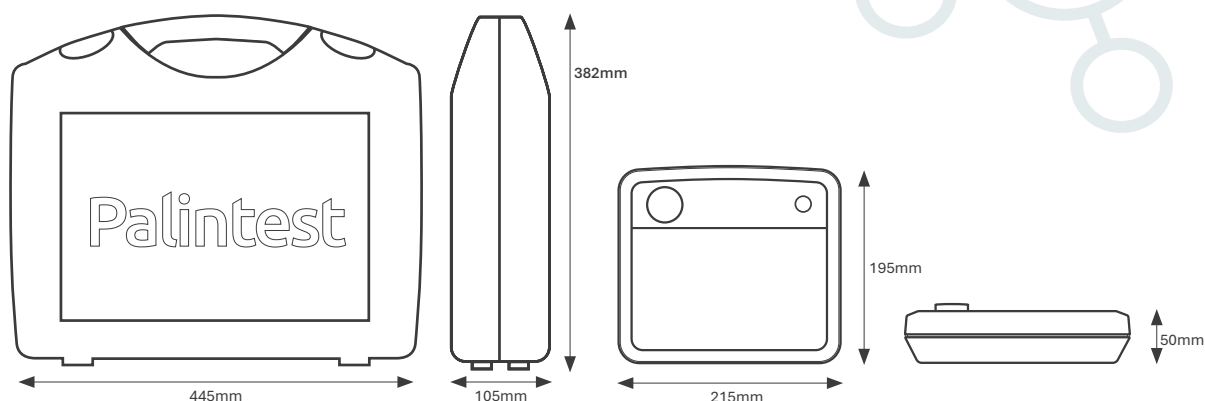
\*Includes starter pack of reagents. To purchase replacement reagents see page 32-35 for ordering information.



## ORDERING INFORMATION

UK/ Rest of World Kit Product Code: LMPXUK		Americas Kit Product Code: LMPXUS		Australia Kit Product Code: LMPXAUS	
Reagents Included	Quantity	Reagents Included	Quantity	Reagents Included	Quantity
DPD1 Free Chlorine	80 tests	DPD XF Free Chlorine	80 tests	DPD1 Free Chlorine	40 tests
DPD3 Total Chlorine	80 tests	DPD XT Total Chlorine	80 tests	DPD3 Total Chlorine	40 tests
DPD4 Total Chlorine	20 tests	Cyanuric Acid	40 tests	DPD4 Total Chlorine	20 tests
Cyanuric Acid	60 tests	Phenol Red (pH)	70 tests	DPD XF Free Chlorine	40 tests
Phenol Red (pH)	80 tests	Coppercol	10 tests	DPD XT Total Chlorine	40 tests
Coppercol	20 tests	Total Alkalinity	60 tests	Cyanuric Acid	70 tests
Total Alkalinity	60 tests	Calcium Hardness	40 tests	Phenol Red (pH)	80 tests
Calcium Hardness	40 tests	Iron MR	10 tests	Coppercol	10 tests
Iron MR	10 tests	Oxystop Tablet	10 tests	Total Alkalinity	70 tests
		Phosphate LR	20 tests	Calcium Hardness	40 tests
				Iron MR	10 tests

## Technical Specification



Instrument Type	Multiparameter Photometer
Wavelengths	530 nm, 575 nm, 620 nm
Peak Wavelengths	±2 nm
Accuracy	±1 %T
Display	Full colour TFT – 16:9 ratio screen, resolution 800x480 px
User Interface	PCAP touch panel
Instrument Weight	0.85kg
Kit Weight	2.63kg
IP Rating & Standards	IP67
Power Supply	6x AA 1.5V batteries or Standalone USB
Connectivity	Via Windows App (USB) or Mobile App (QR Code)
Memory Capacity	Access to 1000 results via device's screen
Battery Life	5000 tests from one set of batteries
Certifications	EN61326, EN61010, IP67 and EN60068-2-78

# LUMISO CHLORINE

Rapid accurate analysis of chlorine. Lightweight, yet robust for field use, the Lumiso Chlorine offers simple reliable testing for drinking and process water applications.



COMPATIBLE WITH

**connect**  
By Palintest



## Rugged Construction

Field ready, featuring a robust IP67 waterproof design making it ideal for use in tough field environments.



## Compact Portability

Lightweight kit, designed with a reusable reagent box for convenient storage, ensuring you can keep everything required for testing in one place, ideal for taking from site to site.



## Cloud Connectivity

Compatible with Connect for easy results retrieval and data traceability for auditing and compliance purposes.



## Effortless Operation

Easy to operate with a large display which is quick to deliver accurate results.

### TESTS FOR

Parameter	Test Range
Free and Total Chlorine	0.01–5 mg/L
Chlorine HR	1–250 mg/L

## Kit Contents

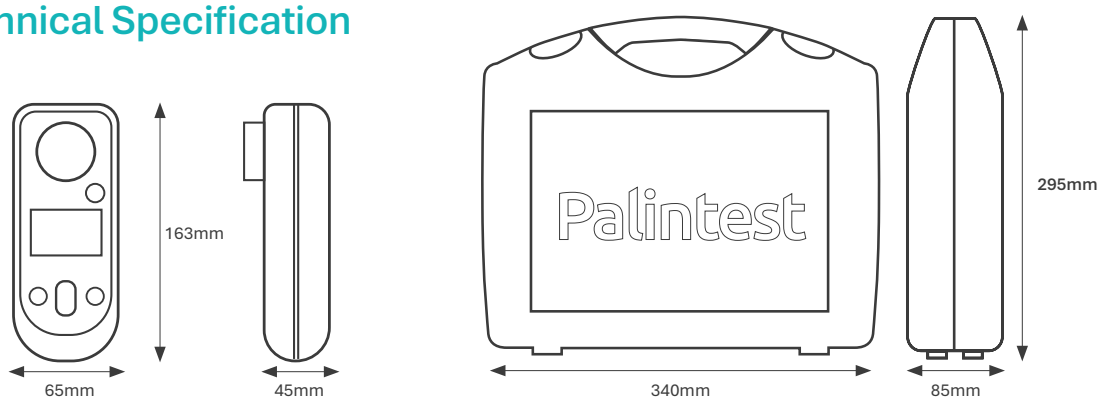


## ORDERING INFORMATION

### PRODUCT CODE: LUM051

\*Reagents must be purchased separately.  
See page 32 for reagent list.

## Technical Specification



Instrument Type	Colorimeter offering direct-reading of pre-programmed test calibrations
Wavelengths	530 nm
Accuracy	±1 %T
Display	226x138 pixels LCD with backlight
User Interface	Language free, on screen visual icons
Size (W x L x H mm)	163 x 70 x 45
Instrument Weight	0.275kg
Kit Weight	1.3kg
IP Rating & Standards	IP67
Power Supply	3x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Up to 50 data sets

# LUMISO CHLORINE DIOXIDE

Rapid accurate analysis of chlorine dioxide and chlorine. Lightweight, yet robust, the Lumiso Chlorine Dioxide offers simple reliable testing for drinking water, wastewater treatment, and food and beverage applications.



COMPATIBLE WITH

**connect**  
By Palintest



## Rugged Construction

Field ready, featuring a robust IP67 waterproof design making it ideal for use in tough field environments.



## Compact Portability

Lightweight kit, designed with a reusable reagent box for convenient storage, ensuring you can keep everything required for testing in one place, ideal for taking from site to site.



## Effortless Operation

Easy to operate with a large display which is quick to deliver accurate results.



## Cloud Connectivity

Compatible with Connect for easy results retrieval and data traceability for auditing and compliance purposes.

### TESTS FOR

Parameter	Test Range
Free and Total Chlorine	0.01–5 mg/L
Chlorine Dioxide	0.04–10 mg/L

## Kit Contents

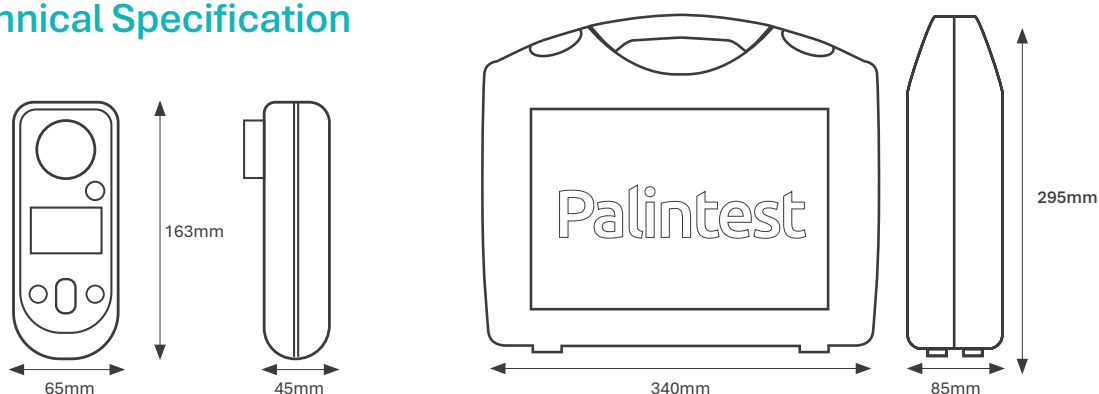


## ORDERING INFORMATION

### PRODUCT CODE: LUM052

\*Contains DPD Glycine (50 tests) and DPD1 (50 tests).  
To purchase replacement reagents see page 32-35 for ordering information.

## Technical Specification



Instrument Type	Colorimeter offering direct-reading of pre-programmed test calibrations
Wavelengths	530 nm
Accuracy	±1 %T
Display	226x138 pixels LCD with backlight
User Interface	Language free, on screen visual icons
Size (W x L x H mm)	163 x 70 x 45
Instrument Weight	0.275kg
Kit Weight	1.3kg
IP Rating & Standards	IP67
Power Supply	3x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Up to 50 data sets



# LUMISO OZONE

Rapid accurate analysis of ozone. Lightweight, yet robust, the Lumiso Ozone offers simple, reliable testing for drinking and wastewater treatment, and also food and beverage production.



COMPATIBLE WITH

**connect**  
By Palintest



## Rugged Construction

Certified IP67 waterproof, enabling water testing to be carried out in challenging environments.



## Compact Portability

Lightweight kit, designed with a reusable reagent box for convenient storage, ensuring you can keep everything required for testing in one place, ideal for taking from site to site.



## Effortless Operation

Easy to operate with a large display which is quick to deliver accurate results.



## Cloud Connectivity

Compatible with Connect for easy results retrieval and data traceability for auditing and compliance purposes.

### TESTS FOR

Parameter	Test Range
Ozone	0.01–3 mg/L

## Kit Contents



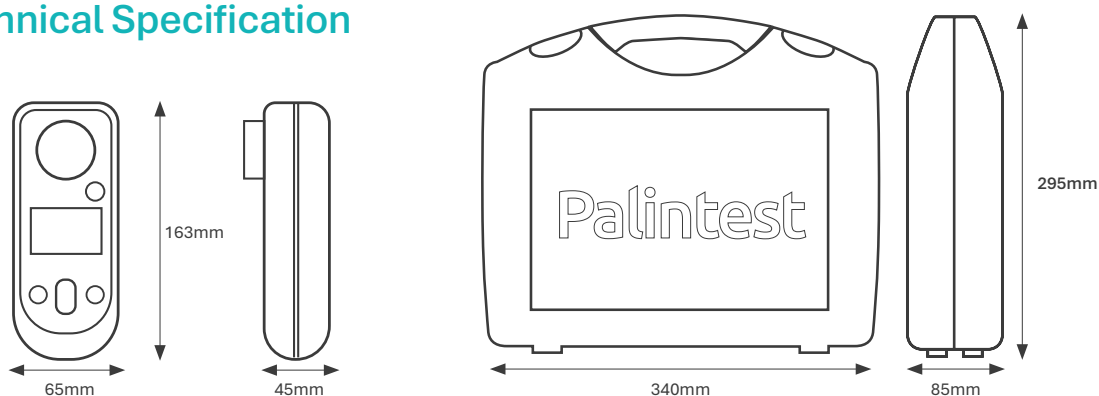
## ORDERING INFORMATION

### PRODUCT CODE: LUM053

\*Contains DPD4 (100 tests).

To purchase replacement reagents see page 32-35 for ordering information.

## Technical Specification



Instrument Type	Colorimeter offering direct-reading of pre-programmed test calibrations
Wavelengths	530 nm
Accuracy	±1 %T
Display	226x138 pixels LCD with backlight
User Interface	Language free, on screen visual icons
Instrument Weight	0.275kg
Kit Weight	1.3kg
IP Rating & Standards	IP67
Power Supply	3x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Up to 50 data sets

# LUMISO AMMONIA

Rapid accurate analysis of ammonia. Lightweight, yet robust, the Lumiso Ammonia offers simple reliable testing for drinking and wastewater treatment, and environmental samples.



COMPATIBLE WITH

**connect**  
By Palintest



## Rugged Construction

Field ready, featuring a robust IP67 waterproof design making it ideal for use in tough field environments.



## Effortless Operation

Easy to operate with a large display which is quick to deliver accurate results.



## Compact Portability

Lightweight kit, designed with a reusable reagent box for convenient storage, ensuring you can keep everything required for testing in one place, ideal for taking from site to site.



## Cloud Connectivity

Compatible with Connect for easy results retrieval and data traceability for auditing and compliance purposes.

### TESTS FOR

Parameter	Test Range
Ammonia Indophenol	0.03–1 mg/L
Ammonia Indophenol	0.2–12 mg/L
Ammonia Indophenol	0.7–50 mg/L
Ammonia Nessler	0.1–15 mg/L
Ammonia Nessler	0.7–50 mg/L
Ammonia Nessler	1.0–100 mg/L

## Kit Contents

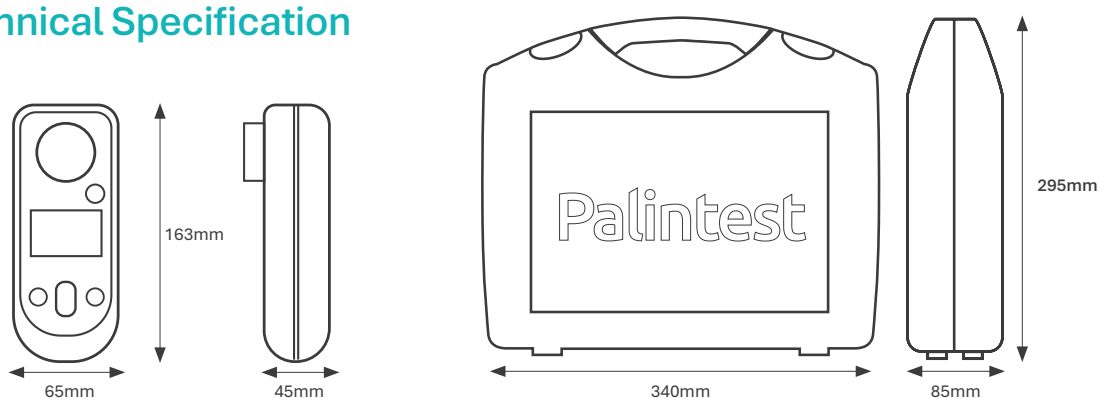


## ORDERING INFORMATION

**PRODUCT CODE: LUM050**

\*Reagents must be purchased separately.  
See page 32 – 35 for reagent list.

## Technical Specification



Instrument Type	Colorimeter offering direct-reading of pre-programmed test calibrations
Wavelengths	620 nm, 465 nm
Accuracy	±1 %T
Display	226x138 pixels LCD with backlight
User Interface	Language free, on screen visual icons
Instrument Weight	0.275kg
Kit Weight	1.3kg
IP Rating & Standards	IP67
Power Supply	3x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Up to 50 data sets



## LUMISO POOLTEST 3

Lumiso Pooltest 3 is ideal for monitoring of outdoor pools, covering the three main tests chlorine, pH and cyanuric acid.



COMPATIBLE WITH

**connect**  
By Palintest



### Compact Portability

Lightweight kit design, with space for all accessories and reagents, allowing you to get testing straight away.



### NSF Approved

NSF L1 certified for pools and spa/ hot tub testing for total chlorine, pH, and cyanuric acid, giving confidence in accurate results you can trust.



### Effortless Operation

Simple, language free user interface making it easy to operate and quick to deliver results.



### Cloud Connectivity

Compatible with Connect for easy results retrieval and data management.

#### TESTS FOR

Parameter	Test Range
Free and Total Chlorine (Standard Range)*	0.01–5 mg/L
Free and Total Chlorine (Extended Range)	0.01–10 mg/L
Cyanuric Acid	2–150 mg/L
pH	6.5–8.4

\*UK/ROW variant only.

## Kit Contents



## ORDERING INFORMATION

### UK/ Rest of World Kit – Product Code: LMP003

#### Starter Pack Reagents Included

DPD1 (50 tests), DPD3 (50 tests), DPD XF (30 tests), DPD XT (30 tests), pH Phenol Red (50 tests), Cyanuric Acid (10 tests)

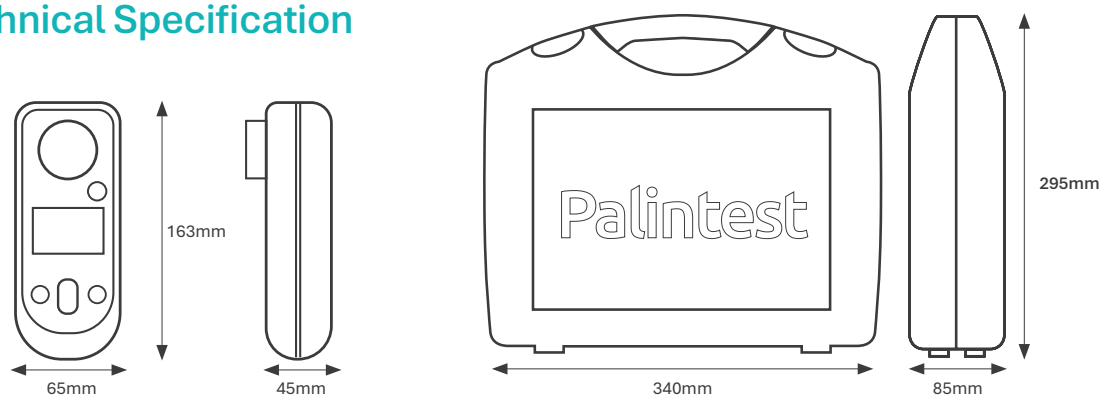
### Americas Kit – Product Code: LMP103

#### Starter Pack Reagents Included

DPD XF (100 tests), DPD XT (100 tests), pH Phenol Red (100 tests), Cyanuric Acid (50 tests)

\*Contains starter pack of reagents. To purchase replacement reagents see page 32-35 for ordering information.

## Technical Specification



Instrument Type	Colorimeter offering direct-reading of pre-programmed test calibrations
Wavelengths	530 nm, 575 nm
Accuracy	±1 %T
Display	226x138 pixels LCD with backlight
User Interface	Language free, on screen visual icons
Instrument Weight	0.275kg
Kit Weight	1.3kg
IP Rating & Standards	IP67
Power Supply	3x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Up to 50 data sets

## LUMISO POOLTEST 6

The Lumiso Pooltest 6 provides simple and effective pool testing for service engineers and pool managers. Inclusive of all the tests required for a water balance calculation: alkalinity, bromine, calcium hardness, chlorine, cyanuric acid and pH.



COMPATIBLE WITH

**connect**  
By Palintest



### Compact Portability

Lightweight kit design, with space for all accessories and reagents, allowing you to get testing straight away.



### NSF Approved

NSF L1 certified for pools and spa/ hot tub testing for total chlorine, pH, and cyanuric acid, giving confidence in accurate results you can trust.



### Effortless Operation

Simple, language free user interface making it easy to operate and quick to deliver results.



### Cloud Connectivity

Compatible with Connect for easy results retrieval and data management.

#### TESTS FOR

Parameter	Test Range
Free and Total Chlorine (Standard Range)*	0.01–5 mg/L
Free and Total Chlorine (Extended Range)	0.01–10 mg/L
pH	6.5–8.4
Cyanuric Acid	2–150 mg/L
Total Alkalinity	10–500 mg/L
Bromine (Standard Range)	0.04–10 mg/L
Bromine (Extended Range)**	0.04 – 20 mg/L
Calcium Hardness	10–500 mg/L

\*UK/ROW variant only.

\*\*US variant only.

## Kit Contents



## ORDERING INFORMATION

### UK/ Rest of World Kit – Product Code: LMP006

#### Starter Pack Reagents Included

DPD1 (50 tests), DPD3 (50 tests), DPD XF (30 tests), DPD XT (30 tests), pH Phenol Red (50 tests), Total Alkalinity (10 tests), Cyanuric Acid (10 tests), Calcium Hardness (10 tests)

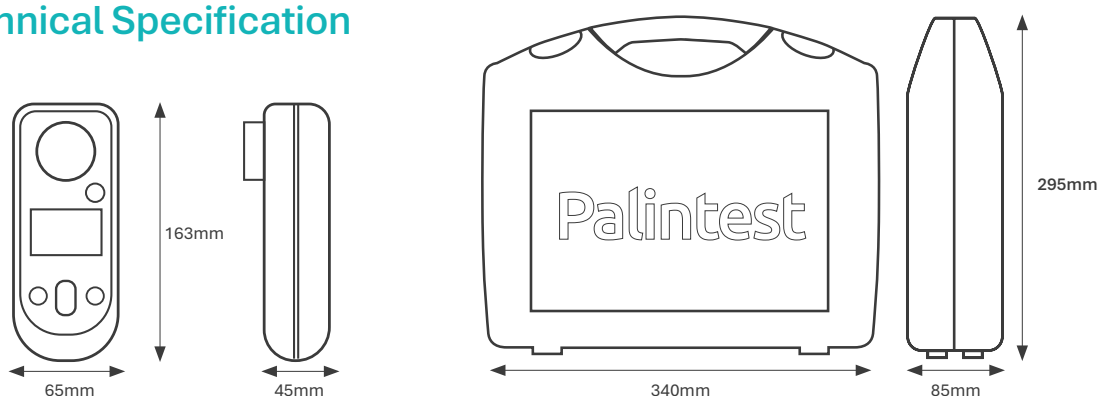
### Americas Kit – Product Code: LMP106

#### Starter Pack Reagents Included

DPD XF (100 tests), DPD XT (100 tests), pH Phenol Red (100 tests), Total Alkalinity (50 tests), Cyanuric Acid (50 tests), Calcium Hardness (50 tests)

\*Contains starter pack of reagents. To purchase replacement reagents see page 32-35 for ordering information.

## Technical Specification



Instrument Type	Colorimeter offering direct-reading of pre-programmed test calibrations
Wavelengths	530 nm, 575 nm
Accuracy	±1 %T
Display	226x138 pixels LCD with backlight
User Interface	Language free, on screen visual icons
Instrument Weight	0.275kg
Kit Weight	1.3kg
IP Rating & Standards	IP67
Power Supply	3x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Up to 50 data sets



# LUMISO POOLTEST 9

The Lumiso Pooltest 9 is the perfect solution for monitoring water quality in leisure centres and municipal swimming pools. It includes all the essential chemical parameter tests required for accurate water balance calculations along with key troubleshooting parameters.



COMPATIBLE WITH

**connect**  
By Palintest



## Compact Portability

Lightweight kit design, with space for all accessories and reagents, allowing you to get testing straight away.



## Rugged Construction

Robust construction and IP67 waterproof design to ensure it can be used in situ in any environment.



## Effortless Operation

Simple, language free user interface making it easy to operate and quick to deliver results.



## Cloud Connectivity

Compatible with Connect for easy results retrieval and data management.

### TESTS FOR

Parameter	Test Range
Free and Total Chlorine (Standard Range)	0.01–5 mg/L
Free and Total Chlorine (Extended Range)	0.01–10 mg/L
pH	6.5–8.4
Cyanuric Acid	2–150 mg/L
Total Alkalinity	10–500 mg/L
Bromine (Standard Range)	0.04–10 mg/L
Bromine (Extended Range)	0.04 – 20 mg/L
Calcium Hardness	10–500 mg/L
Iron MR	0.03–5 mg/L
Copper	0.07–5 mg/L
Phosphate	0.05–4 mg/L

## Kit Contents

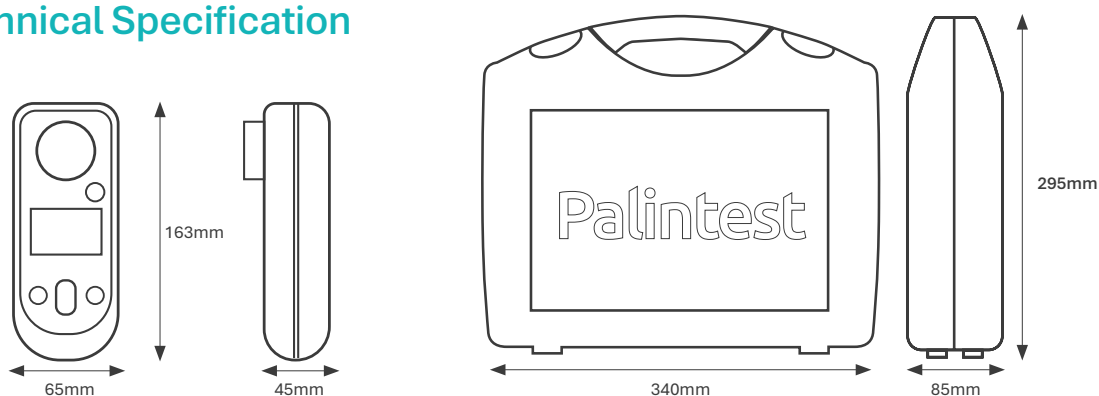


## ORDERING INFORMATION

**PRODUCT CODE: LMP009**

Contains reagents DPD1, DPD3, DPD XF, DPD XT, pH Phenol Red, Total Alkalinity, Cyanuric Acid, Calcium Hardness, Iron, Copper and Phosphate (10 tests of each, 8 tests of phosphate). To purchase replacement reagents, see page 32-35 for ordering information.

## Technical Specification



Instrument Type	Colorimeter offering direct-reading of pre-programmed test calibrations
Wavelengths	530 nm, 575 nm
Accuracy	±1 %T
Display	226x138 pixels LCD with backlight
User Interface	Language free, on screen visual icons
Instrument Weight	0.275kg
Kit Weight	1.3kg
IP Rating & Standards	IP67
Power Supply	3x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Up to 50 data sets

# Tablet Reagents

## Ensure Optimal Performance with Genuine Palintest Reagents

To guarantee accuracy and achieve the best results with your Palintest photometers, always use genuine Palintest reagents. Our photometers are precisely calibrated to work with our unique reagent formulations.

Parameter	Reagent	Test Range	Replacement Pack	
			Part Code	Qty
Chlorine	Free Chlorine, DPD1	0.01-5 mg/L Cl <sub>2</sub>	AP011	250 tests
	Free Chlorine Extended Range, DPD XF	0.01-10 mg/L Cl <sub>2</sub>	AP013	250 tests
	DPD Oxystop	-	AP017	250 tests
	Free and Total Chlorine, DPD1 and DPD3	0.01-5 mg/L Cl <sub>2</sub>	AP031	250 tests
	Total Chlorine, DPD3	0.01-5 mg/L Cl <sub>2</sub>	AP031/1	250 tests
	Free and Total Chlorine Extended Range, DPD XF and DPD XT	0.01-10 mg/L Cl <sub>2</sub>	AP033	250 tests
	Total Chlorine Extended Range, DPD XT	0.01-10 mg/L Cl <sub>2</sub>	AP033/1	250 tests
	Total Chlorine, DPD4	0.01-5 mg/L Cl <sub>2</sub>	AP041	250 tests
	Chlorine HR	1-250 mg/L Cl <sub>2</sub>	AP162	250 tests
Chlorine Dioxide	DPD1	0.04-10 mg/L ClO <sub>2</sub>	AP011	250 tests
	DPD Glycine	-	AT056	250 tests
Ozone	DPD4	0.01-3 mg/L O <sub>3</sub>	AP041	250 tests
Bromine	Total Bromine	0.04-10 mg/L Br <sub>2</sub>	AP060	250 tests
Cyanuric Acid	Cyanuric Acid	2-150 mg/L CYA	AP087	250 tests
Hydrogen Peroxide	Hydrogen Peroxide LR	0.01-2 mg/L H <sub>2</sub> O <sub>2</sub>	AP104	250 tests
	Hydrogen Peroxide HR	1-100 mg/L H <sub>2</sub> O <sub>2</sub>	AP105	250 tests
Nitrite	Nitrite LR Nitricol	0.002-0.5 mg/L N	AP109	250 tests
	Nitrite HR Nitriphot	3-1500 mg/L NaNO <sub>2</sub>	AP260	250 tests
pH	Phenol Red	6.5-8.4	AP130	250 tests
Zinc	Zinc (includes Zinc reagent, Zinc-Dechlor, and EDTA)	0.03-2.25 mg/L Zn	AP148	250 tests
	Zinc-Dechlor (used with Zinc test if chlorine is present in the sample)	-	AT085	250 tests
	EDTA (Used with Zinc test if copper is present in the sample)	-	AT090	250 tests
Ammonia	Ammonia 1N Indophenol	0.03-1 mg/L N	AP152	250 tests
	Seawater Conditioning Reagent	-	AT170	-
Sulfate	Sulfate	2-200 mg/L SO <sub>4</sub>	AP154	250 tests
Iron	Iron LR	0.01-1 mg/L Fe	AP155	250 tests
	Iron MR	0.03-5 mg/L Fe	AP292	250 tests
	Citrate IR (Used with Iron MR test if nitrite or molybdate is present in the sample)	-	AT294	250 tests
	Iron HR	0.04-10 mg/L Fe	AP156	250 tests
Nitrate	Nitratetest	0.6-20 mg/L N	AP163	200 tests
Aluminium	Aluminium	0.01-0.5 mg/L Al	AP166	250 tests
Manganese	Manganese LR	0.001-0.03 mg/L Mn	AP173L*	250 tests
	Manganese HR	0.06-5 mg/L Mn	AP174*	250 tests
Phosphate	Phosphate LR	0.05-4 mg/L PO <sub>4</sub>	AP177	200 tests
Fluoride	Fluoride	0.03-1.5 mg/L F	AP179L*	200 tests
Copper	Free and Chelated Copper	0.07-5 mg/L Cu	AP186	250 tests
	Free Copper	0.07-5 mg/L Cu	AP187	250 tests
Total Alkalinity	Total Alkalinity	10-500 mg/L CaCO <sub>3</sub>	AP188	250 tests
Potassium	Potassium	0.3-12 mg/L K	AP189	250 tests
Magnesium	Magnesium Hardness	2-50 mg/L Mg	AP193L*	250 tests
Urea	Urea	0.25-5 mg/L	AP197	250 tests
Calcium Hardness	Calcium Hardness	0-500 mg/L CaCO <sub>3</sub>	AP252	250 tests
Total Hardness	Total Hardness	0 - 500mg/L CaCO <sub>3</sub>	AP254L*	250 tests
Chloride (Salt)	Chloride	0 - 50,000mg/L NaCl	AP268	250 tests
Nickel	Nickel	0.04-10 mg/L Ni	AP284	200 tests
COD Mn	COD Permanganate	0.01-10 mg/L	AP295*	250 tests
Chromium (VI)	Chromium (VI)	0.02-1.0 mg/L Cr	AP281	250 tests
Colour/ Turbidity	Colour	5-500 mg/L Pt Co (Hazen)	PM269	50 tests
Acid Demand	Acid Demand	0.2-10 mmol/L	AP188	250 tests

\*Reagent includes a combined step method using both tablet and liquid formulations.

[illegible]



# Liquid Reagents

Parameter	Reagent	Test Range	Part Code	Qty
<b>Chlorine</b>	Free Chlorine, DPD1 (A+B solutions)	0.01-5 mg/L Cl <sub>2</sub>	AT015	1200 tests
	Total Chlorine, DPD3 (C solution, to be used in conjunction with AT015)	0.01-5 mg/L Cl <sub>2</sub>	AT035	1200 tests
<b>Ammonia</b>	Ammonia 12N/50N, Indophenol Method	0.2-12 mg/L N 0.7-50 mg/L N	PL400	25 tests
	Ammonia 15N, Nessler Method	0.1-15 mg/L N	PL420	25 tests
	Ammonia 50N, Nessler Method	0.7-50 mg/L N	PL424	25 tests
	Ammonia 100N, Nessler Method	1.0-100 mg/L N	PL425	25 tests
<b>Nitrate</b>	Nitrate 30N	0.2-30 mg/L N 0.7-150 mg/L NO <sub>3</sub>	PL404	25 tests
<b>Total Nitrogen</b>	Total Nitrogen 30N (to be used in conjunction with PL404)	1.2-30 mg/L N	PL408	25 tests
<b>Phosphate</b>	Phosphate 12P	0.09-12 mg/L P	PL412	25 tests
<b>Total Phosphorus</b>	Total Phosphorus 12P	0.09-12 mg/L P	PL416	25 tests
<b>COD (Mercury free for low chloride samples)</b>	COD/150	4-150 mg/L O <sub>2</sub>	PL450	25 tests
	COD/400	9-400 mg/L O <sub>2</sub>	PL452	25 tests
	COD/1000	14-1000 mg/L O <sub>2</sub>	PL453	25 tests
	COD/2000	20-2000 mg/L O <sub>2</sub>	PL454	25 tests
	COD/20000	200-20000 mg/L O <sub>2</sub>	PL456	25 tests
<b>COD (Containing mercury for moderate chloride samples)</b>	COD/150/M	4-150 mg/L O <sub>2</sub>	PL460	25 tests
	COD/400/M	9-400 mg/L O <sub>2</sub>	PL462	25 tests
	COD/2000/M	20-2000 mg/L O <sub>2</sub>	PL464	25 tests
	COD/20000/M	200-20000 mg/L O <sub>2</sub>	PL466	25 tests
<b>COD (Containing mercury for high chloride samples)</b>	COD/150/2M	4-150 mg/L O <sub>2</sub>	PL461	25 tests
	COD/2000/2M	20-2000 mg/L O <sub>2</sub>	PL465	25 tests
	COD/20000/2M	200-20000 mg/L O <sub>2</sub>	PL467	25 tests
<b>COD Concentration</b>				
<b>COD Standard Solutions</b>	COD Standard Solution, 125 mL	800 mg/L	PL474	-

[illegible]

## PHOTOMETER ACCESSORIES



# Accessories

Accessories	Code	Compatibility (Used with)								
		Lumiso Chlorine	Lumiso Chlorine Dioxide	Lumiso Ammonia	Lumiso Ozone	Lumiso Expert	Lumiso Pooltest 3	Lumiso Pooltest 6	Lumiso Pooltest 9	Lumiso Pooltest Expert
Lumiso Pool Check Standards Kit	LMC001						•	•	•	
Lumiso Chlorine, Chlorine Dioxide, Ozone check standard kit	LMC005D	•	•		•					
Lumiso Ammonia Check Standards kit	LMC005N			•						
Lumiso Expert Check Standard kit	LMCEXP					•				
Lumiso Pooltest Expert Check Standard kit	LMCPTX									•
Replacement cuvette, Glass, 5 pack	PT555	•	•	•	•	•	•	•	•	•
Replacement cuvette, Plastic, 5 pack	PT666	•	•	•	•	•	•	•	•	•
Crush/stir rods, 10 pack	PT502	•	•	•	•	•	•	•	•	•
Polishing cloth	PT399	•	•	•	•	•	•	•	•	•
Dilution tube, up to 10x, 100 mL	PT512	•	•	•	•	•	•	•	•	•
Deionised water, 500 mL	PT1250	•	•	•	•	•	•	•	•	•
De-Ion Pack	PT500	•	•	•	•	•	•	•	•	•
USB Lead, 1m, Type A to C	PT749	•	•	•	•	•	•	•	•	•
Absorbent cloths, 5 pack	PT122	•	•	•	•	•	•	•	•	•
Lumiso Tubetest Adaptor	PT670			•		•				
Wash bottle, 250 mL	PT516	•	•	•	•	•	•	•	•	•
Graduated Bottle, 250 mL, Polypropylene	PT530	•	•	•	•	•	•	•	•	•
Syringe, Luer Slip, 10 mL	PT369	•	•		•	•	•	•	•	•
Tubetest Heater, Standard (Includes Standard Tubetest heater, safety screen (PT590), anodized aluminium heater block, power lead)*	PT589					•				
Replacement safety screen from Standard Tubetest Heater (Compatible with PT589)	PT590					•				
Tubetest Rack	PT588			•		•				
Thermometer -10C to +50C	PT683					•				

## \*Tubetest Heater – Technical Specification

Temperature range	30-200°C
Temperature stability	< 1°C @ 100°C by 120 minutes test
Temperature uniformity	< 0.5°C @ 100°C
Temperature accuracy	< 1°C @ 100°C (@ 230 V / 50 Hz, 115 V / 60 Hz)
Temperature controller	Pre-calibrated
Display and Control	Two large sizes four-digit LED display
Temperature Calibration	Built-in and pre-calibrated
Heating rate	< 18 minutes from ambient to 100°C @ 230 V, 50 Hz
Heat power	300 W
Over temperature cutoff	212°C
Timer	0-999
Power	120 V / 60 Hz; 230 V / 50 Hz, voltage variation < 2%
Cabin dimensions (W x D x H)	102 x 78 x 46 mm
Dimensions	310 x 250 x 80 mm
Weight without block	3.3 kg
Certification	CE





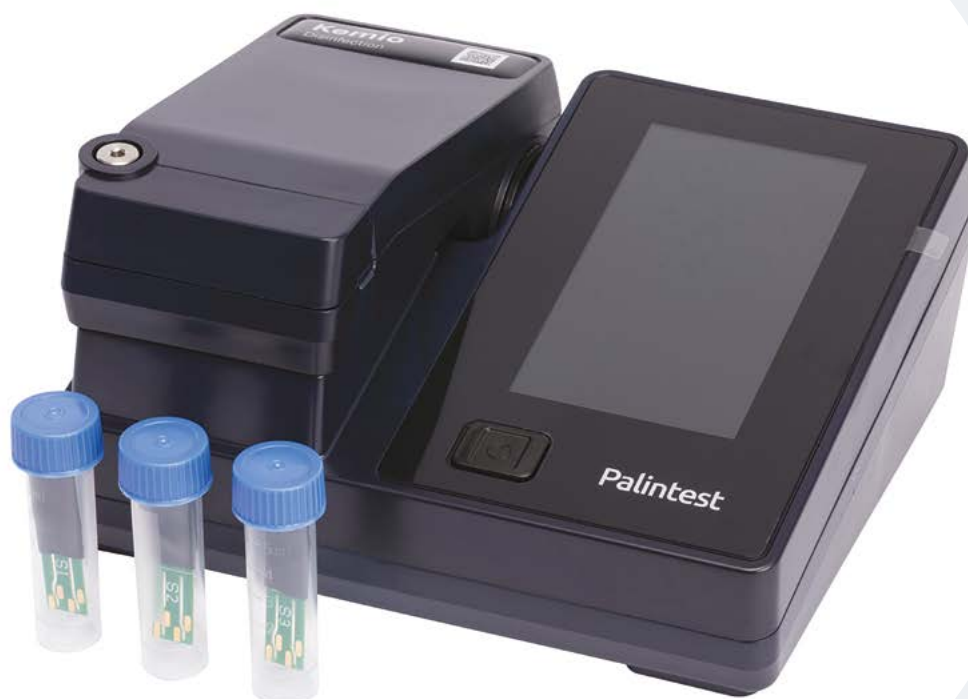
2









# ELECTROCHEMICAL METERS

# ELECTROCHEMICAL METERS

An electrochemical meter is a device which uses a potentiostat to measure and analyse chemical parameters of target analytes through their electrochemical characteristics.

Both electrochemical meters and sensor based solutions employ the use of electrodes to measure a specific parameter.



ELECTROCHEMICAL METERS		42
	KEMIO DISINFECTION	42
	KEMIO HEAVY METALS	48
	KEMIO MULTI	52
	SENSORS & LIQUID REAGENTS	56
	KEMIO ACCESSORIES	58
	CHLORINE SENSOR SELECTOR	60
	MICRO 800 MULTIPARAMETER	62
	PH, CONDUCTIVITY, TDS AND MULTIPARAMETER POCKET METERS	66





## KEMIO DISINFECTION

Kemio Disinfection is a robust portable water testing device which utilises electrochemical sensor technology for various disinfection parameters. Kemio Disinfection is widely adopted in drinking water and industrial applications and is typically used as a secondary application alongside online and inline chemical dosing systems to accurately verify disinfection levels at critical control points within a process.





### Cloud Connectivity

Convenient results logging via the instrument or Palintest Connect equips users with traceable and auditable data, essential for demonstrating compliance.



### Effortless Simplicity

The user-friendly interface features clear, easy-to-follow onscreen instructions, simplifying training and promoting seamless product adoption.



### Rugged Durability

Designed for portability, this lightweight digital test kit is glassware-free and the instrument is certified IP67 waterproof, making it ideal for testing in a range of challenging environments.



### Reliable Precision

This versatile solution is suitable for all sample types, including coloured, turbid, and particle-rich water, guaranteeing precise results even with cloudy or dirty samples.

COMPATIBLE WITH

**connect**  
By Palintest





# Chlorite Hard Case – Kit Contents

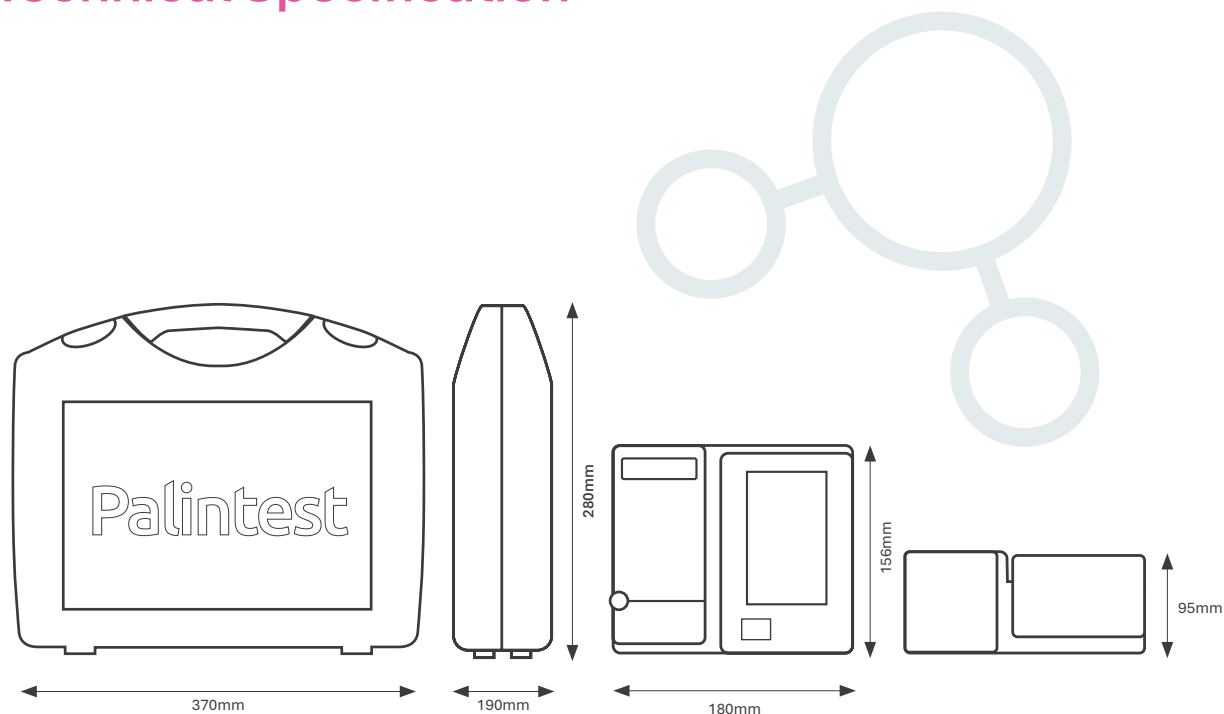


## ORDERING INFORMATION

### PRODUCT CODE: KEMH15DIS

\*Includes 200 Chlorine Dioxide/Chlorite sensors and 100 Chlorine sensors.

# Technical Specification



Measuring System	Chronoamperometry
Temperature Range	Ambient range: 0 °C-50 °C
Display	High Clarity LCD Screen
User Interface	Touchscreen
Language Options	English, French, Spanish and Chinese (Simplified)
Connectivity	USB C
Information Input	Barcode Scanner, on- screen keyboard/keypad
Data Storage	10,000 test results and information
Instrument Weight	1.012kg
Kit Weight	3.84kg
Battery	2399mAh NiMH Rechargeable Battery Pack
Power Supply	USB Power
Rating	IP67



## Soft Case – Kit Contents

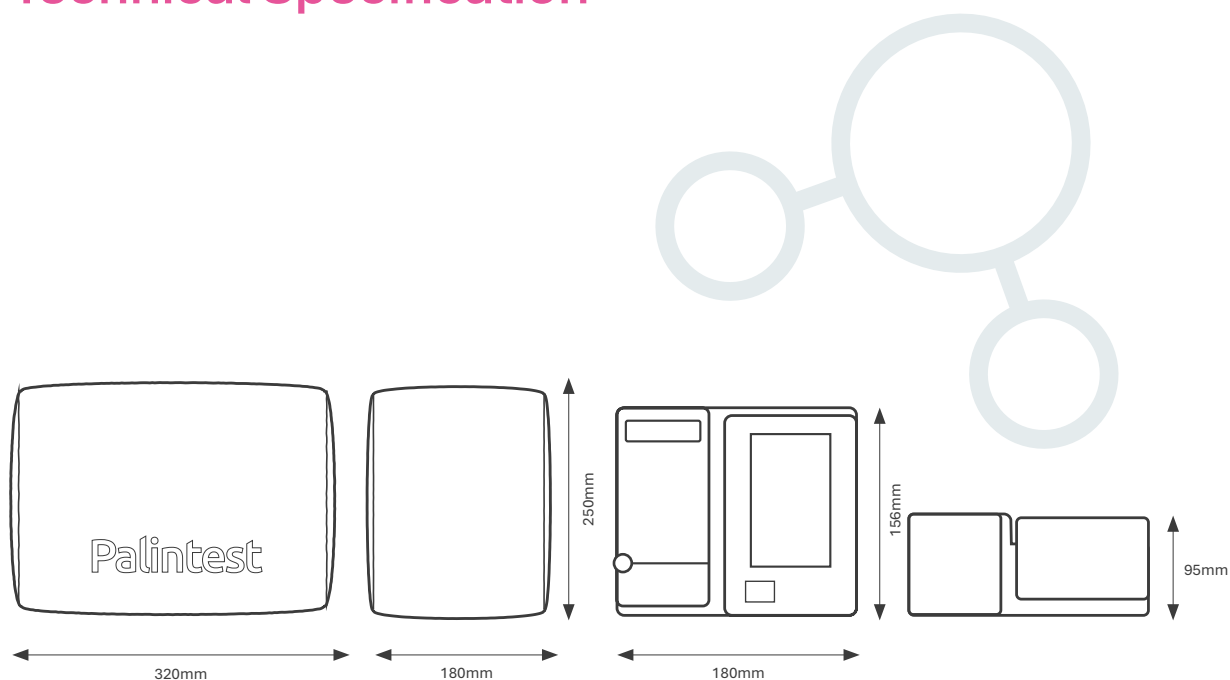


### ORDERING INFORMATION

**PRODUCT CODE: KEMS15DIS**

Sensors ordered separately – see page 56 for order details.

# Technical Specification



Measuring System	Chronoamperometry
Temperature Range	Ambient range: 0 °C-50 °C
Display	High Clarity LCD Screen
User Interface	Touchscreen
Language Options	English, French, Spanish and Chinese (Simplified)
Connectivity	USB C
Information Input	Barcode Scanner, on- screen keyboard/keypad
Data Storage	10,000 test results and information
Instrument Weight	1.012kg
Kit Weight	2.07kg
Battery	2399mAh NiMH Rechargeable Battery Pack
Power Supply	USB Power
Rating	IP67



## KEMIO HEAVY METALS

Kemio Heavy Metals is a lightweight and durable water analysis instrument which uses electrochemical sensor technology to detect various heavy metal contaminants in water samples. Kemio Heavy Metals is widely adopted in humanitarian water and drinking water applications where testing is required at source to determine contamination levels.







### Cloud Connectivity

Convenient results logging via the instrument or Connect equips users with traceable and auditable data, essential for demonstrating compliance.



### Effortless Simplicity

Results can be obtained in as little as three minutes, enabling a rapid response to potential contaminated water sources, ensuring timely intervention and mitigation.



### Rugged Durability

The kit is designed to be lightweight and durable, making it suitable for use in the most challenging or remote environments anywhere in the world.



### Trusted Reliability

Accurate and precise testing provides peace of mind and confidence in the reliability of results, eliminating the delays associated with laboratory test results and ensuring immediate decision-making.

COMPATIBLE WITH

**connect**  
By Palintest



## Soft Case – Kit Contents

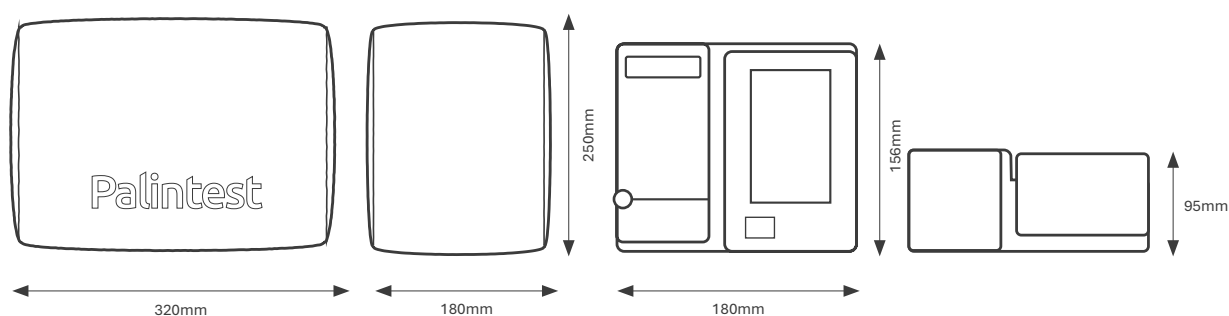
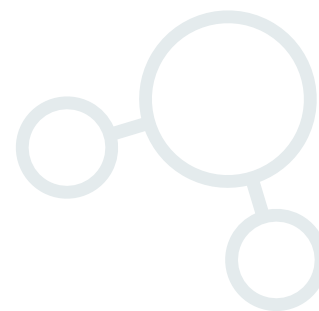


### ORDERING INFORMATION PRODUCT CODE: KEMS15HM

Sensors ordered separately – see page 56 for order details.



# Technical Specification



Measuring System	Anodic Stripping Voltammetry (ASV)
Temperature Range	Ambient range: 0 °C-50 °C
Display	High Clarity LCD Screen
User Interface	Touchscreen
Language Options	English, French, Spanish and Chinese (Simplified)
Connectivity	USB C
Information Input	Barcode Scanner, on- screen keyboard/keypad
Data Storage	10,000 test results and information
Instrument Weight	1.012kg
Kit Weight	2.07kg
Battery	2399mAh NiMH Rechargeable Battery Pack
Power Supply	USB Power
Rating	IP67



## KEMIO MULTI

The Kemio Multi is an advanced, portable water testing device that integrates the functionalities of Kemio Disinfection and Kemio Heavy Metals. Utilising electrochemical sensor technology, it measures various disinfection parameters and detects heavy metal contaminants in water samples. Widely adopted in drinking water, industrial, and humanitarian applications, Kemio Multi serves as a versatile tool for a range of applications.





### Effortless Simplicity

Comprehensive contaminant detection combining the capabilities of both Kemio Heavy Metals and Kemio Disinfection enabling testing across a wide range of key parameters without the need for multiple instruments.



### Cloud Connectivity

Convenient results logging via the instrument or Connect equips users with traceable and auditable data, essential for demonstrating compliance.



### Reliable Precision

Swift and precise results in 60 seconds for disinfection parameters and 3 minutes for heavy metals, facilitating rapid identification and response.



### Trusted Reliability

Accurate and precise testing provides peace of mind and confidence in the reliability of results, eliminating the delays associated with laboratory test results and ensuring immediate decision-making.

COMPATIBLE WITH

**connect**  
By Palintest





## Soft Case – Kit Contents

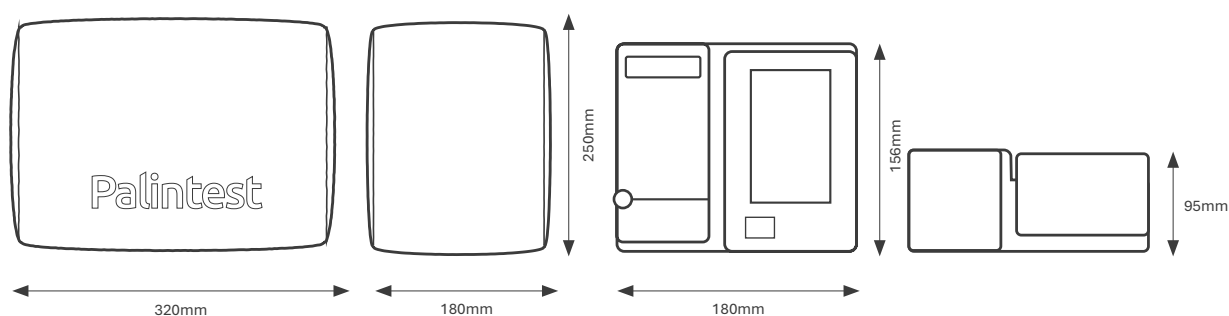


### ORDERING INFORMATION

**PRODUCT CODE: KEMS15MUL**

Sensors ordered separately – see page 56 for order details.

# Technical Specification



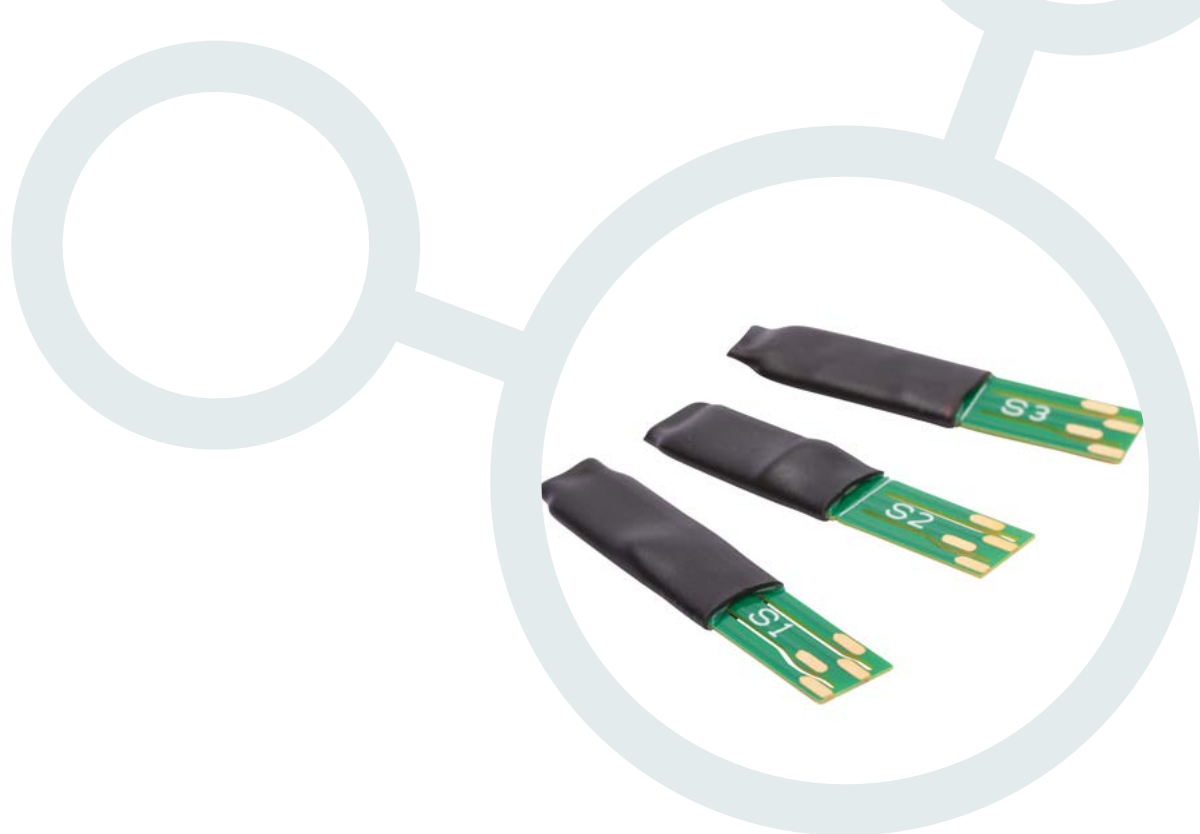
Measuring System	Anodic Stripping Voltammetry (ASV) and Chrono-amperometry
Temperature Range	Ambient range: 0 °C-50 °C
Display	Full colour TFT with projected capacitive touch
User Interface	Touchscreen
Language Options	English, French, Spanish and Chinese (Simplified)
Connectivity	USB C
Information Input	Barcode Scanner, on- screen keyboard/keypad
Data Storage	10,000 test results and information
Instrument Weight	1.012kg
Kit Weight	2.07kg
Battery	2399mAh NiMH Rechargeable Battery Pack
Power Supply	USB Power
Rating	IP67



## Sensors &amp; Liquid Reagents

Parameter	Sensor / Consumable	Range	Temp	Part Code	Qty	Compatible with		
						Kemio DIS	Kemio HM	Kemio Multi
Ammonia	Ammonia Low Range	0.2-2 mg/L	5-50 °C	KEM21ALR	100	●		●
	Ammonia High range	0.5-15 mg/L	5-30 °C	KEM21AHR	100	●		●
Arsenic	Total Arsenic	2-250 µg/L	10-35 °C	KEM100M-TAS	100		●	●
	Speciated Arsenic	2-250 µg/L	10-35 °C	KEM100M-SAS	100			
Bromine	Bromine	0.2-10 mg/L	5- 30°C	KEM21BRS	100	●		●
Cadmium	Cadmium	0.2-10 mg/L	5 - 35°C	KEM22MCD	10		●	●
Chlorine	Free Chlorine FHR	0.1-100 mg/L	2 - 20°C	KEM21FHR	100	●		●
				KEM25FHR	500			
	Free and Total Chlorine CLO	0.02-10 mg/L FC 0.02-75 mg/L TC	5-30 °C	KEM21CLO	100	●		●
				KEM25CLO	500			
	Free and Total Chlorine CHR	0.1-25 mg/L FC 1-500 mg/L TC	5 - 25°C 5 - 30°C	KEM21CHR	100	●		●
				KEM25CHR	500			
	Free and Total Chlorine CLT	0.1-25 mg/L FC 1-500 mg/L TC	2 - 15°C	KEM21CLT	100	●		●
				KEM25CLT	500			
	Chlorine Dioxide & Chlorite	Chlorine Dioxide & Chlorite (CDX)	5 - 40°C	KEM20CDX	Starter Pack	●		●
				KEM21CDX	100			
				KEM25CDX	500			
		CR-1 Reagent	-	PT546	25			
		CR-2 Reagent	-	PT547	25			
Chlorine Dioxide	Chlorine Dioxide	0.02-50 mg/L	5 - 40°C	KEM20CDX	Starter Pack	●		●
				KEM21CDX	100			
				KEM25CDX	500			
	Glycine Reagent	-	-	PT549	25			
Copper	Copper	100-2000µg/L	5 - 35°C	KEM22MCU	10		●	●
Lead	Lead	1-1000 mg/L TC	5 - 35°C	KEM22MPB	10		●	●
Peracetic Acid	Peracetic Acid (PAA)	5-2000mg/L	5 - 30°C	KEM21PAA	100	●		●
				KEM25PAA	500			
	Peracetic Acid Low Range (PAL)	0.02-10 mg/L	2-30°C	KEM21PAL	100	●		●
				KEM25PAL	500			
	Peracetic Acid High Range (PAH)	400-4000mg/L	10-60 °C	KEM21PAH	100	●		●
				KEM25PAH	500			
Monochloramine	Monochloramine	0.2-5 mg/L	5-50 °C	KEM21MOA	100	●		●





## ELECTROCHEMICAL METERS ACCESSORIES





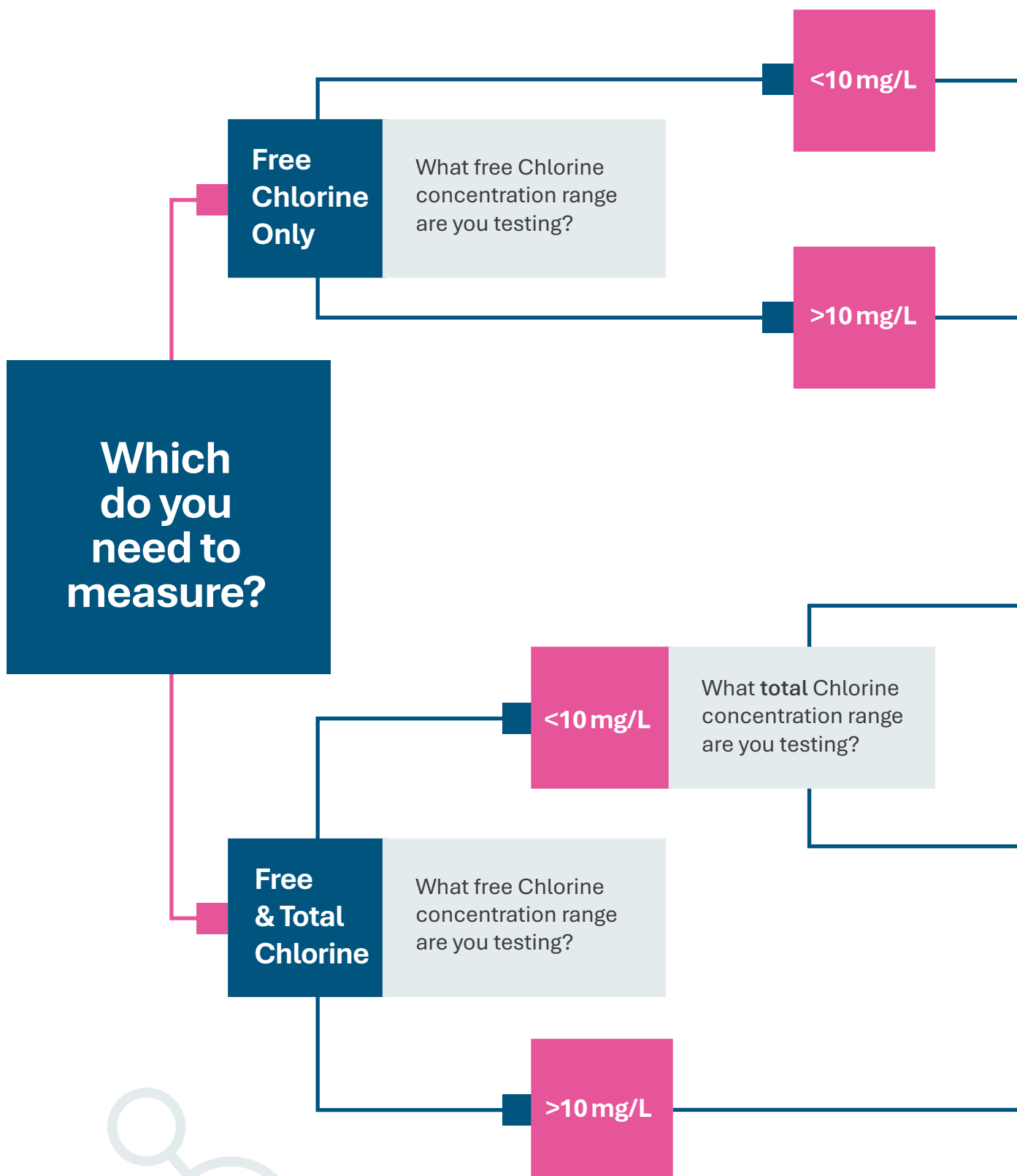
# Accessories

Accessories	Code	Compatibility (Used with)		
		Kemio Disinfection	Kemio Heavy Metals	Kemio Multi
Kemio Check Standards	KEMC10	•	•	•
Kemio Stylus	KEM306	•	•	•
Kemio Protective Case	KEM307	•	•	•
USB – C Cable	PT749	•	•	•
Replacement Sample Vessel (Disinfection)	KEM308	•		•
Replacement Sample Vessel (Heavy Metals)	KEM313		•	•
Contact Pad Replacement Kit	KEM10CTCPAD	•	•	•
Replacement Battery Pack	KEM10BATT	•	•	•
*Kemio Degassing Vessel, Hose, and Filter Disc	PT553	•		•
*Degassing Replacement Filter	PT556	•		•
*Degassing Pump	PT554	•		•
Sample Vessel (Heavy Metals)	KEM323		•	•
Ion Exchange (5 pack)	KEM324		•	•
Kemio USB Power Supply Unit	PT745	•	•	•

\*Degassing products are additional products needed for Chlorite testing, these can be used as replacements as additional accessories.



# Select the most suitable Chlorine sensor for your testing needs







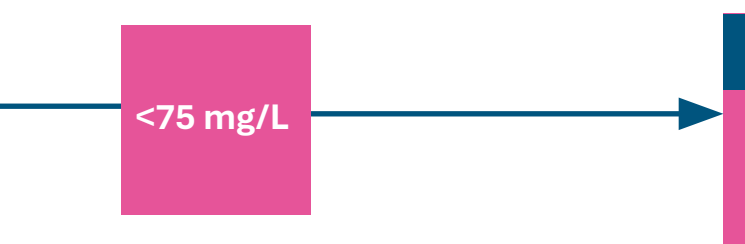
### CLO sensors

Free Cl = 0.02 - 10 mg/L  
Total Cl = 0.02 - 75 mg/L  
Temp range = 5 - 30 °C



### FHR sensors

Free Cl = 0.1 - 100 mg/L  
Temp range = 2 - 20 °C



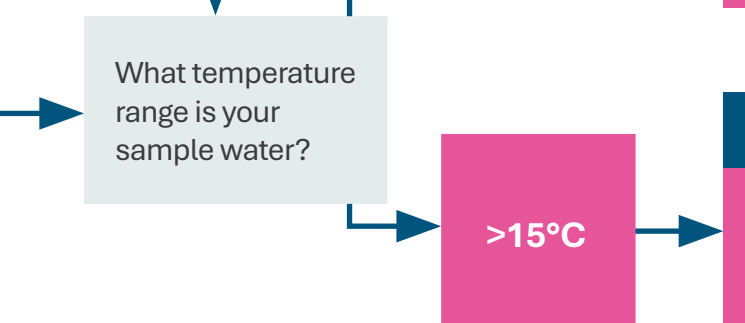
### CLO sensors

Free Cl = 0.02 - 10 mg/L  
Total Cl = 0.02 - 75 mg/L  
Temp range = 5 - 30 °C



### CLT sensors

Free Cl = 0.02 - 10 mg/L  
Total Cl = 0.02 - 75 mg/L  
Temp range = 2 - 35 °C



### CHR sensors

Free Cl = 0.1 - 25 mg/L  
Total Cl = 1 - 500 mg/L  
Temp range (free) = 5 - 25 °C  
Temp range (total) = 5 - 30 °C



## MICRO 800 MULTIPARAMETER

The Micro 800 is suitable for portable or benchtop use to monitor a number of physical water quality parameters. Typically used by professionals in the humanitarian water sector where the monitoring of these critical parameters is essential to maintain water quality.







### Effortless Simplicity

The Micro 800 can measure pH, ORP, conductivity, TDS and temperature, making it a versatile instrument, ensuring users can rely on a single device for various testing needs, enhancing efficiency and reducing the need for multiple instruments.



### User Efficiency

The user-friendly interface simplifies switching between measurement modes and calibration processes, ensuring quick and effective operation, saving time and reducing the likelihood of errors.



### Field Accuracy

Built-in reminders for calibration, including standard recognition and temperature compensation, help maintain measurement accuracy and reliability.



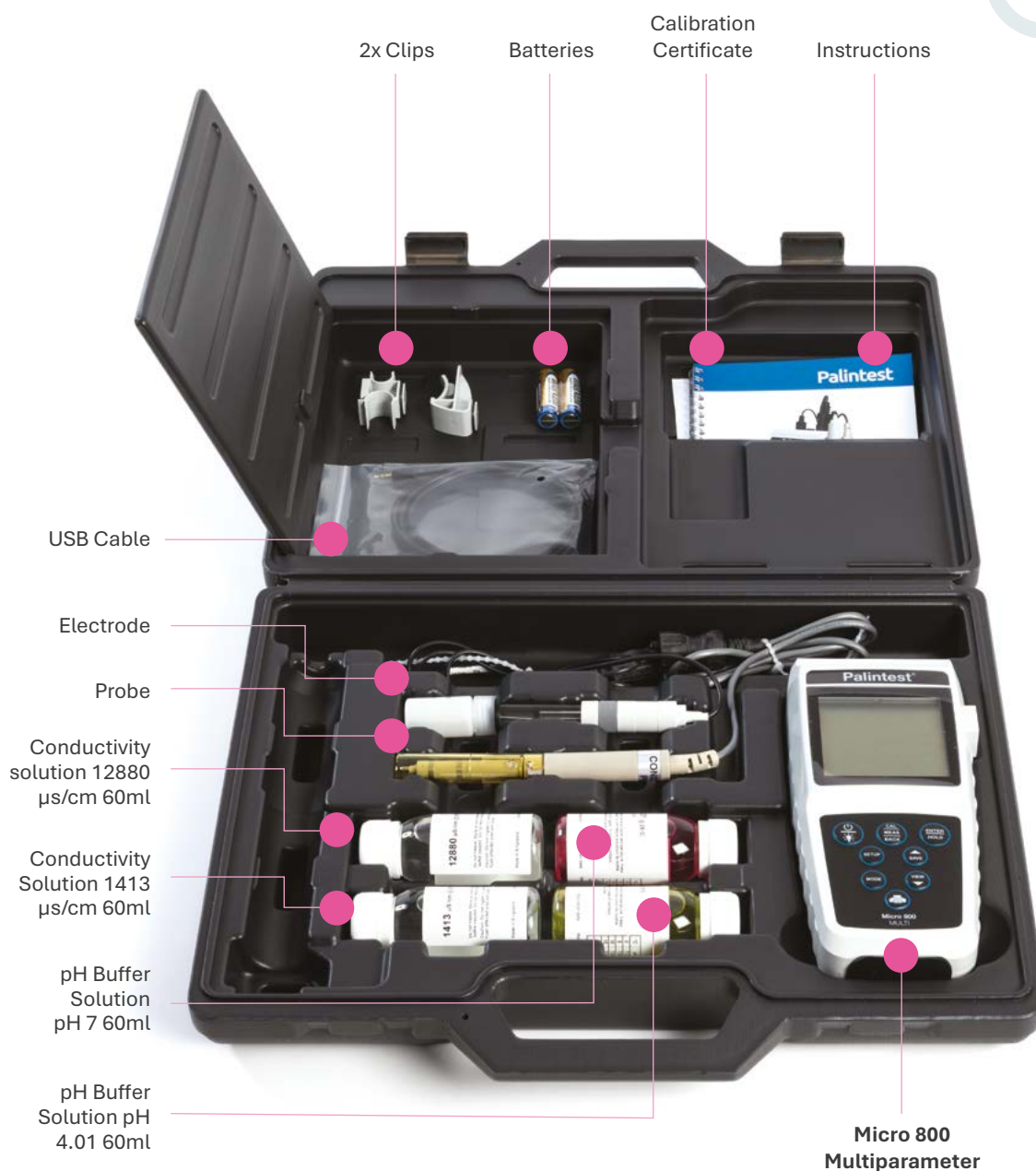
### Built-in Traceability

With the ability to store up to 500 data sets, including time and date stamps and calibration records the Micro 800 ensures thorough documentation and traceability.

#### TESTS FOR

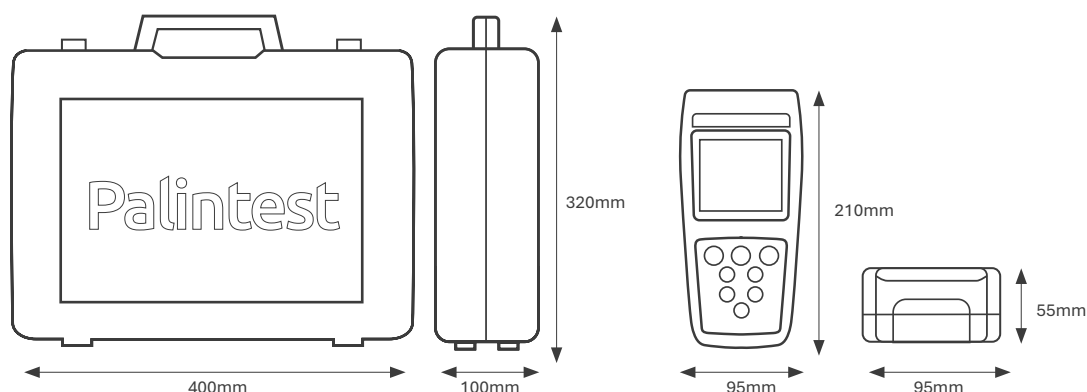
Parameter	Test Range
pH	-2.00 – 16.00
ORP	-2000 to +2000 mV
Conductivity	0 to 200,000 $\mu\text{S}/\text{cm}$ 0 – 200 mS/cm
Total Dissolved Solids (TDS)	0 - 200,000 mg/L 0 – 200 ppt
Temperature	-10 to +110°C

## Kit Contents



**ORDERING INFORMATION**  
**PRODUCT CODE: PT1350**

## Technical Specification



Instrument Weight	0.34kg
Kit Weight	2.20kg

Parameter	Resolution	Accuracy
pH	0.01	±0.01
ORP	0.1 mV (up to ±999.9), 1 mV Above	±0.2 mV or ± 0.5%, whichever is greater
Conductivity	0.01 (0 to 99.99 µS/cm) 0.01 (1.00 – 99.99 mS/cm) 0.1 (100.0 – 200.0 mS/cm)	±1% of full scale or ±1µS/cm, whichever is greater
Total Dissolved Solids (TDS)	0.01 (0 – 99.99 mg/L) 0.1 (100.0 – 200.0 ppt)	±1% of full scale or ±1 mg/L, whichever is greater
Temperature	0.1°C	±0.5°C

Consumables	Code	Compatibility with			
		Pocket Sensor TDS	Pocket Sensor pH	Pocket Sensor Conductivity	Pocket Sensor Multiparameter
pH 4 Buffer Solution, 500mL (pH 4.01)	PT105/1		●		●
pH 10 Buffer Solution, 500mL (pH 10.00)	PT105/2		●		●
pH 7 Buffer Solution, 500mL (pH 7.00)	PT105/3		●		●
ORP Calibration Standard, 500mL (255 mV)	PT1252		●		●
High Range Conductivity Standard, 500mL (12.88 mS/cm)	PT142/2			●	●
Mid-Range Conductivity Standard, 500mL (1412 µS/cm)	PT142/3			●	●
Low Range Conductivity Standard, 500mL (74 µS/cm)	PT142/4			●	●
TDS Calibration Standard, 500mL (3000 ppm)	PT142/8	●			●
TDS Calibration Standard, 500mL (300 ppm)	PT142/9	●			●
TDS Calibration Standard, 500mL (50 ppm)	PT142/10	●			●
Zero Oxygen Solution, 500mL	PT125/3	●	●	●	●
Electrode Care Pack, pH	PT105/4	●	●	●	●
Deionised Water, 500mL	PT1250	●	●	●	●

Accessories	Product Code	Compatible with Micro 800
Replacement pH Electrode	PT1330PH	●
Replacement ATC Probe	PT1330ATC	●
Replacement ORP Probe	PT1330ORP	●
Replacement CON/ATC Probe	PT1340CON	●





## PH, CONDUCTIVITY, TDS AND MULTIPARAMETER POCKET METERS

Pocket meters use a simple dip and read method to measure a variety of water parameters such as pH, Total Dissolved Solids (TDS), conductivity and temperature.

These devices are portable and easy to use, making them ideal for fieldwork and quick assessments of water quality. They are used in various environments including recreational water, humanitarian water, drinking and waste water and industrial water.





### Functional Versatility

Available as dedicated instruments for pH, conductivity and Total Dissolved Solids plus a convenient multiparameter version for even greater efficiency across a range of physical parameters.



### Effortless Simplicity

The large LCD display shows results in a clear, simplistic format and details automatic temperature compensation and calibration standards recognition to make it simplistic to read results.



### Compact Portability

Light and compact pocket meters are certified IP67 waterproof and are designed specifically for use in challenging environments.



### Rugged Durability

A great choice for fast monitoring of physical parameters with user friendly replaceable sensors to ensure product longevity.

#### TESTS FOR

Parameter	Test Range
pH	0.00-15.00
Conductivity	0 – 20,000 $\mu\text{S}/\text{cm}$ 0 – 20 $\text{mS}/\text{cm}$ (Auto-ranging)
Total Dissolved Solids (TDS)	0 - 2,000 $\text{mg}/\text{L}$ 0 – 10 ppt (Auto-ranging)
Temperature	0.0-50°C



## Kit Contents



### ORDERING INFORMATION

#### PRODUCT CODES:

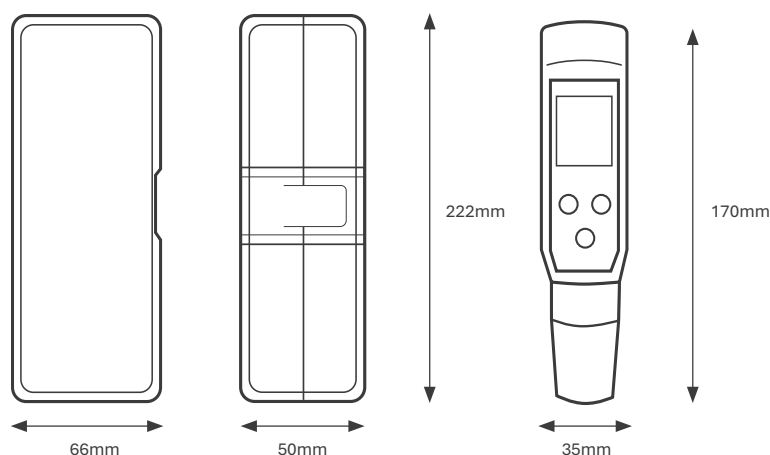
pH Pocket Meter (PT155)

TDS Pocket Meter (PT153T)

Conductivity Pocket Meter (PT157)

Multiparameter Pocket Meter (PT162)

# Technical Specification



Instrument Weight	0.1kg
Kit Weight	0.2Kg

Parameter	Resolution	Accuracy
pH	0.01	±0.01
Conductivity	1mV	±1% of full scale or ±1µS/cm, whichever is greater
Total Dissolved Solids (TDS)	1 (0 – 999 mg/L) 0.01 (1.0 – 10.00 ppt)	±1% of full scale or ±1 mg/L, whichever is greater
Temperature	0.0.1°C	±0.5°C

Consumables	Code	Compatibility with			
		Pocket Sensor TDS	Pocket Sensor pH	Pocket Sensor Conductivity	Pocket Sensor Multiparameter
pH 4 Buffer Solution, 500mL (pH 4.01)	PT105/1		•		•
pH 10 Buffer Solution, 500mL (pH 10.00)	PT105/2		•		•
pH 7 Buffer Solution, 500mL (pH 7.00)	PT105/3		•		•
ORP Calibration Standard, 500mL (255 mV)	PT1252		•		•
High Range Conductivity Standard, 500mL (12.88 mS/cm)	PT142/2			•	•
Mid-Range Conductivity Standard, 500mL (1412 µS/cm)	PT142/3			•	•
Low Range Conductivity Standard, 500mL (74 µS/cm)	PT142/4			•	•
TDS Calibration Standard, 500mL (3000 ppm)	PT142/8	•			•
TDS Calibration Standard, 500mL (300 ppm)	PT142/9	•			•
TDS Calibration Standard, 500mL (50 ppm)	PT142/10	•			•
Zero Oxygen Solution, 500mL	PT125/3	•	•	•	•
Electrode Care Pack, pH	PT105/4	•	•	•	•
Deionised Water, 500mL	PT1250	•	•	•	•

Accessories	Code	Compatibility with			
		Pocket Sensor TDS	Pocket Sensor pH	Pocket Sensor Conductivity	Pocket Sensor Multiparameter
Replacement Sensor TDS	PT153TDS	•			
Replacement Sensor pH	PT155PH		•		
Replacement Sensor Conductivity	PT157CON			•	
Replacement Sensor Multi	PT162M				•





TURBIDITY  
METERS

MICROBIOLOGICAL  
KITS

VISUAL KITS

PALINTEST  
CONNECT

AFTER SALES

3

## TURBIDITY METERS

## TURBIDITY METERS

Turbidity meters are widely used in water treatment plants, distribution networks, water sampling teams, environmental monitoring, and various industries to ensure water quality and compliance with safety standards. It uses the principle of nephelometry to determine the cloudiness of a water sample.



## TURBIDITY METERS



TURBIDITY EXPERT

74



TURBIDITY EXPERT & LUMISO  
CHLORINE KIT

78



ACCESSORIES

82



## TURBIDITY EXPERT

Turbidity Expert is a rugged portable turbidity meter that uses principle of nephelometry to determine turbidity or cloudiness of a water sample. Turbidity Expert delivers clarity through accuracy, simplicity and connectivity- ensuring users make confident decisions in the field. The field replaceable optics allows users to maintain continuity in testing even in harsh field conditions.

COMPATIBLE WITH

**connect**  
By Palintest





### Intuitive Interface

Graphical touch screen with on screen instructions that simplifies testing and user calibration ensuring consistent results across teams and reduced training time.



### Reliable Performance

Achieves  $\pm 0.01$  NTU accuracy with patented optics that limit stray light to 0.02 NTU, ensuring clarity even at low turbidity. The 1 NTU verification ensures confidence in every test.



### Rugged Construction

Built for the field, Turbidity Expert is IP67 waterproof and IK08 impact-resistant, with a secure optic cap. The optics is replaceable in field, minimizing need to return for repair.



### Cloud Connectivity

Real-time results and cloud data management for timely decisions using Wifi or QR code. Add GPS coordinates to pinpoint testing locations and visualise hotspots.

#### TESTS FOR

Parameter	Test Range
Turbidity	0.01 – 1000NTU

## Kit Contents

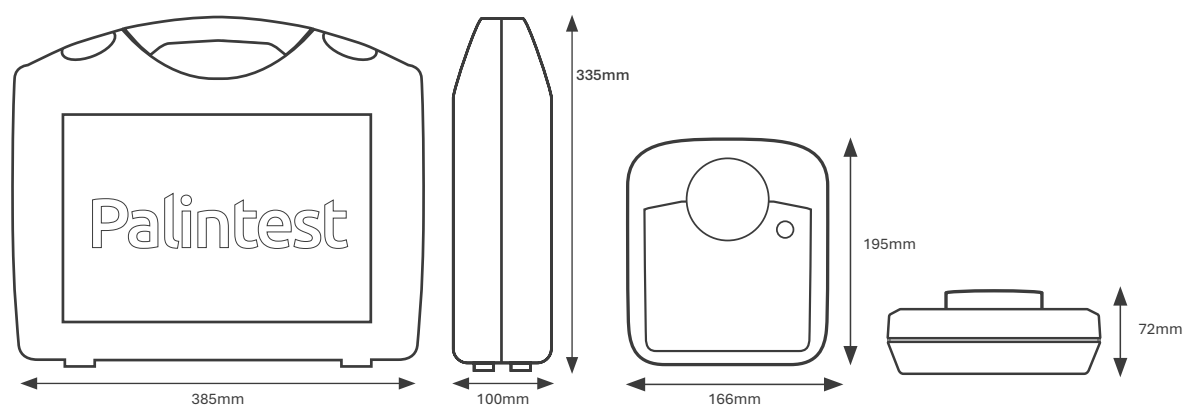


### ORDERING INFORMATION

**PRODUCT CODE: LTH090**

**PRODUCT CODE: LTH090WS\***

# Technical Specification



Range	0.01-1000 NTU
Repeatability	±1% (or ±0.01 NTU), whichever is greater
Approvals	ISO7027 compliant, featuring 860 nm wavelength LED
Measuring System	Nephelometry
Operating Range	Ambient temperature from 0°C to 40°C
Reading Modes	Normal (Push to Read), Signal Averaging, Continuous
Response Time	<7 seconds in Normal reading mode
Display	800 x 480px full-colour IPS display
User Interface	Touchscreen, usable with wet and gloved hands
Ingress Protection	Enclosure rating IK08 for impact resistance, IP67 waterproof rating
Connectivity	Palintest Connect enabled Wi-Fi, USB-C for data transfer
Data Storage	Up to 5,000 test results
Kit Weight	2.02kg
Instrument Size & Weight	195 mm x 166 mm x 72 mm, 650g
Battery & Power Supply	Rechargeable Li-ion battery (up to 2500 tests on a full charge), USB-C powered/rechargeable





## TURBIDITY EXPERT & LUMISO CHLORINE KIT

The Turbidity Expert & Lumiso Chlorine Kit is a portable, rugged kit for reliable chlorine and turbidity analysis. Ideal for drinking water, wastewater, and industrial applications, it ensures accurate and dependable results in the field.

COMPATIBLE WITH

**connect**  
By Palintest





### Intuitive Interface

Graphical touch screen with on screen instructions that simplifies testing and user calibration ensuring consistent results across teams and reduced training time.



### Reliable Performance

Achieves  $\pm 0.01$  NTU accuracy with patented optics that limit stray light to 0.02 NTU, ensuring clarity even at low turbidity. The 1 NTU verification ensures confidence in every test.



### Rugged Construction

Built for the field, Turbidity Expert is IP67 waterproof and IK08 impact-resistant, with a secure optic cap. The optics is replaceable in field, minimizing need to return for repair.



### Cloud Connectivity

Real-time results and cloud data management for timely decisions using Wifi or QR code. Add GPS coordinates to pinpoint testing locations and visualise hotspots.

#### TESTS FOR

Parameter	Test Range
Turbidity	0.01 – 1000NTU
Chlorine	0-250mg/L

## Kit Contents

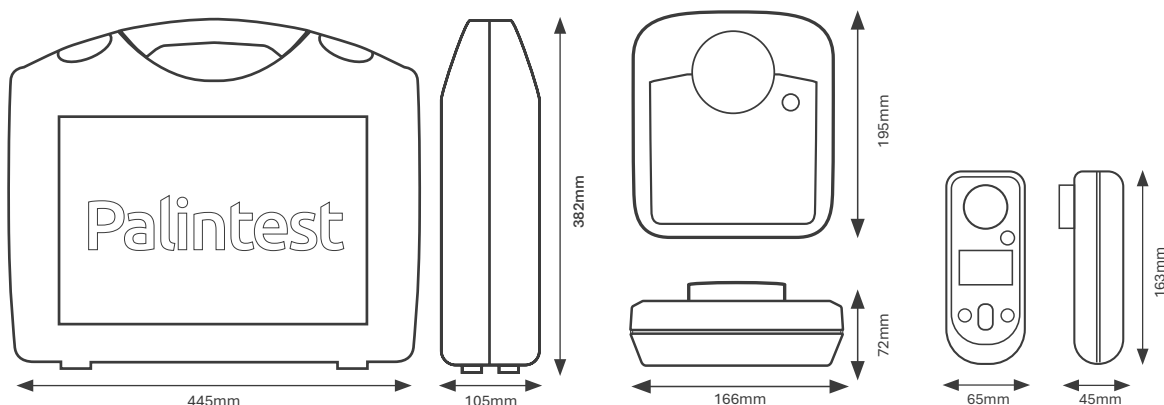


### ORDERING INFORMATION

**PRODUCT CODE: LUM7051**

**PRODUCT CODE: LUM7051WLC\***

## Technical Specification



### Turbidity Expert Specifications

Range	0.01-1000 NTU
Repeatability	±1% (or ±0.01 NTU), whichever is greater
Approvals	ISO7027 compliant, featuring 860 nm wavelength LED
Measuring System	Nephelometry
Operating Range	Ambient temperature from 0°C to 40°C
Reading Modes	Normal (Push to Read), Signal Averaging, Continuous
Response Time	<7 seconds in Normal reading mode
Display	800 x 480px full-colour IPS display
User Interface	Touchscreen, usable with wet and gloved hands
Ingress Protection	Enclosure rating IK08 for impact resistance, IP67 waterproof rating
Connectivity	Palintest Connect enabled Wi-Fi, USB-C for data transfer
Data Storage	Up to 5,000 test results
Kit Weight	3.03kg
Instrument Size & Weight	195 mm x 166 mm x 72 mm, 650g
Battery & Power Supply	Rechargeable Li-ion battery (up to 2500 tests on a full charge), USB-C powered/rechargeable

### Lumiso Chlorine Specifications

Instrument Type	Colorimeter offering direct-reading of pre-programmed test calibrations
Peak Wavelengths	530 nm
Accuracy	± 1.0% T
Display	226 × 138 pixels LCD with backlight
User Interface	Language free, on screen visual icons
Size (W x L x H)	163 mm x 70 mm x 45 mm
Instrument Weight	275 g
IP Rating	IP67
Power Supply	3 x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Data Sets	Up to 50 data sets



## TURBIDITY EXPERT ACCESSORIES





# Accessories

Accessories	Product Code
Replaceable Optics Kit	PT128
SDVB Calibration Standards Kit	LTC090
Crush Rods, Pack of 10	PT502
Syringe 10 mL	PT369
Silicone Oil, 10 mL	PT120
USB C Charging Cable	PT749
Dilution Tube	PT512
Polishing Cloth	PT399
Glass Test Tubes, Pack of 5	PT555
Turbidity Expert Soft Pouch Case	ZX0117





4

## MICROBIOLOGICAL KITS











# MICROBIOLOGICAL KITS

Our microbiological testing kits are designed to detect coliforms in water samples using the principle of membrane filtration, making them perfect for humanitarian water applications. Designed for both immediate response and long-term monitoring, we offer a range of solutions to suit various water quality testing needs.





## MICROBIOLOGICAL KITS

	WAGTECH POTATECH+	88
	WAGTECH POTALAB+	94
	WAGTECH POTALAB WITHOUT ARSENIC	100
	WAGTECH POTACHECK	104
	WAGTECH POTATEST DUAL	108
	WAGTECH POTAKIT	110
	WAGTECH POTATEST CLASSIC	116
	WAGTECH CONSUMABLES	122
	MICROBIOLOGICAL TESTING ACCESSORIES	124
	WAGTECH KIT COMPARISON	126



## WAGTECH POTATECH+

The Wagtech Potatech+ is a state-of-the-art field testing kit designed for comprehensive water quality analysis. Trusted by WASH professionals, it combines microbiological, chemical, and physical parameters testing capabilities in a portable and durable package, making it ideal for rural and remote water monitoring.

COMPATIBLE WITH

**connect**  
By Palintest







### Portable Microbiological Testing

Employs membrane filtration technique for screening faecal and/or total coliforms. The kit is equipped with an incubator that has independent temperature control and can process up to 20 samples simultaneously, making it perfect for covering multiple sites.



### Rapid Physio-Chemical Testing

Our kits include instruments and reagents for a wide range of physical and chemical parameters. This includes advanced tools such as Lumiso Expert, Turbidity Expert, and electrochemical meters for pH and conductivity/TDS.



### Seamless Data Management

Easily transfer results from your Lumiso Expert and Turbidity Expert via USB or QR code for full traceability. Add GPS coordinates to pinpoint testing locations and visualise water quality hotspots with confidence.



### Field Ready Water Testing

Our kits come with a durable, portable carry case with foam inserts, ensuring longevity even in harsh field conditions. Equipped with a surface for performing tests, Wagtech kits are expertly designed for field testing.

#### TESTS FOR

Category	Parameter	Range
Chemical	Ammonia	0.03–1 mg/L N
	Free Chlorine	0.01–5 mg/L Cl <sub>2</sub>
	Total Chlorine	0.01–5 mg/L Cl <sub>2</sub>
	Nitrate	0.6–20 mg/L N
	Nitrite	0.002–0.5 mg/L N
	Turbidity	0.01–1000 NTU
	pH	0.00–15.00
Physical	Conductivity	0 – 20,000 µS/cm 0 – 20 mS/cm (Auto-ranging)
	Total Dissolved Solids (TDS)	0 – 2,000 mg/L 0 – 10 ppt (Auto-ranging)
	Temperature	0.0–50°C
Microbiological	Thermotolerant/Faecal Coliforms	>1CFU/ 100mL
	Total Coliforms	>1CFU/ 100mL
Other	Additional parameters with reagents	See pg. 32 for other parameters

# Kit Contents



**ORDERING INFORMATION**  
**PRODUCT CODE: PTW10481**



**Wagtech Incubator Kit**

- 1 Wagtech Incubator
- 2 20 Petri dishes
- 3 Lead Acid battery
- 4 Mains charger with international adaptors
- 5 Vehicle charger
- 6 External battery leads

**Membrane Filtration Unit**

- 7 Bronze disc
- 8 Pistol grip vacuum pump with no-kink silicone tubing
- 9 5 Media Measuring Devices (MMDs)
- 10 38.1g Membrane Lauryl Sulphate Broth
- 11 5 Pasteur pipettes
- 12 Hand lens
- 13 Forceps
- 14 200 sterilised and sealed membrane filters
- 15 200 absorbent pads
- 16 Absorbent pad dispenser
- 17 Steel sampling cup
- 18 Sampling cable

**Photometer (Lumiso Expert)**

- 19 Lumiso Expert Photometer
- 20 Photometer reagents for 200 tests: Free Chlorine, Total Chlorine, Ammonia, Nitrite, Nitrate

**Turbidity Expert**

- 21 Turbidity Expert
- 22 SDVB calibration standards
- 23 Silicone oil
- 24 Cleaning/oiling cloth

**Pocket Meter for pH**

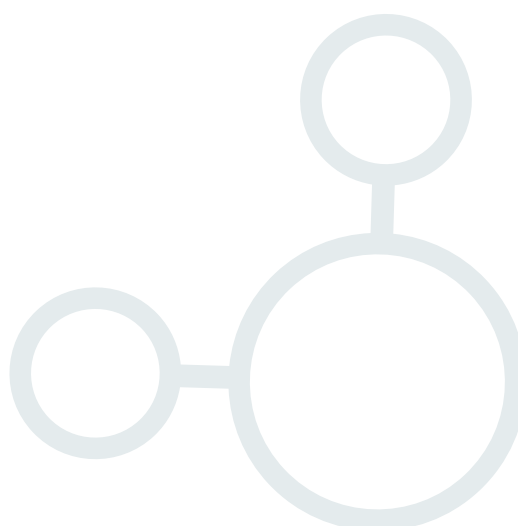
- 25 Pocket Meter
- 26 Calibration buffers

**Pocket Meter for Conductivity**

- 27 Pocket Meter
- 28 Calibration standard

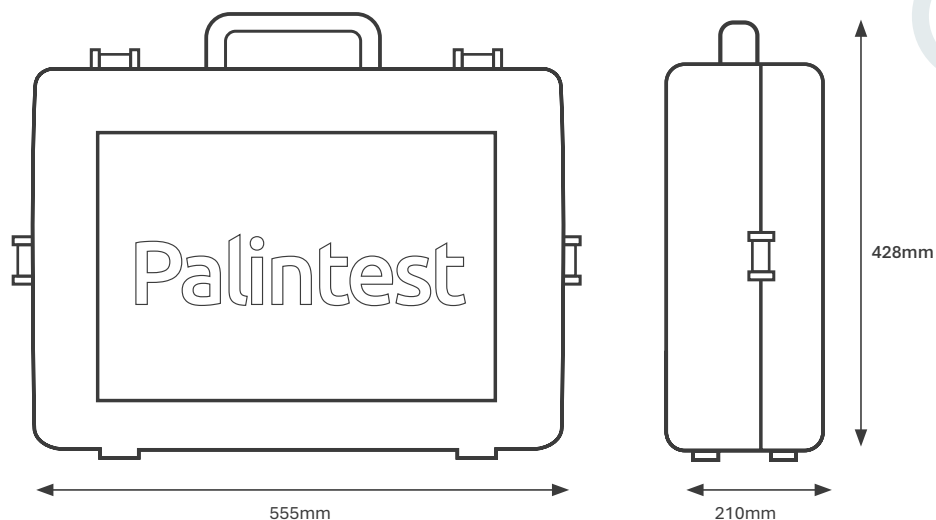
**Additional Accessories**

- 29 250 mL Beaker
- 30 Dilution tube
- 31 De-ion pack
- 32 User Manual
- 33 Sampling Tube
- 34 Sample Curvettes

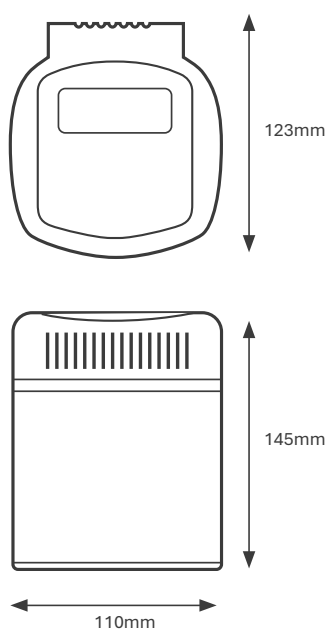


# Technical Specification

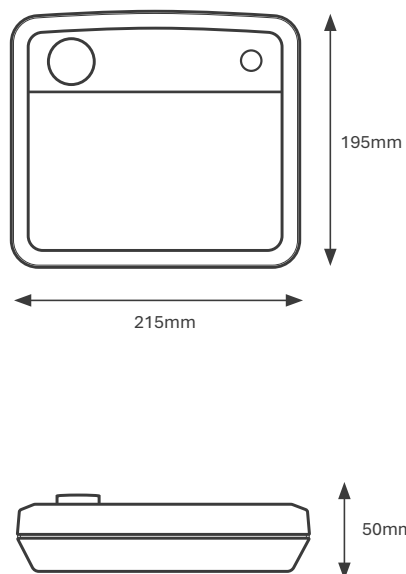
Potatech+ Kit



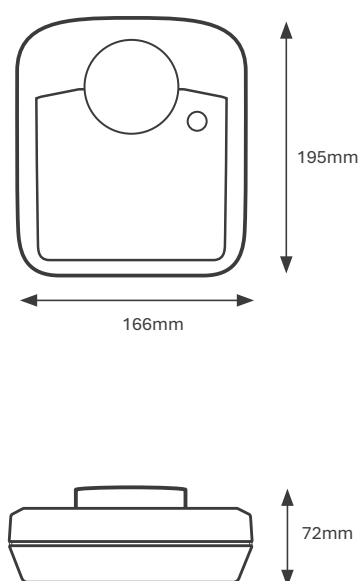
Wagtech Incubator



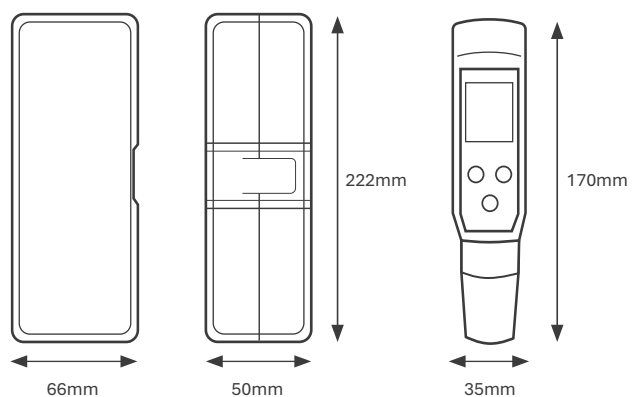
Lumiso Expert



Turbidity Expert



Pocket Meter



**Potatech+ Kit Specifications**

Kit Microbiological Capacity	Single incubator with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms.
Physico-Chemical Parameters	Ammonia, Free and Total Chlorine, Nitrate, Nitrite, Turbidity, pH, Conductivity, Total Dissolved Solids. Additional parameters available.
Kit Size & Weight	55.5 x 42.8 x 21.1 cm, 13 kg

**Potatech+ Incubator Specifications**

Test Protocols	Temperature selections at 37°C and 44°C, with up to 6 user-defined profiles ranging from 20°C to 50°C. User-selectable time periods for all temperatures, including an automatic resuscitation period.
Temperature Stability	±0.1°C
Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation.
User Interface	On-screen and audible prompts available in English, French, Spanish, and Simplified Chinese (incubator only).
Data Log	Performance report of the last five incubation cycles.
Size & Weight	110 x 123 x 145 mm, 690g
Power Supply	Replaceable sealed lead acid battery with mains, vehicle, and external charging options.
Power Consumption	High thermal efficiency heating system, capable of 5 full cycles from a fully charged battery.

**Lumiso Expert Specifications**

Instrument Type	Multiparameter Photometer
Wavelengths	430 nm, 465 nm, 530 nm, 575 nm, 620 nm
Peak Wavelengths	±2 nm
Accuracy	±1 %T
Display	Full colour TFT – 16:9 ratio screen, resolution 800x480 px
User Interface	PCAP touch panel
Weight (Kg)	0.85
IP Rating & Standards	IP67
Power Supply	6x AA 1.5V batteries or Standalone USB
Connectivity	Via Windows App (USB) or Mobile App (QR Code)
Memory Capacity	Access to 1000 results via device's screen
Battery Life	5000 tests from one set of batteries
Certifications	EN61326, EN61010, IP67 and EN60068-2-78

**Turbidity Expert Specifications**

Range	0.01-1000 NTU
Repeatability	±1% (or ±0.01 NTU), whichever is greater
Approvals	ISO7027 compliant, featuring 860 nm wavelength LED
Measuring System	Nephelometry
Operating Range	Ambient temperature from 0°C to 40°C
Reading Modes	Normal (Push to Read), Signal Averaging, Continuous
Response Time	<7 seconds in Normal reading mode
Display	800 x 480px full-colour IPS display
User Interface	Touchscreen, usable with wet and gloved hands
Ingress Protection	Enclosure rating IK08 for impact resistance, IP67 waterproof rating
Connectivity	Palintest Connect enabled Wi-Fi, USB-C for data transfer
Data Storage	Up to 5,000 test results
Size & Weight	195 mm x 166 mm x 72 mm, 650g
Battery & Power Supply	Rechargeable Li-ion battery (up to 2500 tests on a full charge), USB-C powered/rechargeable

**Pocket Meter Specifications**

Instrument Size & Weight	35mm x 170mm, 0.34kg
Kit Size & Weight	66mm x 50mm x 222mm, 2.20kg



## WAGTECH POTALAB+

Wagtech Potalab+ is a portable water quality lab offering digital instrumentation and lab-grade accuracy, including Kemio arsenic testing. The kit is ideal for long term monitoring in rural areas.

Separate configurations are available under different part codes:

Potacheck, which includes the Potalab (C) case & Kemio HM soft case kit for chemical testing; and Potatest Dual, which includes the Potalab (M) case only for microbiological field testing.

COMPATIBLE WITH

**connect**  
By Palintest







### Portable Microbiological Testing

Employs membrane filtration technique for screening faecal and/or total coliforms. The kit is equipped with an incubator that has independent temperature control and can process up to 20 samples simultaneously, making it perfect for covering multiple sites.



### Rapid Physio-Chemical Testing

Our kits include instruments and reagents for a wide range of physical and chemical parameters. This includes advanced tools such as Lumiso Expert, Turbidity Expert, and electrochemical meters for pH and conductivity/TDS.



### Seamless Data Management

Easily transfer results from your Lumiso Expert, Kemio, and Turbidity Expert via USB or QR code for full traceability. Add GPS coordinates to pinpoint testing locations and visualise water quality hotspots with confidence.



### Field Ready Water Testing

Our kits come with a durable, portable carry case with foam inserts, ensuring longevity even in harsh field conditions. Equipped with a surface for performing tests, Wagtech kits are expertly designed for field testing.

## TESTS FOR

Category	Parameter	Range
Chemical parameters (Potalab (C) case with Kemio HM for arsenic)	Ammonia	0.03–1 mg/L N
	Arsenic	2–250 ug/L (ppb)
	Free Chlorine	0.01–5 mg/L Cl <sub>2</sub>
	Total Chlorine	0.01–5 mg/L Cl <sub>2</sub>
	Fluoride	0.03–1.5 mg/L F
	Nitrate	0.6–20 mg/L N
	Nitrite	0.002–0.5 mg/L N
Physical parameters (Potalab (C) case )	Turbidity	0.01–1000 NTU
	pH	–2.00 – 16.00
	ORP	–2000 to +2000 mV
	Conductivity	0 to 200,000 µS/cm 0 – 200 mS/cm
	Total Dissolved Solids (TDS)	0 - 200,000 mg/L 0 – 200 ppt
	Temperature	–10 to +110°C
Microbiological (Potalab (M) case)	Thermotolerant/Faecal Coliforms	>1CFU/ 100mL
	Total Coliforms	>1CFU/ 100mL
Other	Additional parameters with reagents	See pg. 32–35 for other parameters

## Kit Contents

**PTW10011** – Supplied as two cases and soft kit:

**Potalab (M) Case and Potalab (C) Case, plus Kemio HM soft case kit**



**ORDERING INFORMATION**  
**PRODUCT CODE: PTW10011**

**Potalab (M) Case includes:**

- 1 Dual Potalab incubators – each with petri dish rack and 20 petri dishes
- 2 High-performance lead acid battery (min. 5 cycles per incubator)
- 3 Mains charger with international adaptors
- 4 Vehicle charger and external battery clips

**Membrane Filtration Unit**

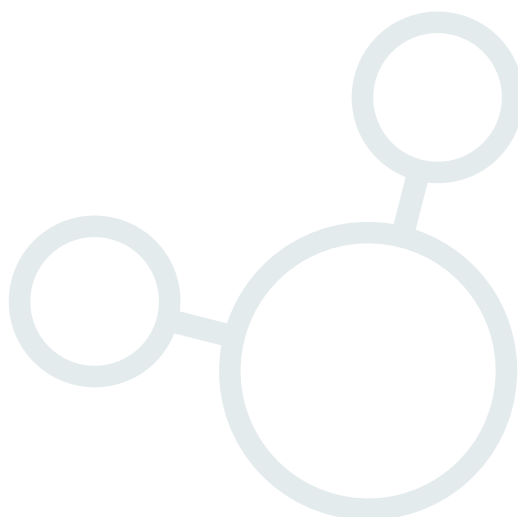
- 5 Bronze disc
- 6 Pistol grip vacuum pump with no-kink silicone tubing
- 7 5 Media Measuring Devices (MMDs)
- 8 38.1g Membrane Lauryl Sulphate Broth
- 9 5 Pasteur pipettes
- 10 Hand lens
- 11 Forceps
- 12 200 sterilised and sealed membrane filters
- 13 200 absorbent pads
- 14 Absorbent pad dispenser
- 15 Steel sampling cup
- 16 Sampling cable
- 17 250 mL polypropylene beaker
- 18 Quick start prompt cards
- 19 Full microbiological instruction manual

**Potalab (C) Case includes:**

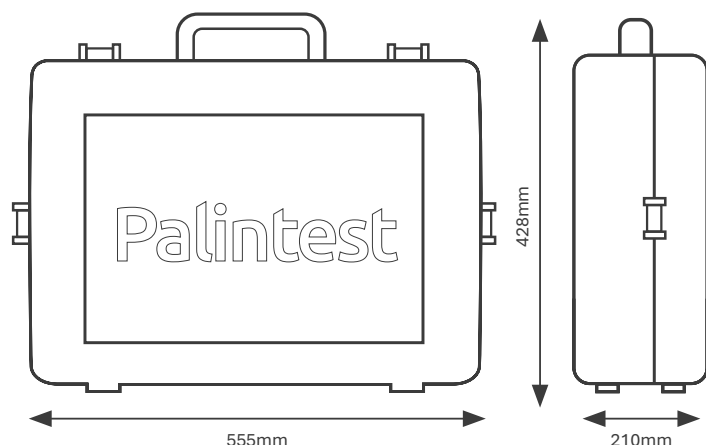
- 20 Lumiso Expert Photometer
- 21 6 photometer cuvettes
- 22 Reagents for 200 tests (Free and Total Chlorine, Ammonia, Fluoride, Nitrite, Nitrate)
- 23 Turbidity Expert
- 24 SDVB calibration standards
- 25 Silicone oil
- 26 Cleaning cloth
- 27 Micro 800 Multiparameter
- 28 pH calibration buffers
- 29 Conductivity calibration standards
- 30 Dilution tubes
- 31 De-ion pack
- 32 User manual

**Kemio HM Soft Case Kit:**

- 33 Kemio HM Instrument
- 34 Consumables for 200 arsenic tests

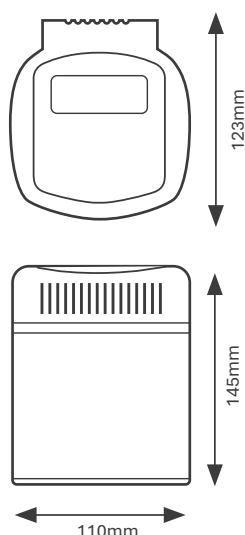


# Technical Specification



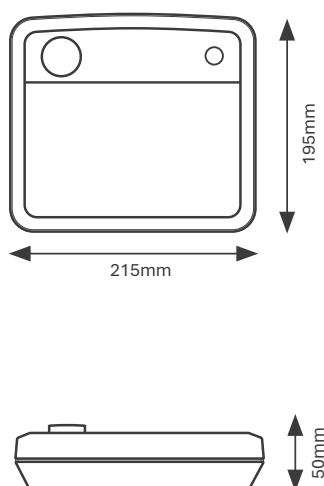
## Potalab+ Kit Specifications

Kit Microbiological Capacity	Dual incubators with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms.
Physico-Chemical Parameters	Ammonia, Arsenic, Free and Total Chlorine, Fluoride, Nitrate, Nitrite, Turbidity, pH, Conductivity, Total Dissolved Solids. Additional parameters available.
Kit Size & Weight	Two heavy-duty field cases, each 55.5 x 42.8 x 21.1 cm, 12 kg (M), 11 kg (C).



## Potalab+ Incubator Specifications

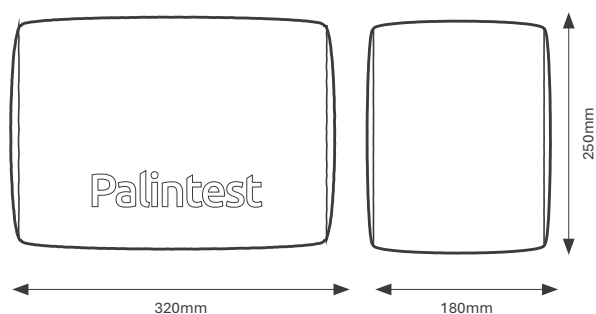
Test Protocols	Temperature selections at 37°C and 44°C, with up to 6 user-defined profiles ranging from 20°C to 50°C. User-selectable time periods for all temperatures, including an automatic resuscitation period.
Temperature Stability	±0.1°C
Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation.
User Interface	On-screen and audible prompts available in English, French, Spanish, and Simplified Chinese (incubator only).
Data Log	Performance report of the last five incubation cycles.
Size & Weight	110 x 123 x 145 mm, 690g
Power Supply	Replaceable sealed lead acid battery with mains, vehicle, and external charging options.
Power Consumption	High thermal efficiency heating system, capable of 5 full cycles from a fully charged battery.



## Lumiso Expert Specifications

Instrument Type	Multiparameter Photometer
Wavelengths	430 nm, 465 nm, 530 nm, 575 nm, 620 nm
Peak Wavelengths	±2 nm
Accuracy	±1 %T
Display	Full colour TFT – 16:9 ratio screen, resolution 800x480 px
User Interface	PCAP touch panel
Weight (Kg)	0.85
IP Rating & Standards	IP67
Power Supply	6x AA 1.5V batteries or Standalone USB
Connectivity	Via Windows App (USB) or Mobile App (QR Code)
Memory Capacity	Access to 1000 results via device's screen
Battery Life	5000 tests from one set of batteries
Certifications	EN61326, EN61010, IP67 and EN60068-2-78

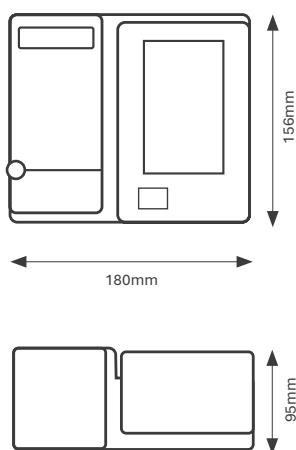




### Kemio Soft Case Specifications

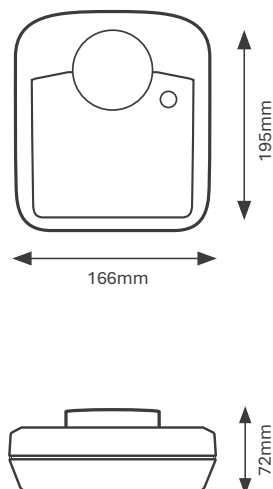
Kit Weight	2.07kg
------------	--------

### Kemio Heavy Metal Specifications



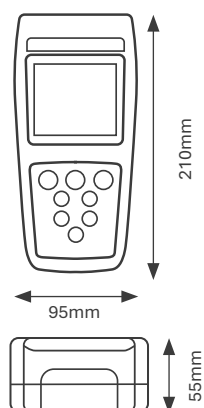
Measuring System	Anodic Stripping Voltammetry (ASV) and Chrono-amperometry
Temperature Range	Ambient range: 0°C-50 °C
Display	Full colour TFT with projected capacitive touch
User Interface	Touchscreen
Language Options	English, French, Spanish and Chinese (Simplified)
Connectivity	USB C
Information Input	Barcode Scanner, on- screen keyboard/keypad
Data Storage	10,000 test results and information
Size (W x L x H) & Weight **	156 mm x 180 mm x 95 mm, 1012g
Battery	2399mAh NiMH Rechargeable Battery Pack
Power Supply	USB Power
Rating	IP67

### Turbidity Expert Specifications



Range	0.01-1000 NTU
Repeatability	±1% (or ±0.01 NTU), whichever is greater
Approvals	ISO7027 compliant, featuring 860 nm wavelength LED
Measuring System	Nephelometry
Operating Range	Ambient temperature from 0°C to 40°C
Reading Modes	Normal (Push to Read), Signal Averaging, Continuous
Response Time	<7 seconds in Normal reading mode
Display	800 x 480px full-colour IPS display
User Interface	Touchscreen, usable with wet and gloved hands
Ingress Protection	Enclosure rating IK08 for impact resistance, IP67 waterproof rating
Connectivity	Palintest Connect enabled Wi-Fi, USB-C for data transfer
Data Storage	Up to 5,000 test results
Size & Weight	195 mm x 166 mm x 72 mm, 650g
Battery & Power Supply	Rechargeable Li-ion battery (up to 2500 tests on a full charge), USB-C powered/rechargeable

### Micro 800 Specifications



Parameter	Resolution	Accuracy
pH	0.01	±0.01
ORP	0.1 mV (up to ±999.9), 1 mV Above	±0.2 mV or ± 0.5%, whichever is greater
Conductivity	0.01 (0 to 99.99 µS/cm) 0.01 (1.00 – 99.99 mS/cm) 0.1 (100.0 – 200.0 mS/cm)	±1% of full scale or ±1 µS/cm, whichever is greater
Total Dissolved Solids (TDS)	0.01 (0 – 99.99 mg/L) 0.1 (100.0 – 200.0 ppt)	±1% of full scale or ±1 mg/L, whichever is greater
Temperature	0.1°C	±0.5°C

## Kit Contents

### Wagtech Potalab without Arsenic

Supplied in two cases – Wagtech Potalab (M) Case and Wagtech Potalab (C) Case as above. This kit excludes the Kemio HM soft case kit



**ORDERING INFORMATION**  
**PRODUCT CODE: PTW10011XA**

**Potalab (M) Case includes:**

- 1 Dual Potalab incubators – each with petri dish rack and 20 petri dishes
- 2 High-performance lead acid battery (min. 5 cycles per incubator)
- 3 Mains charger with international adaptors
- 4 Vehicle charger and external battery clips

**Membrane Filtration Unit**

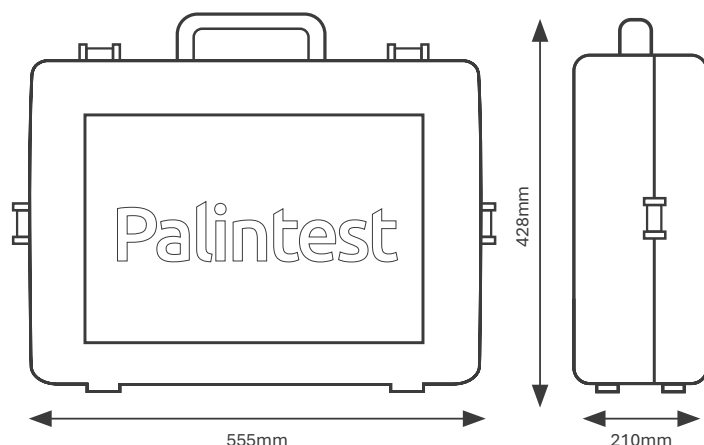
- 5 Bronze disc
- 6 Pistol grip vacuum pump with no-kink silicone tubing
- 7 5 Media Measuring Devices (MMDs)
- 8 38.1g Membrane Lauryl Sulphate Broth
- 9 5 Pasteur pipettes
- 10 Hand lens
- 11 Forceps
- 12 200 sterilised and sealed membrane filters
- 13 200 absorbent pads
- 14 Absorbent pad dispenser
- 15 Steel sampling cup
- 16 Sampling cable
- 17 250 mL polypropylene beaker
- 18 Quick start prompt cards
- 19 Full microbiological instruction manual

**Potalab (C) Case includes:**

- 20 Lumiso Expert Photometer
- 21 6 photometer cuvettes
- 22 Reagents for 200 tests (Free and Total Chlorine, Ammonia, Fluoride, Nitrite, Nitrate)
- 23 Turbidity Expert
- 24 SDVB calibration standards
- 25 Silicone oil
- 26 Cleaning cloth
- 27 Micro 800 Multiparameter
- 28 pH calibration buffers
- 29 Conductivity calibration standards
- 30 Dilution tubes
- 31 De-ion pack
- 32 User manual

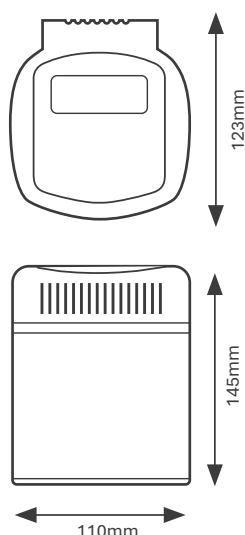


# Technical Specification



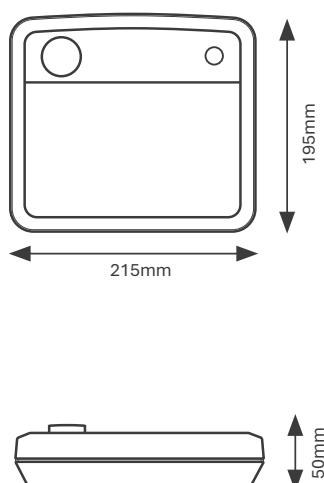
## Potalab+ Kit Specifications

Kit Microbiological Capacity	Dual incubators with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms.
Physico-Chemical Parameters	Ammonia, Arsenic, Free and Total Chlorine, Fluoride, Nitrate, Nitrite, Turbidity, pH, Conductivity, Total Dissolved Solids. Additional parameters available.
Kit Size & Weight	Two heavy-duty field cases, each 55.5 x 42.8 x 21.1 cm, 12 kg (M), 11 kg (C).



## Potalab+ Incubator Specifications

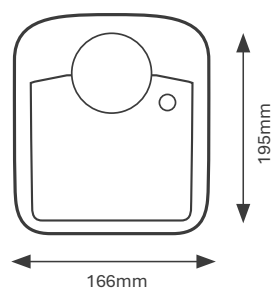
Test Protocols	Temperature selections at 37°C and 44°C, with up to 6 user-defined profiles ranging from 20°C to 50°C. User-selectable time periods for all temperatures, including an automatic resuscitation period.
Temperature Stability	±0.1°C
Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation.
User Interface	On-screen and audible prompts available in English, French, Spanish, and Simplified Chinese (incubator only).
Data Log	Performance report of the last five incubation cycles.
Size & Weight	110 x 123 x 145 mm, 690g
Power Supply	Replaceable sealed lead acid battery with mains, vehicle, and external charging options.
Power Consumption	High thermal efficiency heating system, capable of 5 full cycles from a fully charged battery.



## Lumiso Expert Specifications

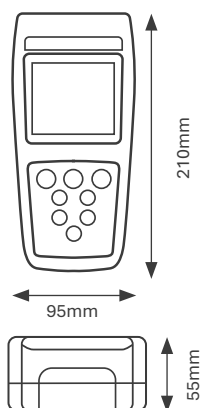
Instrument Type	Multiparameter Photometer
Wavelengths	430 nm, 465 nm, 530 nm, 575 nm, 620 nm
Peak Wavelengths	±2 nm
Accuracy	±1 %T
Display	Full colour TFT – 16:9 ratio screen, resolution 800x480 px
User Interface	PCAP touch panel
Weight (Kg)	0.85
IP Rating & Standards	IP67
Power Supply	6x AA 1.5V batteries or Standalone USB
Connectivity	Via Windows App (USB) or Mobile App (QR Code)
Memory Capacity	Access to 1000 results via device's screen
Battery Life	5000 tests from one set of batteries
Certifications	EN61326, EN61010, IP67 and EN60068-2-78





### Turbidity Expert Specifications

Range	0.01-1000 NTU
Repeatability	±1% (or ±0.01 NTU), whichever is greater
Approvals	ISO7027 compliant, featuring 860 nm wavelength LED
Measuring System	Nephelometry
Operating Range	Ambient temperature from 0°C to 40°C
Reading Modes	Normal (Push to Read), Signal Averaging, Continuous
Response Time	<7 seconds in Normal reading mode
Display	800 x 480px full-colour IPS display
User Interface	Touchscreen, usable with wet and gloved hands
Ingress Protection	Enclosure rating IK08 for impact resistance, IP67 waterproof rating
Connectivity	Palintest Connect enabled Wi-Fi, USB-C for data transfer
Data Storage	Up to 5,000 test results
Size & Weight	195 mm x 166 mm x 72 mm, 650g
Battery & Power Supply	Rechargeable Li-ion battery (up to 2500 tests on a full charge), USB-C powered/rechargeable



### Micro 800 Specifications

Parameter	Resolution	Accuracy
pH	0.01	±0.01
ORP	0.1 mV (up to ±999.9), 1 mV Above	±0.2 mV or ± 0.5%, whichever is greater
Conductivity	0.01 (0 to 99.99 µS/cm) 0.01 (1.00 – 99.99 mS/cm) 0.1 (100.0 – 200.0 mS/cm)	±1% of full scale or ±1 µS/cm, whichever is greater
Total Dissolved Solids (TDS)	0.01 (0 – 99.99 mg/L) 0.1 (100.0 – 200.0 ppt)	±1% of full scale or ±1 mg/L, whichever is greater
Temperature	0.1°C	±0.5°C

## Kit Contents

### Wagtech Potacheck

Supplied as Potalab (C) Case only, with Kemio HM soft case kit



**ORDERING INFORMATION**  
**PRODUCT CODE: PTW10727**

**Potalab (C) Case includes:**

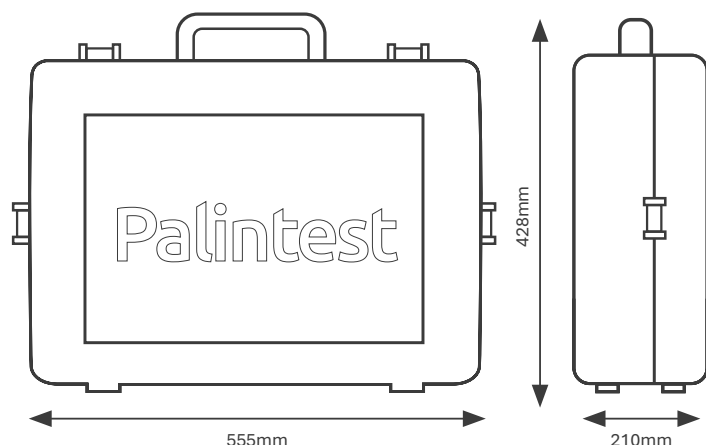
- 1 Lumiso Expert Photometer
- 2 5 photometer cuvettes
- 3 Reagents for 200 tests  
(Free and Total Chlorine, Ammonia, Fluoride, Nitrite, Nitrate)
- 4 Turbidity Expert
- 5 SDVB calibration standards
- 6 Silicone oil
- 7 Cleaning cloth
- 8 Micro 800 Multiparameter
- 9 pH calibration buffers
- 10 Conductivity calibration standards
- 11 Dilution tubes
- 12 De-ion pack
- 13 User manual

**Kemio HM Soft Case Kit:**

- 14 Consumables for 200 arsenic tests
- 15 Kemio HM Instrument
- 16 Kemio Check Standards



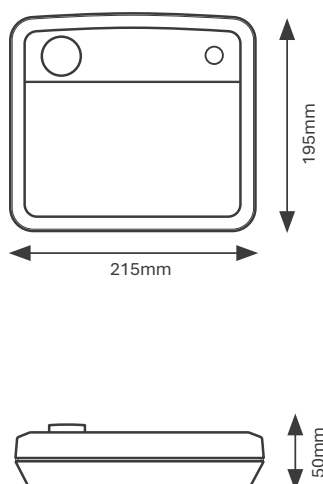
# Technical Specification



## Potachek Kit Specifications

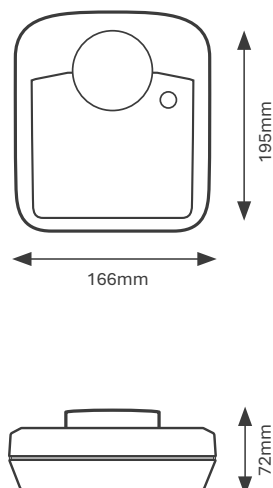
Kit Microbiological Capacity	Dual incubators with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms.
Physico-Chemical Parameters	Ammonia, Arsenic, Free and Total Chlorine, Fluoride, Nitrate, Nitrite, Turbidity, pH, Conductivity, Total Dissolved Solids. Additional parameters available.
Kit Size & Weight	One heavy-duty field cases, each 55.5 x 42.8 x 21.1 cm, 11 kg (C) and Soft Case Kit for Kemio HM, 2.1kg .

## Lumiso Expert Specifications



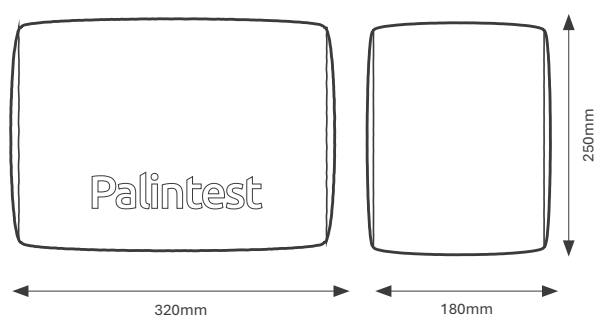
Instrument Type	Multiparameter Photometer
Wavelengths	430 nm, 465 nm, 530 nm, 575 nm, 620 nm
Peak Wavelengths	±2 nm
Accuracy	±1 %T
Display	Full colour TFT – 16:9 ratio screen, resolution 800x480 px
User Interface	PCAP touch panel
Weight (Kg)	0.85
IP Rating & Standards	IP67
Power Supply	6x AA 1.5V batteries or Standalone USB
Connectivity	Via Windows App (USB) or Mobile App (QR Code)
Memory Capacity	Access to 1000 results via device's screen
Battery Life	5000 tests from one set of batteries
Certifications	EN61326, EN61010, IP67 and EN60068-2-78

## Turbidity Expert Specifications



Range	0.01-1000 NTU
Repeatability	±1% (or ±0.01 NTU), whichever is greater
Approvals	ISO7027 compliant, featuring 860 nm wavelength LED
Measuring System	Nephelometry
Operating Range	Ambient temperature from 0°C to 40°C
Reading Modes	Normal (Push to Read), Signal Averaging, Continuous
Response Time	<7 seconds in Normal reading mode
Display	800 x 480px full-colour IPS display
User Interface	Touchscreen, usable with wet and gloved hands
Ingress Protection	Enclosure rating IK08 for impact resistance, IP67 waterproof rating
Connectivity	Palintest Connect enabled Wi-Fi, USB-C for data transfer
Data Storage	Up to 5,000 test results
Size & Weight	195 mm x 166 mm x 72 mm, 650g
Battery & Power Supply	Rechargeable Li-ion battery (up to 2500 tests on a full charge), USB-C powered/rechargeable

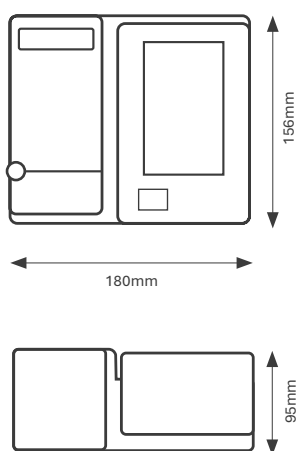




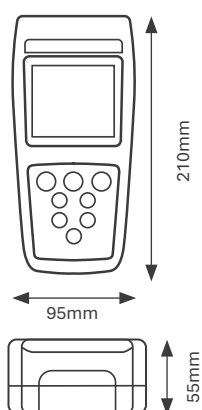
#### Kemio Soft Case Specifications

Kit Weight	2.07kg
------------	--------

#### Kemio Heavy Metal Specifications



Measuring System	Anodic Stripping Voltammetry (ASV) and Chrono-amperometry
Temperature Range	Ambient range: 0 °C-50 °C
Display	Full colour TFT with projected capacitive touch
User Interface	Touchscreen
Language Options	English, French, Spanish and Chinese (Simplified)
Connectivity	USB C
Information Input	Barcode Scanner, on- screen keyboard/keypad
Data Storage	10,000 test results and information
Size (W x L x H) & Weight **	156 mm x 180 mm x 95 mm, 1012g
Battery	2399mAh NiMH Rechargeable Battery Pack
Power Supply	USB Power
Rating	IP67



#### Micro 800 Specifications

Parameter	Resolution	Accuracy
pH	0.01	±0.01
ORP	0.1 mV (up to ±999.9), 1 mV Above	±0.2 mV or ± 0.5%, whichever is greater
Conductivity	0.01 (0 to 99.99 µS/cm) 0.01 (1.00 – 99.99 mS/cm) 0.1 (100.0 – 200.0 mS/cm)	±1% of full scale or ±1 µS/cm, whichever is greater
Total Dissolved Solids (TDS)	0.01 (0 – 99.99 mg/L) 0.1 (100.0 – 200.0 ppt)	±1% of full scale or ±1 mg/L, whichever is greater
Temperature	0.1 °C	±0.5 °C

# Kit Contents

## Wagtech Potatest Dual

Supplied as Potalab (M) Case only



**ORDERING INFORMATION**  
**PRODUCT CODE: PTW10020**

**Potalab (M) Case includes:**

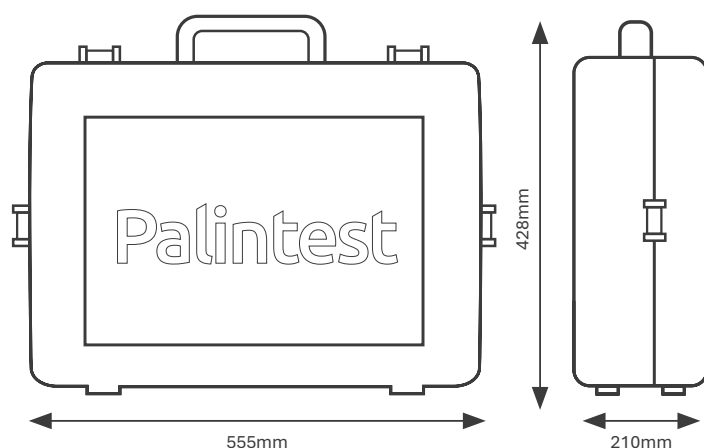
- 1 Dual Potalab incubators – each with petri dish rack and 20 petri dishes
- 2 High-performance lead acid battery (min. 5 cycles per incubator)
- 3 Mains charger with international adaptors
- 4 Vehicle charger and external battery clips

**Membrane Filtration Unit**

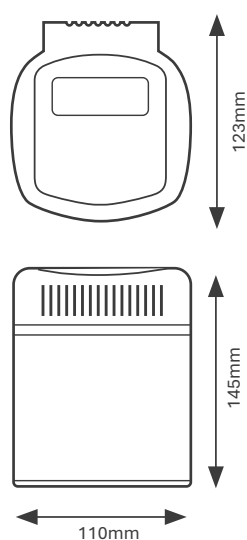
- 5 Bronze disc
- 6 Pistol grip vacuum pump with no-kink silicone tubing
- 7 5 Media Measuring Devices (MMDs)
- 8 38.1g Membrane Lauryl Sulphate Broth
- 9 5 Pasteur pipettes
- 10 Hand lens
- 11 Forceps

- 12 200 sterilised and sealed membrane filters
- 13 200 absorbent pads
- 14 Absorbent pad dispenser
- 15 Steel sampling cup
- 16 Sampling cable
- 17 250 mL polypropylene beaker
- 18 Quick start prompt cards
- 19 Full microbiological instruction manual
- 20 De-Ion Pack
- 21 Dilution Tube

## Technical Specification

**Potatest Dual Kit Specifications**

Kit Microbiological Capacity	Dual incubators with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms.
Physico-Chemical Parameters	Ammonia, Arsenic, Free and Total Chlorine, Fluoride, Nitrate, Nitrite, Turbidity, pH, Conductivity, Total Dissolved Solids. Additional parameters available.
Kit Size & Weight	One heavy-duty field cases, each 55.5 x 42.8 x 21.1 cm, 12 kg (M).

**Incubator Specifications**

Test Protocols	Temperature selections at 37°C and 44°C, with up to 6 user-defined profiles ranging from 20°C to 50°C. User-selectable time periods for all temperatures, including an automatic resuscitation period.
Temperature Stability	±0.1°C
Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation.
User Interface	On-screen and audible prompts available in English, French, Spanish, and Simplified Chinese (incubator only).
Data Log	Performance report of the last five incubation cycles.
Size & Weight	110 x 123 x 145 mm, 690g
Power Supply	Replaceable sealed lead acid battery with mains, vehicle, and external charging options.
Power Consumption	High thermal efficiency heating system, capable of 5 full cycles from a fully charged battery.



## WAGTECH POTAKIT

Designed for routine field testing, the Wagtech Potakit combines visual and digital test instruments to provide an affordable yet accurate testing solution.

The Potakit is ideal for NGOs and water technicians working on small-scale rural WASH programs, as well as organisations with limited budgets that still require precise assessments of key drinking water quality parameters in the field.





### Portable Microbiological Testing

Employs membrane filtration technique for screening faecal and/or total coliforms. The kit is equipped with an incubator that has independent temperature control and can process up to 20 samples simultaneously, making it perfect for covering multiple sites.



### Rapid Physio-Chemical Testing

Includes visual testing apparatus for turbidity, ammonia, free and total chlorine, fluoride, nitrite, and nitrate. Also includes pocket sensors for pH and conductivity.



### Versatile & Flexible

Suitable for use in emergency situations, rural water quality monitoring and WASH projects with immediate results on chemical parameters.



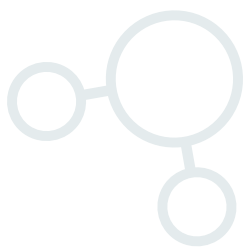
### Field Ready Water Testing

The kit comes with a durable, portable carry case with foam inserts, ensuring longevity even in harsh field conditions.

#### TESTS FOR

Category	Parameter	Range
Chemical	Ammonia	0.03–1 mg/L N
	Free Chlorine	0.01–5 mg/L Cl <sub>2</sub>
	Total Chlorine	0.01–5 mg/L Cl <sub>2</sub>
	Nitrate	0.6–20 mg/L N
	Nitrite	0.002–0.5 mg/L N
	Fluoride	0.03–1.5 mg/L F
Physical	Turbidity	5–500 JTU
	pH	0.00–15.00
	Conductivity	0 – 20,000 µS/cm 0 – 20 mS/cm (Auto-ranging)
	Temperature	0.0–50°C
Microbiological (Potalab (M) case)	Thermotolerant/Faecal Coliforms	>1CFU/ 100mL
	Total Coliforms	>1CFU/ 100mL

**ORDERING INFORMATION**  
**PRODUCT CODE: PTW10030XA**

**Wagtech Potakit Case includes:**

- 1 Wagtech Incubator with 20 petri dishes
- 2 Lead acid battery with mains charger and international adaptors
- 3 Vehicle charger and external battery leads

**Membrane Filtration Unit**

- 4 Bronze disc
- 5 Pistol grip vacuum pump with no-kink silicone tubing
- 6 5 Media Measuring Devices (MMDs)
- 7 38.1g Membrane Lauryl Sulphate Broth
- 8 5 Pasteur pipettes
- 9 Hand lens
- 10 Forceps
- 11 200 sterilised and sealed membrane filters
- 12 200 absorbent pads
- 13 Absorbent pad dispenser
- 14 Steel sampling cup
- 15 Sampling cable

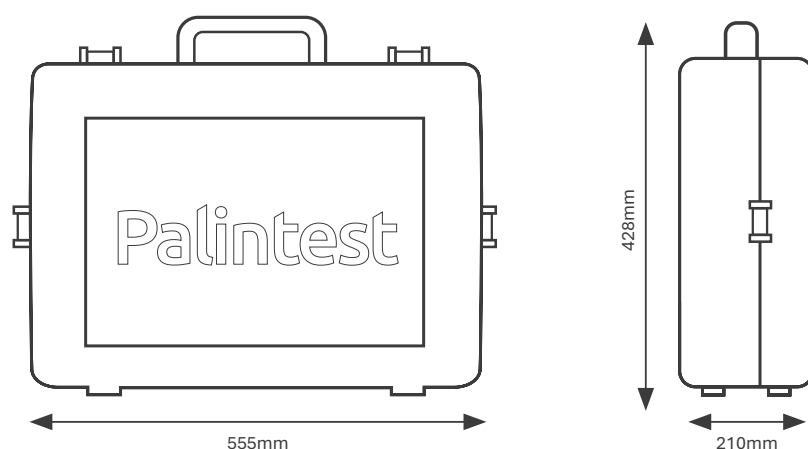
- 16 Contour Comparator and Discs
- 17 Reagents for 200 tests for Free and Total Chlorine, Ammonia, Fluoride, Nitrite, and Nitrate
- 18 Double Length Turbidity Tube for visual turbidity testing
- 19 Pocket Meter for pH
- 20 Calibration buffers
- 21 Pocket Meter for Conductivity
- 22 Calibration standard

**Additional Accessories**

- 23 Cuvette brush
- 24 250 mL beaker
- 25 Dilution tube
- 26 User manual



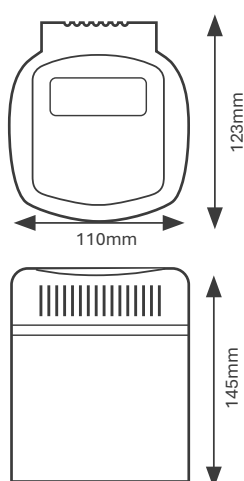
# Technical Specification



## Potakit Kit Specifications

Kit Microbiological Capacity	Single incubator with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms.
Physico-Chemical Parameters	Ammonia, Free and Total Chlorine, Nitrate, Nitrite, Turbidity, pH, Conductivity. Additional parameters available.
Kit Size & Weight	55.5 x 42.8 x 21.1 cm, 13 kg

## Incubator Specifications



Test Protocols	Temperature selections at 37°C and 44°C, with up to 6 user-defined profiles ranging from 20°C to 50°C. User-selectable time periods for all temperatures, including an automatic resuscitation period.
Temperature Stability	±0.1°C
Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation.
User Interface	On-screen and audible prompts available in English, French, Spanish, and Simplified Chinese (incubator only).
Data Log	Performance report of the last five incubation cycles.
Size & Weight	110 x 123 x 145 mm, 690g
Power Supply	Replaceable sealed lead acid battery with mains, vehicle, and external charging options.
Power Consumption	High thermal efficiency heating system, capable of 5 full cycles from a fully charged battery.









## WAGTECH POTATEST CLASSIC

The Wagtech Potatest Classic is a reliable and cost-effective portable water quality testing kit, designed for rapid on-site testing of critical drinking water quality parameters. This kit is ideal for emergency response and simple water quality testing projects.





### Portable Microbiological Testing

Employs membrane filtration technique for screening faecal and/or total coliforms. The kit is equipped with an incubator that has independent temperature control and can process up to 20 samples simultaneously, making it perfect for covering multiple sites.



### Rapid Physio-Chemical Testing

The kit includes instruments and reagents for a range of physical and chemical parameters. This includes tools such as the Contour Comparator for visual testing of key parameters.



### Seamless Data Management

Suitable for use in emergency situations, rural water quality monitoring, and simple water quality testing projects.



### Field Ready Water Testing

The kit comes with a durable, portable carry case with foam inserts, ensuring longevity even in harsh field conditions.

#### TESTS FOR

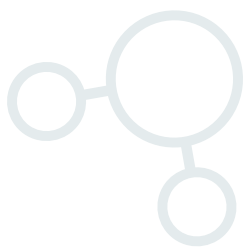
Category	Parameter	Range
Chemical	Free Chlorine	0.01–5 mg/L Cl <sub>2</sub>
	Total Chlorine	0.01–5 mg/L Cl <sub>2</sub>
Physical	Turbidity	5–500 JTU
	pH	0.00–15.00
Microbiological	Thermotolerant/Faecal Coliforms	>1CFU/ 100mL
	Total Coliforms	>1CFU/ 100mL

# Kit Contents



**ORDERING INFORMATION**  
**PRODUCT CODE: PTW10005**



**Wagtech Potakit Case includes:**

- 1 Wagtech Incubator with 20 petri dishes
- 2 Lead acid battery
- 3 Mains charger with international adapters
- 4 Vehicle charger
- 5 External battery leads

**Membrane Filtration Unit:**

- 6 Bronze disc
- 7 Pistol grip vacuum pump
- 8 No-kink silicone tubing
- 9 5 Media Measuring Devices (MMDs)
- 10 38.1g Membrane Lauryl Sulphate Broth
- 11 5 Pasteur pipettes
- 12 Hand lens
- 13 Forceps
- 14 200 sterilised and sealed membrane filters
- 15 200 absorbent pads
- 16 Absorbent pad dispenser
- 17 Steel sampling cup
- 18 Sampling cable

**19 WSK Water Safety Kit PT100WSK****Contour Comparator and Discs:**

Reagents for 200 tests  
(Free and Total Chlorine)

Double Length Turbidity Tube

Pocket Meter for pH

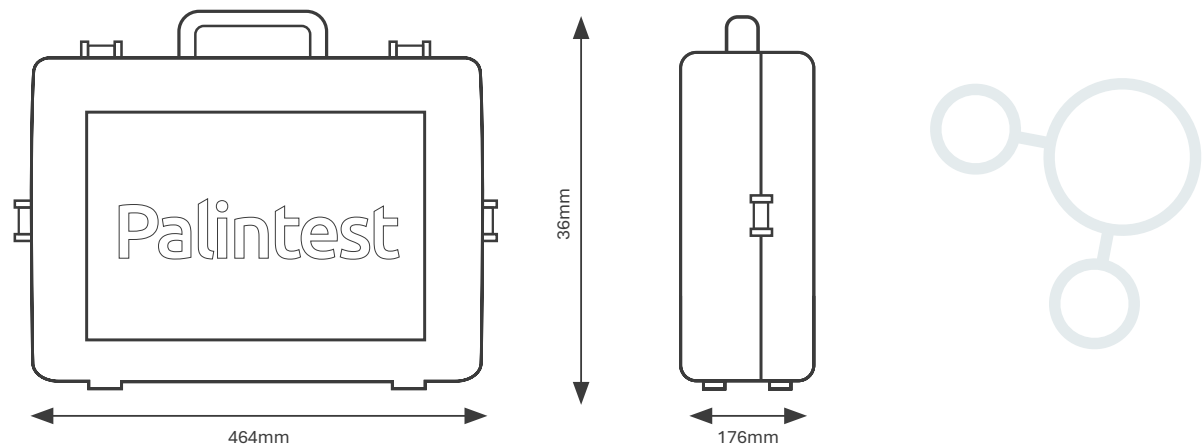
Calibration buffers

**Additional Accessories:**

- 20 250mL beaker
- 21 Dilution tube
- 22 Crush/stir rods
- 23 De-ion pack
- 24 User manual
- 25 Work Surface



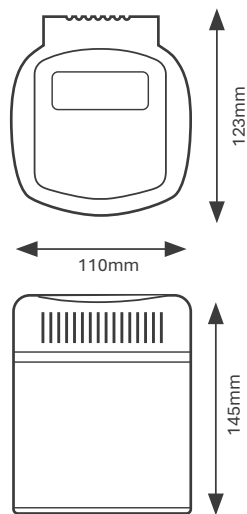
# Technical Specification



## Potatest+ Kit Specifications

Kit Microbiological Capacity	Single incubator with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms.
Physico-Chemical Parameters	Free and Total Chlorine, Turbidity, pH. Additional parameters available.
Kit Size & Weight	46.4 x 36.6 x 17.6 cm, 9 kg

## Incubator Specifications



Test Protocols	Temperature selections at 37°C and 44°C, User-selectable time periods for all temperatures, including an automatic resuscitation period.
Temperature Stability	±0.1°C
Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation.
User Interface	On-screen and audible prompts available in English, French, Spanish, and Simplified Chinese (incubator only).
Data Log	Performance report of the last five incubation cycles.
Size & Weight	110 x 123 x 145 mm, 690g
Power Supply	Replaceable sealed lead acid battery with mains, vehicle, and external charging options.
Power Consumption	High thermal efficiency heating system, capable of 5 full cycles from a fully charged battery.



## WAGTECH CONSUMABLES





# Consumables

Description	Code	Compatible with					
		Potatest	Potalab	Potalab (no Arsenic)	Potatest Dual	Potakit	Potatest Classic
Coliform Starter Pack	PTW10450	•	•	•	•	•	•
Membrane Lauryl Sulphate Broth, 38.1g	PTW10454	•	•	•	•	•	•
Membrane Filters, 200 pack	PTW10459	•	•	•	•	•	•
Absorbent Pads & Membranes, 200 pack	PTW10460	•	•	•	•	•	•
Absorbent Pads & Membranes, 1000 pack	PTW10462	•	•	•	•	•	•
Absorbent Pads, 100 pack	PTW10463	•	•	•	•	•	•
Nutrient Pad Set for E.coli and faecal coliforms	PTW10064	•	•	•	•	•	•
Membrane Filters, 0.45µm, 47mm, gridded, 600 Pack	PTW10465	•	•	•	•	•	•

Potatest includes chemical testing only and excludes microbiological testing consumables.



## MICROBIOLOGICAL TESTING ACCESSORIES



# Microbiological Testing Accessories

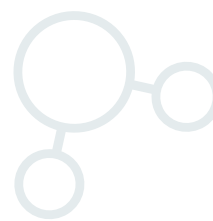
Description	Code	Compatible with					
		Potatech	Potalab	Potalab (no Arsenic)	Potatest Dual	Potakit	Potatest
Wagtech Incubator	PT1005	•	•	•	•	•	•
Wagtech Potalab Incubator	PT1010	•	•	•	•	•	•
Membrane Filtration Unit	PTW10400	•	•	•	•	•	•
Pistol Grip Hand Vacuum Pump	PTW10401	•	•	•	•	•	•
Bronze Disk	PTW10402	•	•	•	•	•	•
Silicone tubing for MFU	PTW10403	•	•	•	•	•	•
Sampling Cup	PTW10404	•	•	•	•	•	•
MFU/silicone tubing connector	PTW10405	•	•	•	•	•	•
Forceps	PTW10412	•	•	•	•	•	•
Hand Lens	PTW10416	•	•	•	•	•	•
Aluminium Petri Dishes, 20	PTW10420	•	•	•	•	•	•
Aluminium Petri Dishes, 25	PTW10423	•	•	•	•	•	•
Replacement battery for Wagtech Incubator	PTW10425	•	•	•	•	•	•
Pistol Grip Hand Vacuum Pump plus silicone tubing	PTW10427	•	•	•	•	•	•
WagPac Disposable Water Sample Bags	PTW10428	•	•	•	•	•	•
Media Measuring Devices (MMD)	PTW10429	•	•	•	•	•	•
Absorbent Pad Dispenser	PTW10464	•	•	•	•	•	•
Pasteur Pipettes, 1mL	PTW10700	•	•	•	•	•	•

Potacheck includes chemical testing only and excludes microbiological testing accessories.

## Included Instrumentation



Instrumentation included	Potalab+	Potatech+	Potacheck	Potakit	Potatest Dual	Potatest Classic	Water Safety Kit (WSK)
Part Code	PTW10011	PTW10481	PTW10727	PTW10030XA	PTW10020	PTW10005	PT100WSK
Membrane filtration set	•	•		•	•	•	
Lumiso Expert	•	•	•				
Turbidity Expert	•	•	•				
Kemio HM	•		•				
Micro 800	•		•				
Electrochemical Pocket meter		•		•		•	•
Visual comparator kits				•		•	•

# MICROBIOLOGICAL KIT COMPARISON



## TEST TYPE:

- Digital
- Microbiological
- Visual

	Potalab+	Potatech+
		
<b>Reagents</b>	Consumables for 200 arsenic tests  Photometer reagents for 200 tests of each chemical parameter	Photometer reagents for 200 tests for each chemical parameter
Parameters	PTW10011	PTW10481
Ammonia	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>
Arsenic	<span style="color: blue;">●</span>	
Free Chlorine	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>
Total Chlorine	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>
Combined Chlorine	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>
Conductivity	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>
Fluoride	<span style="color: blue;">●</span>	
Nitrate	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>
Nitrite	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>
pH	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>
TDS	<span style="color: blue;">●</span>	
Temperature	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>
Thermotolerant/Faecal Coliforms	<span style="color: green;">●</span>	<span style="color: green;">●</span>
Total Coliforms	<span style="color: green;">●</span>	<span style="color: green;">●</span>
Turbidity	<span style="color: blue;">●</span>	<span style="color: blue;">●</span>





Potacheck	Potakit	Potatest Dual	Potatest Classic
			
Consumables for 200 arsenic tests	Photometer reagents for 200 tests of each chemical parameter		Comparator reagents for 200 tests for free and total chlorine
PTW10727	PTW10030XA	PTW10020	PTW10005
●	●		
●			
●	●		●
●	●		●
●			●
●	●		
	●		
●	●		
●	●		
●	●		●
●			
●	●		●
	●	●	●
	●	●	●
●	●		●





5

## VISUAL KITS

VISUAL KITS

PALINTEST  
CONNECT

AFTER SALES







## VISUAL KITS

Visual testing provides a straightforward and effective method for assessing water quality. This technique involves using reagents that react with specific chemicals in the water, causing a visible colour change.

By comparing the colour of the treated water sample to a standard colour chart, you can determine the concentration of various substances in the water and therefore determine the overall water quality. Visual test kits are ideally suited to applications where the volume of testing is high and where approximate screening of samples is required.





VISUAL KITS		130
	CONTOUR COMPARATOR KITS	132
	TEST STRIPS	136
	POOLTESTER KITS	138
	POCKET KITS	140
	SEWAGE EFFLUENT KIT	142
	VISUAL ACCESSORIES	144



## CONTOUR COMPARATOR KITS

Simple to use, and with a wide range of kit options, the Contour Comparator offers an excellent solution to visual testing requirements.





### Effortless Simplicity

Simple visual method suitable for all users, ensuring ease of use and quick testing.



### Expandable Testing

Additional discs and reagents can be purchased to expand testing capabilities, offering cost-effective customisation to meet specific testing needs.



### Compact Portability

Compact design makes it easy to transport and use in various locations, ideal for on-site testing and fieldwork.



### Fast Results

Get results in seconds, saving time for other maintenance activities.

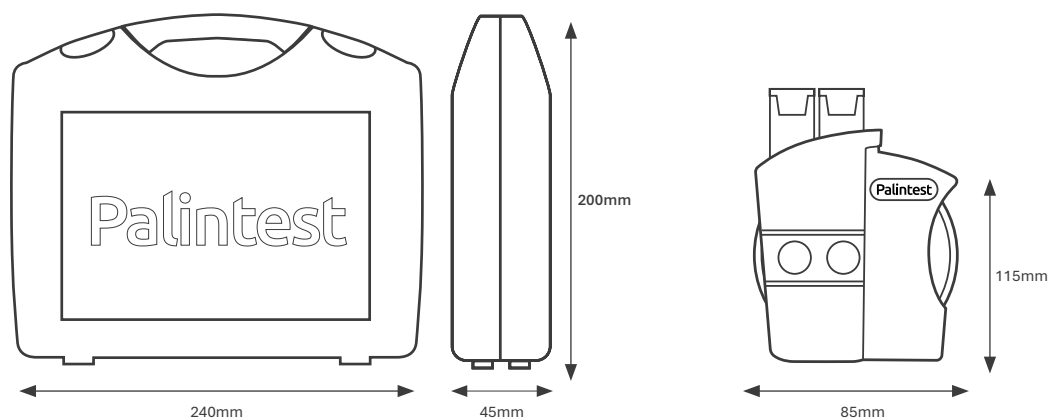


## Kit Contents

Test Instructions



## Technical Specification





## ORDERING INFORMATION

### Single Parameter Kits

Parameter	Test Range	Kit Product Code (30 tests)	Comparator Disc	Replacement Reagents (250 tests)
Ammonia	0–1 mg/L N	CKH1152	CKD1152	AP152
Bromine	0–8 mg/L Br <sub>2</sub>	-	CKD1005	AP060
Chlorine, DPD1 Free	0–5 mg/L Cl <sub>2</sub>	CKH1001	CKD1001	AP011
Chlorine, Free and Total	0–1 mg/L Cl <sub>2</sub>	CKH1003	CKD1003	AP031/1
Chlorine HR	0–50 mg/L Cl <sub>2</sub>	CKH162/50	CKD162/50	AP162
Chlorine HR	0–250 mg/L Cl <sub>2</sub>	CKH162/250	CKD162/250	AP162
Iron MR	0–10 mg/L Fe	CKH1292	CKD1292	AP292
Nitrite	0–0.4 mg/L N	CKH1109	CKD1109	AP109
Phosphate LR	0–4 mg/L PO <sub>4</sub>	CKH1177	CKD1177	AP177 (200 tests)
Zinc	0–4 mg/L Zn	-	CKD1148	AP148
pH Phenol Red	pH 6.8–8.4	CKH1131	CKD1131	AP130

### Dual Parameter Kits

Parameter	Test Range	Kit Product Code
Free and Total Chlorine, Phenol Red	0–5 mg/L Cl <sub>2</sub> and pH 6.8–8.4	CKH2001
Free and Total Chlorine, Phenol Red	0–2 mg/L Cl <sub>2</sub> and pH 6.8–8.4	CKH2002

## TEST STRIPS

Available in 3-way and 6-way formats to support all residential pool and hot tub users, Palintest test strips are the simplest method for testing your water.



### Fast Results

Get results in seconds, saving time for pool maintenance



### Cost Effective

Affordable testing method which gives an indication of pool water quality, making it budget-friendly for residential pool owners



### Comprehensive Testing

Offers comprehensive testing for multiple parameters, ensuring complete pool water safety.



### Effortless Simplicity

Simple visual test based on colour change method, just dip into water and read.

### Ordering Information

Item	Parameter	Test Range	Product Code	Qty
3-in-1 Pool Test Strips	Free Chlorine	0–10 mg/L	PTJ634	50 tests
	pH	6.4–8.4		
	Total Alkalinity	0–240 mg/L		
6-in-1 Pool Test Strips	Free Chlorine	0–10 mg/L	PTJ637	50 tests
	Total Chlorine/ Bromine	Chlorine 0–10 mg/L Bromine 0–20 mg/L		
	pH	6.4–8.4		
	Cyanuric Acid	0–300 mg/L		
	Total Hardness	0–1000 mg/L		
	Alkalinity	0–240 mg/L		







# POOLTESTER KITS

Ideal for the residential user, the Pooltester range provides simple and cost effective pool and hot tub testing.



## Comprehensive Testing

Tests for key pool parameters including chlorine, pH, alkalinity, and bromine, ensuring comprehensive water quality monitoring.



## Effortless Simplicity

Easy-to-use design allows users to test water quality with minimal effort, ensuring hassle-free maintenance.



## Sustainable Design

Made from 100% post-consumer recycled plastic, supporting sustainable practices.



## Compact Portability

Compact design makes it easy to store and transport to use poolside in various locations.

## Ordering Information

Item	Parameter	Test Range	Qty included in kit	Part Code
Chlorine/ pH Pooltester	Free Chlorine	0.1–6.0 mg/L	20 tests	SPT610
	pH	6.8–8.2	20 tests	
Chlorine (0-5 mg/L)/ pH/ Alkalinity Pooltester	Chlorine	0.5–5.0 mg/L	20 tests	SPT612
	pH	6.8–8.2	20 tests	
	Alkalinity	0–250 mg/L	10 tests	
Chlorine (0-3 mg/L)/ pH/ Alkalinity Pooltester	Chlorine	0.2–3.0 mg/L	20 tests	SPT614
	pH	6.8–8.2	20 tests	
	Alkalinity	0–250 mg/L	10 tests	
Bromine/ pH/ Alkalinity Pooltester	Bromine	0.5–8.0 mg/L	20 tests	SPT616
	pH	6.8–8.2	20 tests	
	Alkalinity	0–250 mg/L	10 tests	



## Pooltester Reagents

Parameter	Product Code			Compatible with			
	50 tests	100 tests	250 tests	SPT610	SPT612	SPT614	SPT616
Alkalinity	-	-	AP192		•	•	•
pH	-	AL131/100B	AP130	•	•	•	•
Free Chlorine/ Bromine DPD1	AL010B	AL010/100B	AT050	•	•	•	•
Total Chlorine DPD3	-	-	AT030	•	•	•	
Total Chlorine DPD4	-	-	AT054	•	•	•	

## Pooltester Refill Packs

Refill Pack	Parameter	Quantity	Part Code	Compatible with			
				SPT610	SPT612	SPT614	SPT616
Free chlorine and pH	Free Chlorine	30 tests	AL003B				
	pH	30 tests		•	•	•	•



## POCKET KITS

Providing an inexpensive approach to water testing for applications such as domestic water treatment control. Pocket Kits are all based on tablet reagents and visual colour comparison methods.



### Compact Portability

Conveniently packaged in hard compact cases, perfect for on-the-go testing



### Effortless Simplicity

Simple visual tests based on colour change methods, ensuring straightforward readings



### Cost Effective

Offers an affordable solution for water testing, ideal for home use to give an indication of water quality



### Fast Results

Get results in seconds, saving time for other maintenance activities.

### Ordering Information

Parameter	Test Range	Part Code (50 tests)	Replacement Reagents (250 tests)
Free and total chlorine	0.2–2.0 mg/L Cl <sub>2</sub>	PK011	Free Chlorine - AT050 Total Chlorine – AT030



## Kit Contents



## SEWAGE EFFLUENT KIT



The Palintest Sewage Effluent Kit is a comprehensive tool used in wastewater treatment facilities to monitor key parameters such as permanganate value, pH, turbidity, temperature, and probable BOD, COD, and TOC values, ensuring effective control and compliance.



### Compact Portability

Compact and lightweight, allowing for easy transport and on-site testing.



### Comprehensive Testing

Includes tests for permanganate value, pH, turbidity, temperature, and probable BOD, COD, and TOC values, ensuring thorough monitoring of sewage effluent quality.



### Effortless Simplicity

Designed for straightforward operation without the need for complicated equipment, making it accessible for users with minimal training.



### Field Ready

Kit contains all of the reagents and accessories required for testing, so you can get started straight away.



## Kit Contents



## ORDERING INFORMATION

**PRODUCT CODE: SP304**

Parameter	Description	Test Range	Replacement Consumable Part Code
Permanganate Value	The Palintest Permanganate Value test is a simplified version of the standard AO test for indicating the general quality of final effluents. The test enables the Permanganate Value (PV) to be determined and the effluent classified as to its acceptability for discharge.	0–30+ PV	Permanganate Value: AD-1136 (300 bottle pack) Acidifying SE tablets: AD-0705 (100 bottle pack)
pH	Chemical and biological reactions at sewage works are profoundly influenced by pH. A pH test will also check, for example, on the effect of acid or alkaline trade wastes in the effluent flow. The pH test is carried out using a Universal pH test tablet and Contour Comparator equipped with Universal pH disc.	4–11	–
Turbidity and TSS	The Turbidity Test is designed to give a measure of the suspended solids content of the final effluent. It is also useful in following the day-to-day variation in the quality of sewage and effluent. The Palintest Turbidity Test uses a specially calibrated plastic tube.	30–500 JTU	–
Temperature	A check should be maintained on the temperature of effluent discharges and these should always be close to ambient temperatures. This is particularly important on industrial effluents where heated processes are involved. The kit includes a -10° to +50° thermometer complete in a brass protecting case.	-10° C – +50° C	–
Probable BOD, COD and TOC	It is possible to derive an indication of the Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Organic Carbon (TOC) from the result of the Permanganate Value test. This is based on the relationship between these measures of organic pollution obtained experimentally for such effluents.	All based on PV calculation BOD – Up to 150 mg/L COD – Up to 300 mg/L TOC – Up to 90 mg/L	–



## VISUAL ACCESSORIES

Accessories	Part Code	Compatible with		
		Contour Comparator	Pocket Kit	Sewage Effluent Kit
Comparator cuvettes, 10 mL square comparator cuvettes, pack of 5	PT521/5	•	•	•
Dilution tube, up to 10x, 100 mL	PT512	•	•	•
Crush/ Stirring Rods, pack of 10	PT502	•	•	•
Thermometer -10C to +50C	PT683			•
Jackson Turbidity Tube, 13", 30-500 JTU	PT514			•
Jackson Turbidity Tube, 26", two-part, 5-500 JTU	PT513			•









6

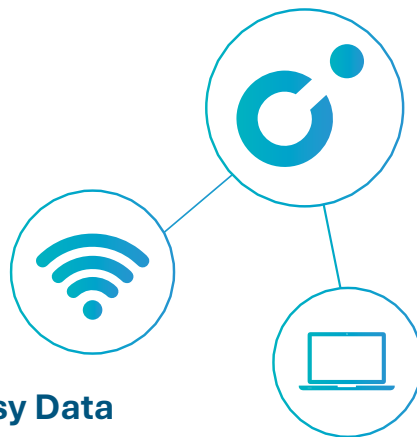
PALINTEST CONNECT

# PALINTEST CONNECT

## What is Connect?

Connect by Palintest is a **cloud-based digital ecosystem**, available by subscription, designed to support end users carrying out **water quality testing**, ensuring **results are clear, connected, and compliant**.





## Reliable Data Every time

Log results digitally with GPS location tagging to ensure accuracy and prevent errors. Protect data from tampering, giving accurate testing visibility and reducing manual entry mistakes.



## Easy Data Access Anywhere

Data is automatically recorded and uploaded, allowing remote access across all locations. Monitor performance, take quick action, and generate clear, auditable reports.









## Instant Access and Expert Support

Easily register instruments and get quick access to calibration certificates, service history, and a 12-month warranty. Benefit from expert technical support, automatic firmware updates, asset management and flexible self-service account options like upgrading or cancelling.

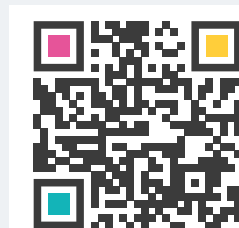
## COSTS AND WHAT'S INCLUDED

Basic (£ FREE)	Premium (£19.99pm / £219.89pa)	Corporate (£5,499.98pa)
<ul style="list-style-type: none"> <li>• Single User</li> <li>• Multi Instrument</li> <li>• Calibration Certificates</li> <li>• Service History Included*</li> <li>• Unlimited Data Upload</li> <li>• 7-day Data Visibility</li> <li>• 1 .CSV Report Per Month</li> <li>• 1 .pdf Report Per Month</li> <li>• Online FAQ Technical Support</li> <li>• No Collaboration</li> <li>• No Alert Management</li> <li>• No GPS Access</li> <li>• No API</li> </ul>	<ul style="list-style-type: none"> <li>• Single User</li> <li>• Multi Instrument</li> <li>• 5 Data Groups</li> <li>• Calibration Certificates</li> <li>• Premium Calibration Certificates</li> <li>• Service History Included*</li> <li>• Unlimited Data Upload</li> <li>• 9-year Data Retention</li> <li>• 100 .CSV Reports Per Month</li> <li>• 100 Reports**</li> <li>• Dedicated Technical Support</li> <li>• Limit and Alert Management</li> <li>• GPS &amp; Photo Geotagging</li> <li>• 5 Collaborations***</li> <li>• No API</li> </ul>	<ul style="list-style-type: none"> <li>• Single User</li> <li>• Multi Instruments</li> <li>• 100 Data Groups</li> <li>• Calibration Certificates</li> <li>• Premium Calibration Certificates</li> <li>• Service History Included*</li> <li>• Unlimited Data Upload</li> <li>• 9-year Data Retention</li> <li>• Unlimited Reports</li> <li>• Unlimited .CSV Reports</li> <li>• Dedicated Technical Support</li> <li>• Limit and Alert Management</li> <li>• GPS &amp; Photo Geotagging</li> <li>• Unlimited Collaborations</li> <li>• API Code on Request</li> </ul>
<small>*When serviced at a Palintest authorised service centre</small>	<small>*When serviced at a Palintest authorised service centre</small> <small>**Additional reports sold in blocks of 50 for £10 per block</small> <small>***Only premium accounts no share with corporate</small>	<small>*When serviced at a Palintest authorised service centre</small>

## Compatible Products

-  Lumiso Pooltest 3, 6, 9
-  Lumiso Pooltest Expert
-  Lumiso Chlorine, Chlorine Dioxide, Ozone, Ammonia
-  Lumiso Expert
-  Turbidity Expert
-  Kemio Disinfection, Heavy Metals, Multi

## REGISTER FOR CONNECT



[www.palintestconnect.com](http://www.palintestconnect.com)





An abstract graphic featuring two overlapping circles. The top circle is light blue with a thick white border. The bottom circle is also light blue with a thick white border. A thick white line connects the right side of the top circle to the top of the bottom circle. Another thick white line extends horizontally from the left side of the top circle.

7

## AFTER SALES

## SERVICING

### What is Palintest Servicing?

Ensure accurate results and reduce costly downtime with our essential instrument servicing. Designed to keep your Palintest equipment calibrated, compliant, and ready to perform. With flexible on-site and return-to-manufacturer options, we work around your operations to keep you testing with confidence.

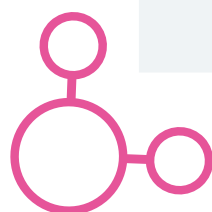




## WHAT IS INCLUDED WITH A PALINTEST SERVICE?

Our Standard service is an all-inclusive package, which means it includes, Service, Calibration and standard repairs. This means there are no hidden costs. All Palintest instruments should be serviced annually by Palintest or a Palintest Authorised Service Partner.

Component	Description
Visual Evaluation	Our technicians carefully inspect your instrument and its components to identify any issues.
Thorough Cleaning	We perform both internal and external cleaning to ensure optimal performance.
Software upgrade	Any required software or firmware updates are included to keep your instrument up-to-date.
Calibration Check and Re-calibration	We meticulously check and adjust calibration points, ensuring accuracy and recalibration back to factory-new standard.
Full Validation Testing	Following completion of each service, calibration and repair, each instrument undergoes rigorous testing to detect any errors or inconsistencies.
Necessary Repairs	All required repairs are completed as part of the service, if an instrument is beyond repair we offer a variety of options to get the customer back testing. NB. In Warranty products would be replaced Free of Charge.

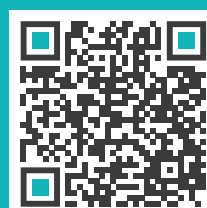


## Compatible Products

- Lumiso Pooltest 3, 6, 9
- Lumiso Pooltest Expert
- Lumiso Chlorine, Chlorine Dioxide, Ozone, Ammonia
- Lumiso Expert
- Turbidity Expert
- Kemio Disinfection, Heavy Metals, Multi
- Turbidity Meter Plus (servicing ends December 2026)

## How do I arrange a service?

Servicing is carried out by approved service partners around the world. To view your local partner and to book a service scan the QR code.



## LEGACY TRADE-IN

### Trade in options

We always recommend keeping your instrument in service and regularly verifying its performance using check standards.

If you own a legacy instrument that is beyond its support period, we suggest exploring upgrade options or requesting a demo. Please reach out to your respective sales contact to discuss options.

**Use promo code TRADE20 to receive  
20% off when trading in your instrument.**





## Legacy Instruments

Legacy Electrochemical Instruments	Replacement Product Code
ChloroSense	KEMS15DIS
PAASense	KEMS15DIS
ChlordioXense	KEMS15DIS
ChlordioX Plus	KEMS15DIS
Scanning Analyser SA1100	KEMS15HM

Legacy Benchtop Photometers	Replacement Product Code
Photometer 7100	LUM7210
Photometer 7500	LUM7210
Pooltest 9	LMP009
Pooltest 10	LMPXUK/ LMPXUS/ LMPXAUS
Pooltest 25	LMPXUK/ LMPXUS/ LMPXAUS

Legacy Turbidimeters	Replacement Product Code
Turbidity Meter	LTH090
Turbidity Meter Plus	LTH090

Legacy Handheld photometers	Replacement Product Code
Compact Chlorometer: PTH045D, PTS045D	LUM051
Compact Chlorometer Duo PTH027, PTS027	LUM051
Compact ClO <sub>2</sub> <sup>+</sup> : PTH046, PTS046	LUM052
Compact Ozone: PTH043, PTS043	LUM053
Compact Ammonia: PTH041, PTS041	LUM050
Compact Ammonia Duo: PTH042, PTS042	LUM050
Turbidity Meter/Chlorometer Kit: PTH7091	LUM051
Turbidity Meter/Chlorometer Duo Kit: PTH7092	LUM051
Turbidity Meter/ClO <sub>2</sub> <sup>+</sup> Kit: PTH7093	LUM7051WLC/ LUM052
Turbidity Meter/Ozone Kit: PTH7094	LUM7051WLC/ LUM053
Turbidity Meter/Ammonia + Kit PTH7095	LUM7051WLC/ LUM050
Turbidity Meter/Ammonia Duo Kit: PTH7096	LUM7051WLC/ LUM050

# APPROVALS AND CERTIFICATIONS

Trusted standards for accuracy, safety and reliability



## Regulatory Approvals

### Kemio – EPA Approved Methods

- Chlorine Dioxide (40 CFR 141.131(c)(1))
- Chlorite (40 CFR 141.131(b)(1))
- Free Chlorine (40 CFR 141.131(c)(1))
- Total Chlorine (40 CFR 141.74(a)(2))
- Lead (Pb) (40 CFR 141.23(k)(1))

### Kemio CLO – UKAS Approved Method

- Trade Effluent to Controlled Water
- Measurement of Free and Total Chlorine (Method 3:9114, electrochemical)



## Instrument Certifications

- **CE Marked** – meeting European safety requirements
- **IP67 Rated** – waterproof and dust-tight
- **IK08 Impact Resistance** – durable (excludes Lumiso Handheld)
- **IEC61010-1 / EN61010-1** – electrical safety standards
- **EN61326-1:2013** – electromagnetic compatibility



## NSF Certification

### Lumiso Pooltest 3 & Pooltest 6 – Level 1 Accuracy

- Combined Chlorine (Pools & Spas)
- pH (Phenol Red) (Pools & Spas)
- Cyanuric Acid (Pools)

View our NSF listing: <https://info.nsf.org/Certified/Pools/Listings.asp?Company=C0592612&Standard=050>



## Business Certifications

- **ISO 9001** – Quality Management Standard



# PALINTEST WARRANTY POLICY

Effective from 30th September 2025

## Warranty Registration

- All products must be registered via Palintest Connect.
- Calibration certificates will be available digitally through Palintest Connect upon completion of warranty registration.
- Warranty claims can only be processed for registered products.
- An additional 12-month warranty extension (up to a maximum of 24 months total) is available when the instrument is serviced by an approved Palintest partner.

## Warranty Coverage

This warranty covers the repair or replacement of products or components that are found to be defective under normal use. To qualify, the following conditions must be met:

- The instrument is registered through Palintest Connect (failure to register your product may result in the inability to process warranty claims).
- It has been supplied, maintained, and used in accordance with Palintest user instructions.
- It has not been repaired or serviced by unauthorised personnel.

## Exclusions

- Calibration of the instrument
- Accidental damage, for example dropping the instrument or exposure to extreme temperatures.
- Mechanical damage resulting from misuse or unauthorised repairs.
- Damage due to incorrect fitting of the battery compartment (applicable for Lumiso products with replacement AA cells).
- Damage caused using non-Palintest reagents.

Please note: pH, conductivity, and TDS probes are covered for six months from the date of purchase only. Micro 800 is covered for a period of 12 months from the date of purchase only.

This warranty policy does not affect your statutory rights.





# TERMS AND CONDITIONS

## Standard terms and conditions for the supply of goods and services

The Customer's attention is particularly drawn to the price increase clause at Condition 7.4 and the exclusions and limitations of liability at Condition 10.

### 1 DEFINITIONS AND INTERPRETATION

- 1.1 This is version 1 of these Conditions dated 22 April 2022. In these Conditions:
  - 1.2 defined words and expressions have the meanings set out at Condition 25 unless the context otherwise requires;
  - 1.3 references to the defined term Conditions are to the terms and conditions set out in this document;
  - 1.4 all headings are for ease of reference only and will not affect the construction or interpretation of these Conditions; unless the context otherwise requires:
  - 1.4.1 references to the singular include the plural and vice versa and references to any gender include every gender;
  - 1.4.2 references to a "person" include any individual, body corporate, association, partnership, firm, trust, organisation, joint venture, government, local or municipal authority, governmental or supra-governmental agency or department, state or agency of state or any other entity (in each case whether or not having separate legal personality);
  - 1.5 references to any statute or statutory provision include any subordinate legislation made under it and will be construed as references to such statute, statutory provision and/or subordinate legislation as modified, amended, extended, consolidated, re-enacted and/or replaced and in force from time to time;
  - 1.6 any words following the words "include", "includes", "including", "in particular" or any similar words or expressions will be construed without limitation and accordingly will not limit the meaning of the words preceding them;
  - 1.7 the meaning of general words introduced by the word "other" or a similar word or expression will not be restricted by reason of the fact that they are preceded by words indicating a particular class of acts, matters or things;
  - 1.8 references to "in writing" or "written" include e-mail;
  - 1.9 any reference to an English or Welsh legal term, concept or thing will, in respect of any jurisdiction other than that of England and Wales, be deemed to include a reference to what most nearly approximates to the English or Welsh legal term in that jurisdiction;
  - 1.10 any reference to:
  - 1.10.1 time of day is to London GMT or BST (as relevant);
  - 1.10.2 a day is to a period of 24 hours running from midnight to midnight;
  - 1.10.3 an obligation on a party to procure or ensure the performance or standing of another person will be construed as a primary obligation of that party; and
  - 1.10.4 any obligation on a party not to do or omit to do anything includes an obligation not to allow (whether expressly or by a failure to take reasonable steps to prevent) that thing to be done or omitted to be done by any other person.
- ### 2 CONTRACT FORMATION
- 2.1 Any quotation given by the Supplier will be valid for 30 days from and including its date, and will constitute an invitation to treat and not an offer.
  - 2.2 The Order constitutes an offer by the Customer to purchase Goods and/or Services from the Supplier on these Conditions. A contract for the supply of Goods and/or Services by the Supplier to the Customer on these Conditions will be formed

when the Supplier accepts the Order by issuing an Order Acknowledgement to the Customer. The Supplier is under no obligation to accept the Order. The Customer may not cancel its Order except as set out in Condition 7.4.

- 2.3 These Conditions are the only terms and conditions on which the Supplier will supply goods and/or services to the Customer and will apply to the exclusion of all other terms and conditions including any terms and conditions which the Customer purports to apply under any purchase order, confirmation of order or similar document (whether or not such document is referred to in the Contract) and any terms and conditions which may otherwise be implied by trade, custom, practice or course of dealing.
  - 2.4 Delivery or commencement of the performance of the Services will be deemed conclusive evidence of the Customer's acceptance of these Conditions.
  - 2.5 The Supplier will be entitled, at its discretion, to deliver Goods by separate instalments. The Supplier will be entitled to invoice the Price for each instalment separately in accordance with Condition 7.5. Each instalment will be deemed to be a separate contract and no cancellation or termination of any one contract relating to an instalment will give the Customer the right to cancel or terminate any other contract. Letters of Credit should allow for delivery in instalments and terms should ensure that despatch and negotiation dates allow sufficient time for documents to be submitted before expiry.
- ### 3 THE GOODS
- 3.1 The Supplier will obtain the Customer's prior approval in order to:
  - 3.1.1 vary the design, finish or Specification of Goods and/or their packaging; and/or
  - 3.1.2 substitute any materials or parts which are used in Goods and which are unavailable for any reason with alternative materials or parts, unless the variation or substitution is necessary to comply with Applicable Law, in which case the Supplier will use reasonable endeavours to give the Customer prior written notice of any such variation or substitution.
  - 3.2 With the exception of the Specification, all samples, drawings, descriptive and illustrative matter and advertising issued or published by the Supplier (or the manufacturer of the Goods) are for the sole purpose of giving an approximate idea of the relevant Goods.
  - 3.3 The Contract is not a sale by sample.
  - 3.4 The Supplier is a registered producer under the UK WEEE Regulations WEE/HE00481Z. Upon the sale of all Goods which are electrical and electronic equipment ("EEE") the Customer agrees to accept the financial obligations for removal, collection, recovery and recycling of the EEE once it becomes waste and for any replaced EEE provided to the Customer.
- ### 4 DELIVERY
- 4.1 Unless otherwise specified in the Order Acknowledgement, the Goods will be EXW Incoterms 2020 at the location specified in the Order Acknowledgement. Delivery of the Goods will be deemed to occur when the Supplier completes its delivery obligations under that Incoterm or as otherwise set out in the Order Acknowledgement. To the extent that these Conditions or the Order Acknowledgement set out that the Goods will be Delivered pursuant to an Incoterm 2020, then where there is any conflict or inconsistency between Incoterms 2020 and these Conditions, Incoterms 2020 will take precedence.
  - 4.2 Where the Order Acknowledgement specifies

that the Supplier shall arrange carriage, carriage shall be via the Supplier's nominated carriers or forwarding agents, otherwise a surcharge will be imposed.

- 4.3 The Supplier will use reasonable endeavours to Deliver the Goods on the estimated date set out in the Order Acknowledgement, but time for Delivery of the Goods will not be of the essence of the Contract. Any Delivery dates given by the Supplier are estimates only.
  - 4.4 If the Goods have not been Delivered under Condition 4.1 within 20 Business Days from and including the latter of:
  - 4.4.1 the estimated Delivery date set out in the Order Acknowledgement; or
  - 4.4.2 any updated estimated Delivery date notified to the Customer in writing, the Customer will notify the Supplier in writing and, if the Supplier fails to Deliver the Goods within a further 10 Business Days of the Customer's written notice, the Supplier will refund to the Customer any monies which the Customer has already paid to the Supplier under the Contract for the Goods. Subject to Condition 10.4, the Supplier's sole Liability for its failure to Deliver the Goods will be limited to the price (exclusive of VAT) paid by the Customer in obtaining replacement goods of equivalent description and quality in the cheapest market available, less the Price of the Goods. The Customer will not otherwise be entitled to cancel the Contract or to reject any Goods by reason of a delay in Delivery or failure to Deliver.
  - 4.5 If Delivery occurs but the Customer fails to accept delivery of, or to collect, the Goods, the Supplier will be entitled to:
  - 4.5.1 store or arrange for storage of the Goods until the Customer accepts delivery of them or they are disposed of under Condition 4.5.2 (as applicable) and to take such action as it considers necessary to attempt to re-deliver the Goods to the address specified in the Order Acknowledgement; or
  - 4.5.2 treat the Contract as repudiated by the Customer and dispose of the Goods in any way it sees fit, including by sale to another person. If the Supplier sells any of the Goods under this Condition 4.5.2 at a price which is less than the relevant Price plus any relevant packaging, insurance, carriage and delivery costs, the Supplier will be entitled to charge the Customer for the shortfall; and
  - 4.5.3 charge the Customer for all costs and expenses which the Supplier incurs under Conditions 4.5.1 and 4.5.2.
  - 4.6 The Customer will ensure that any Goods and/or Services that the Customer purchases or receives from the Supplier under the Contract will not be received, imported, exported, re-exported, transferred, sold or used except in compliance with (i) all Applicable Laws, regulations, orders and requirements relating to import, export control and sanctions, as they may be amended from time to time, including without limitation those of the United States of America, the European Union, the United Kingdom, and the jurisdictions in which the Customer and the Supplier are established, conduct business or from which the Goods and/or Services may be supplied; and (ii) the requirements of any licences, authorisations or licence exceptions relating to the receipt, import, export, re-export, transfer use or sale of the Goods and/or Services.
- ### 5 INSPECTION AND ACCEPTANCE
- 5.1 The Customer will inspect the Goods on Delivery and will within 10 Business Days from and including the date of Delivery give written notice to the Supplier of any breach of the warranty in Condition 8.1 in relation to those Goods which is or

	should be identifiable upon reasonable inspection.		
5.2	If the Customer does not give notice to the Supplier under Condition 5.1 in respect of the Goods, the Customer will be deemed to have accepted the Goods on expiry of the 10 Business Day period from and including the date of Delivery.		
6	<b>PASSING OF RISK AND RETENTION OF TITLE</b>		
6.1	Risk of damage to or loss of the Goods will pass to the Customer on Delivery.		
6.2	Subject to Conditions 6.3 and 6.4, legal and beneficial ownership of the Goods will not pass to the Customer until the Supplier has received in full in cleared funds:		
6.2.1	all sums due to it in respect of the Goods; and		
6.2.2	all other sums which are or which become due to the Supplier from the Customer on any account whatsoever.		
6.3	The Customer may resell the Goods if that is in the ordinary course of its business (but not otherwise) and, if it does so, legal and beneficial ownership of Goods will pass to the Customer immediately prior to the Customer entering into a binding contract for the sale of those Goods.		
6.4	The Supplier may, by giving written notice to the Customer, pass legal and beneficial ownership of the Goods (or any of them) to the Customer at any time before such ownership would otherwise have passed to the Customer.		
6.5	Until ownership of the Goods has passed to the Customer, the Customer will:		
6.5.1	hold the Goods on a fiduciary basis as the Supplier's bailee;		
6.5.2	store the Goods (at no cost to the Supplier) separately from all other goods of the Customer or any third party in such a way that they remain readily identifiable as the Supplier's property;		
6.5.3	not destroy, deface or obscure any identifying mark or packaging on or relating to the Goods;		
6.5.4	maintain the Goods in satisfactory condition; and		
6.5.5	keep the Goods insured for their full price against damage or loss on an "all risks" basis.		
6.6	The Customer's right to possession, use and resale of the Goods will terminate immediately if, before ownership of the Goods passes to the Customer in accordance with Conditions 6.2, 6.3 or 6.4:		
6.6.1	the Customer suffers an Insolvency Event;		
6.6.2	the Supplier gives the Customer written notice that it has any reasonable concerns regarding the financial standing of the Customer;		
6.6.3	the Customer fails to pay any sum due to the Supplier under the Contract on or before the due date;		
6.6.4	the Customer encumbers or in any way charges any of the Goods; or		
6.6.5	the Contract expires or terminates for any reason.		
6.7	Once the Goods are Delivered to the Customer, the Supplier will be entitled to recover payment for the Goods (including by way of an action for the price) notwithstanding that ownership of any of the Goods has not passed from the Supplier.		
6.8	The Customer grants, and will procure that the owner of any third party premises grants, the Supplier, its agents, employees and subcontractors an irrevocable licence at any time to enter any premises where the Goods are or may be stored in order to inspect them, or, where the Customer's right to possession, use and resale has terminated, to recover them.		
6.9	Where the Supplier is unable to determine whether any goods are the Goods in respect of which the Customer's right to possession, use and resale has terminated, the Supplier will be deemed to have sold all goods of the kind sold by the Supplier to the Customer in the order in which they were invoiced to the Customer.		
6.10	If the Customer's right to possession, use and resale of the Goods terminates in accordance with Condition 6.6, the Supplier will be entitled to issue the Customer with a credit note for all or any part of the price of the Goods together with value added tax thereon.		
6.11	The Supplier's rights contained in this Condition 6 will survive expiry or termination of the Contract however arising.		
7	<b>PRICE AND PAYMENT</b>		
7.1	The Customer will pay the Prices and Charges to the Supplier in accordance with this Condition 7.		
7.2	Depending on the method of Delivery and where set out in the Order Acknowledgement, the Prices and Charges may be exclusive of packaging, insurance, carriage and delivery costs and Expenses and, in such case, these may be payable by the Customer in addition to the Prices and Charges.		
7.3	Any sum payable under the Contract is exclusive of VAT (and any other similar or equivalent taxes, duties, fees and levies imposed from time to time by any government or other authority) which will be payable in addition to that sum in the manner and at the rate prescribed by law from time to time.		
7.4	The Supplier will be entitled to vary the Prices and/or Charges at any time prior to Delivery or performance by giving written notice to the Customer to reflect any variation in the cost of supplying the Goods and/or Services which		
	arises as a consequence of: (i) any change in Applicable Law; (ii) any variation in the Customer's requirements for the Goods and/or Services; (iii) any information provided by the Customer being inaccurate or incomplete;		
	(iv) any failure or delay by the Customer in providing information; or (v) any factor beyond the Supplier's control (including foreign exchange fluctuations, increases in taxes and duties, and increases in labour, materials, utilities, haulage or other manufacturing or delivery costs).		
7.5	Unless otherwise notified to the Customer by the Supplier (for example where the Supplier has notified the Customer that the Goods/Services require upfront payment or where the Supplier exercises its discretion to ask for upfront payment where the Supplier has concerns about the Customer's creditworthiness), the Supplier will invoice the Customer for the Prices for the Goods and any packaging, insurance, carriage and delivery costs payable by the Customer in addition to the Prices and the Charges and any Expenses payable by the Customer in addition to the Charges following Delivery.		
7.6	Each invoice will be payable by the Customer within 30 days after the end of the month in which the Supplier's invoice is submitted. All payments will be made in pounds sterling (or such other currency as may be stated on the Supplier's invoice) in available cleared funds by electronic transfer to such bank account as the Supplier may nominate from time to time.		
7.7	Notwithstanding any purported contrary appropriation by the Customer, the Supplier will be entitled, by giving written notice to the Customer, to appropriate any payment by the Customer to any invoice issued by the Supplier.		
7.8	If any sum payable under the Contract is not paid on or before the due date for payment, without prejudice to any other rights or remedies available to the Supplier pursuant to these Conditions, the Supplier will be entitled to charge the Customer interest on that sum at 4% per annum above the base lending rate from time to time of the Bank of England from the due date until the date of payment (whether before or after judgment), such interest to accrue on a daily basis.		
7.9	If the Customer fails to make any payment due to the Supplier under the Contract or any other contract between the Customer and the Supplier within 10 Business Days after the due date, without prejudice to any other rights or remedies available to the Supplier pursuant to these Conditions, the Supplier will be entitled to withhold further deliveries of goods and to suspend or terminate provision of the services until that payment has been made (whether the Goods/Services under the Contract or whether the goods/services under any other contract).		
7.10	If the Customer suffers an Insolvency Event all invoices issued by the Supplier will immediately become due and payable to the extent permitted by Applicable Law.		
7.11	Save as otherwise expressly provided in these Conditions or required by law, all payments to be made by the Customer to the Supplier under the Contract will be made in full and without any set-off or any deduction or withholding including on account of any counter-claim.		
7.12	Following expiry or termination of the Contract:		
7.12.1	the Supplier will be entitled to invoice all Prices and Charges and any packaging, insurance, carriage and delivery costs and Expenses incurred which have not yet been invoiced; and		
7.12.2	all invoices (including any invoices issued under Condition 7.12.1) will become immediately due and payable by the Customer.		
8	<b>WARRANTY</b>		
8.1	The Supplier warrants to the Customer that for a period of 12 Months from delivery ("Warranty Period") the Goods will, subject to Condition 5.1, conform to the Specification in all material respects.		
8.2	If, at any time during the Warranty Period, the Customer becomes aware of a breach of the warranty at Condition 8.1, the Customer will:		
8.2.1	give written notice of the breach to the Supplier, such notice to be given within 5 days after the Customer becomes aware of the breach and prior to expiry of the Warranty Period;		
8.2.2	at the Supplier's option either return to the Supplier (at the Customer's cost) the relevant Goods or permit the Supplier or its agent or subcontractor to inspect the relevant Goods at the Customer's premises; and		
8.2.3	provide to the Supplier all information and assistance which the Supplier may reasonably require to investigate the alleged breach.		
8.2	Subject to Condition 10.4, the Supplier's only Liability for breach of the warranty at Condition 8.1, and the Customer's only remedy, will be, at the Supplier's option, to repair or replace the relevant Goods.		
8.3	The Customer's only remedy for breach of the obligation at Condition will be in damages.		
8.5	Subject to Condition 10.4, the Supplier will not have any Liability for a breach of the warranty at Condition 8.1 if:		
8.5.1	the Customer does not comply with its obligations at Condition 8.2 in respect of the breach;		
8.5.2	notice of the breach should have been but was not given to the Supplier under Condition 5.1;		
8.5.3	the relevant defect was caused by damage in transit after Delivery;		
8.5.4	the relevant defect was caused by fair wear and tear;		
8.5.5	the relevant defect was caused or exacerbated by improper use, handling, alteration, installation, repair, maintenance, storage or failure to comply with instructions provided by the Supplier or the manufacturer; or		
8.5.6	the Customer makes further use of the relevant Goods after discovering the relevant breach.		
8.6	The warranty under Condition 8.1 will apply to any Goods which are repaired or replaced under Condition 8.3 for the remainder of the original Warranty Period.		
	Subject to Condition 10.4, all other warranties, conditions and other terms implied by law (whether by statute, common law or otherwise) are excluded from the Contract.		
9	<b>SERVICES</b>		
	The Supplier warrants to the Customer that it will provide the Services with reasonable care and skill.		
	The Supplier will use reasonable endeavours to provide the Services on the estimated performance date set out in the Order Acknowledgement, but time for provision of the Services will not be of the essence of the Contract. Any performance dates given by the Supplier are estimates only.		
10	<b>EXCLUSIONS AND LIMITATIONS OF LIABILITY</b>		
10.1	The Customer's attention is particularly drawn to this Condition.		
	Subject to Condition 10.4, the Supplier's entire Liability for any non- delivery of Goods or failure to deliver the Goods in accordance with the timescales set out or referred to in the Contract will be as set out in Condition 4.4 and the Supplier will have no other Liability for any such non-delivery or failure to deliver. Such Liability will be subject to Condition 10.2 and will be taken into account in calculating whether the financial limit in Condition 10.2 has been reached.		
10.1	Subject to Condition 10.4, the Supplier's maximum aggregate Liability will be limited to a sum that is equal to 100% of the price payable under the Contract.		
10.3	The Supplier will have no Liability to the Customer for any:		
10.3.1	loss of profit (whether direct, indirect or consequential);		
10.3.2	loss of use, loss of revenue, loss of production or loss of business (in each case whether direct, indirect or consequential);		
10.3.3	loss of goodwill, loss of reputation or loss of opportunity (in each case whether direct, indirect or consequential);		
10.3.4	loss of anticipated savings or loss of margin (in each case whether direct, indirect or consequential);		
10.3.5	loss of bargain (whether direct, indirect or consequential);		
10.3.6	liability of the Customer to third parties (whether direct, indirect or consequential);		
10.3.7	loss of use or value of any data or software (whether direct, indirect or consequential);		
10.3.8	wasted management, operational or other time (whether direct, indirect or consequential);		
10.3.9	loss or damage arising out of any failure by the Customer to keep full and up to date security copies of any computer program and data held or used by or on behalf of the Customer (whether direct, indirect or consequential); or		
10.3.10	indirect, consequential or special loss, subject always to Condition 10.4.		
	Nothing in the Contract will operate to exclude or restrict one party's Liability (if any) to the other:		
10.4.1	for death or personal injury resulting from its negligence or the negligence of a person for whom it is vicariously liable (negligence being as defined in Section 1(1) Unfair Contract Terms Act 1977);		
10.4.2	for its fraud or fraudulent misrepresentation or fraud or fraudulent misrepresentation by a person for whom it is vicariously liable; or		
10.4.3	for any matter for which it is not permitted by law to exclude or limit, or to attempt to exclude or limit, its liability.		
10.5	Nothing in this Condition 10 will prevent or restrict the right of a party to seek injunctive relief or specific performance or other discretionary remedies of the court.		
10.6	The exclusions from, and limitations of, liability set out in this Condition 10 will be considered severally. The invalidity or unenforceability of any one sub-clause or clause will not affect the validity or enforceability of any other sub-clause or clause and will be considered severable from each other.		
10.7	Each of the Supplier's employees, agents and sub-contractors will be entitled to enforce all the terms of this Condition 10 subject to and in accordance with the Contracts (Rights of Third Parties) Act 1999 and the terms of the Contract.		



	Accordingly and for the avoidance of doubt the financial limits on liability set out in Condition 10 are the maximum liability of the Supplier, its employees, agents and sub-contractors in aggregate.	13.7.2	all other rights and obligations will immediately cease without prejudice to any rights, obligations, claims (including claims for damages for breach) and liabilities which have accrued prior to the date of expiry or termination.		dispose of, disclose or otherwise deal with the Goods and/or Services; and
<b>11</b>	<b>INTELLECTUAL PROPERTY</b>	13.8	Within 30 days after the date of expiry or termination of the Contract, on request by the other party, each party will return to the other party or destroy the other party's Confidential Information.	17.3.4	will not put the Goods and/or Services, in their entirety or in part, to any use in connection with the development, production, handling, operation, maintenance, storage, detection, identification or dissemination of chemical, biological or nuclear weapons or the development, production, maintenance or storage of missiles capable of delivering such weapons or to any military end-use in violation of any applicable embargo (including, but not limited to, embargoes maintained by the EU, UK, OSCE and/or UN). In addition, the Customer shall not sell, resell, supply, export, re-export, transfer, divert, distribute or dispose of the Goods and/or Services to any third party where the Customer knows or has grounds for suspecting that the Goods and/or Services are or may be intended for one of the uses specified in this Condition.
<b>11.1</b>	Nothing in the Contract will operate to transfer to the Customer or to grant to the Customer any licence or other right to use any of the Supplier's Intellectual Property Rights, save that the Customer may use the Supplier's Intellectual Property Rights in the Goods and/or Services solely to the extent necessary to use the Goods and/or Services for the purpose for which they were supplied.	<b>14</b>	<b>FORCE MAJEURE</b>	17.4	In addition to any other remedy available to the Supplier, the Customer shall indemnify, keep indemnified and hold harmless (on a full indemnity basis) the Supplier and its affiliates, officers and personnel against any and all direct or indirect liabilities, claims, demands, damages, losses or expenses (including legal and other professional advisers' fees and disbursements), interest and penalties suffered or incurred as a result of any breach of this Condition 17. The Supplier reserves the right to terminate the Contract immediately upon written notice and without penalty in the event of such breach.
<b>12</b>	<b>CUSTOMER OBLIGATIONS</b>	14.1	The Supplier will not be in breach of the Contract or otherwise liable to the Customer for any failure to perform or delay in performing its obligations under the Contract to the extent that such failure or delay is due to a Force Majeure Event.	17.5	The Supplier shall not be obliged to perform any obligation under the Contract and shall have the right to terminate the Contract, without being liable for any damages or costs of any kind, if in its sole discretion it reasonably believes that such performance in full or in part would place it in violation of any Trade Restrictions (including, for the avoidance of doubt, if such violation would be the result of any delay to, or refusal of, the grant of any licence required under Trade Restrictions).
12.1	The Customer will:	14.2	If a Force Majeure Event occurs:	17.6	Nothing in this Condition 17 shall require either party to act in any way contrary to any blocking or anti-boycott laws with jurisdiction over such party's operations, including (if applicable) the Anti-Foreign Sanctions Law of the People's Republic of China.
12.1.1	provide the Supplier with all such information and assistance as the Supplier may reasonably require from time to time to perform its obligations or to exercise any of its rights under the Contract;	14.2.1	the Supplier will as soon as reasonably practicable after becoming aware of the Force Majeure Event give written notice to the Customer that the Force Majeure Event has occurred; and	<b>18</b>	<b>ANTI-SLAVERY</b>
12.1.2	notify the Supplier within 24 hours of:	14.2.2	subject to Condition 14.3, the Supplier will not be in breach of the Contract or otherwise liable to the Customer for any failure to perform or delay in performing its obligations under the Contract to the extent that this is due to a Force Majeure Event affecting the Supplier.	18.1	The Customer shall comply with all applicable anti-slavery and human trafficking laws, statutes, regulations and codes from time to time in force including but not limited to the UK Modern Slavery Act 2015 and will not engage in any activity, practice or conduct that would constitute an offence under sections 1, 2 or 4, of the Modern Slavery Act 2015.
12.1.2.1	any discussions, negotiations or proposals with or to any one or more of the Customer's creditors in relation to any composition, compromise, arrangement or scheme of arrangement of debt or debts owed to any such creditor; or	14.3	If the Supplier is affected by a Force Majeure Event the Customer will continue to pay the Supplier's invoices in accordance with Condition 7.6 in respect of any Goods and/or Services which the Supplier continues to supply notwithstanding the occurrence of the Force Majeure Event.	<b>19</b>	<b>ANTI-BRIBERY</b>
12.1.2.2	any discussions, negotiations or proposals with any person in relation to the insolvency of the Customer;	14.4	If a Force Majeure Event which gives rise to relief from liability under Condition 14.1 continues for a period of more than 60 days, either party will be entitled to terminate the Contract immediately by giving written notice to that effect to the other party.	19.1	Each party will comply with all Applicable Laws, regulations, codes and sanctions relating to anti-bribery and anti-corruption including, but not limited to:
12.1.3	not re-package the Goods or remove or alter any trade marks, patent numbers, serial numbers or other identifying marks on the Goods or their packaging or add any other trademarks, patent numbers, serial numbers or other identifying marks to the Goods or their packaging;	<b>15</b>	<b>CONFIDENTIALITY</b>	19.1.1	local and national laws in the territories in which it operates;
12.1.4	not alter or modify the Goods in any way; and		Each party undertakes that it shall not at any time disclose to any person any confidential information concerning the business, affairs, customers, clients or suppliers of the other party or of any member of the Group to which the other party belongs ("Confidential Information") except as permitted by Condition 15.2.	19.1.2	the UK Bribery Act 2010;
12.1.5	comply with the Supplier's instructions in connection with any product recall initiated by the Supplier involving the Goods (or any of them).	15.1	Each party may disclose the other party's Confidential Information:	19.1.3	the US Foreign Corrupt Practices Act 1977; and
12.2	Notwithstanding any other term of the Contract, the Supplier will not be in breach of the Contract to the extent its failure to perform or delay or defect in performance of its obligations under the Contract arises as a result of:	15.2.1	to its employees, officers, representatives or advisers who need to know such information for the purposes of exercising the party's rights or carrying out its obligations under or in connection with the Contract. Each party shall ensure that its employees, officers, representatives or advisers to whom it discloses the other party's Confidential Information comply with this Condition 15; and	19.1.4	the UN Convention Against Corruption;
12.2.1	any breach by the Customer of its obligations contained in the Contract;	15.2.2	as may be required by Applicable Law, a court of competent jurisdiction or any governmental or regulatory authority.	19.1.5	in relation to the Supplier only, comply with the Supplier Group's code of conduct relating to bribery and corruption (as amended from time to time) found at <a href="http://www.halma.com">www.halma.com</a> .
12.2.2	the Supplier relying on any incomplete or inaccurate data provided by a third party; or		Neither party shall use any other party's Confidential Information for any purpose other than to exercise its rights and perform its obligations under or in connection with the Contract.	19.2	The Customer shall (and shall procure that its Associated Persons shall):
12.2.3	the Supplier complying with any instruction or request by the Customer or one of its employees.	<b>16</b>	<b>DATA PROTECTION</b>	19.2.1	not make any offer, payment, promise to pay, or authorise the giving of any monies or financial or other advantage to any person: (i) for the purpose of inducing or rewarding that person (or any other person) to perform their role or function improperly; (ii) for the purpose of influencing a public official in relation to any decision, act or other performance (including failure to perform) of their official role or function, with the intention of obtaining or retaining business or a business advantage; or (iii) that is otherwise for the purpose of improperly obtaining or retaining business or a business advantage of any kind;
<b>13</b>	<b>TERMINATION</b>	<b>17</b>	<b>TRADE RESTRICTIONS</b>	19.2.2	not request, agree to receive, or accept, any monies or financial or other advantage in return or as a reward for performing their role or function improperly;
	If a party:	17.1	The Customer hereby acknowledges and agrees that the supply of the Goods and/or Services may be subject to Trade Restrictions.	19.2.3	not engage in any other activity, practice or conduct which would constitute an offence under any other applicable anti-corruption or anti-bribery legislation, or that would place the Supplier in breach of such legislation; and
13.1.1	commits a material breach of the Contract which cannot be remedied; or	17.2	The Supplier reserves the right to carry out screening and background checks on the Customer prior to the supply of the Goods and/or Services and at any time during the performance of the Contract. The Customer shall provide all assistance to the Supplier that the Supplier reasonably requires in relation to such checks.	19.2.4	have, maintain in place and enforce throughout the term of any Contract its own policies and procedures, including but not limited to adequate procedures to ensure compliance with any applicable anti-bribery legislation and the requirements of this Condition 19.
13.1.2	commits a material breach of the Contract which can be remedied but fails to remedy that breach within 30 days of a written notice setting out the breach and requiring it to be remedied being given by the other party, the other party may terminate the Contract immediately by giving written notice to that effect to the party in breach provided that the notice to terminate is given within 1 month from the date of the material breach occurring or the terminating party becoming aware of it, whichever is the later.	17.3	The Customer is solely responsible for complying with and shall not do anything which would cause the Supplier to be in breach of, Trade Restrictions. In particular, the Customer warrants and represents that it:	<b>20</b>	<b>TAX</b>
13.2	A material breach can be remedied if the party in breach can comply with the relevant obligation in all respects other than as to time of performance unless time of performance of such obligation is of the essence.	17.3.1	is not, and is not owned or controlled by a Sanctioned Party;	20.1	The Customer shall (and shall procure that its Associated Persons shall) comply with all applicable taxation laws and shall not commit an offence consisting of the evasion of tax, or the facilitation of tax evasion by another person.
13.3	Condition 13.1 will not apply to any failure by the Customer to make any payment due to the Supplier under the Contract on or before the due date. Condition 13.4 will apply instead to any such failure.	17.3.2	will not use, sell, resell, export, re-export, transfer, distribute, dispose of, disclose or otherwise deal with the Goods and/or Services, directly or indirectly, to: (i) any country, territory, or destination with which the Supplier, as a matter of policy, does not conduct business (including but without limitation to Iran, Syria, Sudan, Cuba, Crimea & Sevastopol and North Korea, and any other territory subject to comprehensive Trade Restrictions from time to time); (ii) any other territory to which the supply of the Goods and/or Services would be restricted or prohibited under Trade Restrictions (subject to the Customer obtaining any and all licences and/or approvals required to make such a supply); or (iii) any Sanctioned Party (or any party owned or controlled by a Sanctioned Party);		
13.4	If the Customer fails to make any payment due under the Contract on or before the due date, the Supplier may terminate the Contract by giving not less than 30 days' written notice to that effect to the Customer provided the Supplier has given to the Customer written notice of the failure to make payment and the Customer has still failed to make payment within 7 days of that written notice.	17.3.3	will obtain and maintain any required export licence or other governmental approval and complete such formalities as may be required under Trade Restrictions in order to use, sell, resell, export, re-export, transfer, distribute,		
13.5	To the extent permitted by Applicable Law, the Supplier may terminate the Contract immediately by giving written notice to that effect to the Customer if the Customer suffers an Insolvency Event.				
13.6	The Supplier may terminate the Contract immediately by giving written notice to the Customer if: (i) the Supplier has reasonable cause to believe that the continued performance of the Contract is or would be in breach of any Applicable Law relating to sanctions or exports imposed or re-imposed by a relevant body; or (ii) the Supplier has reasonable cause to believe that the Customer has breached or is likely to breach Condition 4.5.				
13.7	Following expiry or termination of the Contract:				
13.7.1	Conditions 1, 4.4, 6, 7, 8, 10, 13.7, 13.8, 15, 22, 23 and 24 will continue in force, together with any other Conditions which expressly or impliedly continue to have effect after expiry or termination of the Contract; and				



- 20.2 The Supplier may terminate the Contract immediately upon written notice to the Customer where it reasonably believes that the Customer has breached Condition 20.1 and the Customer shall indemnify the Supplier from all damages, penalties, fines and/or costs of any kind arising from, or relating to, any breach of Condition 20.1.
- 21 ASSIGNMENT AND SUB-CONTRACTING**
- 21.1 The Supplier will be entitled to assign, transfer, charge, hold on trust for any person and deal in any other manner with any of its rights under the Contract.
- 21.2 The Customer will not be entitled to assign, transfer, charge, hold on trust for any person or deal in any other manner with any of its rights under the Contract without the Supplier's prior written consent.
- 21.3 The Supplier will be entitled to sub-contract any of its obligations under the Contract.
- 21.4 The Customer will not be entitled to sub-contract any of its obligations under the Contract without the Supplier's prior written consent.
- 22 NOTICE**
- 22.1 Subject to Condition 22.3, any notice given under or in connection with the Contract will be in the English language and:
- 22.1.1 sent to the relevant party's address by pre-paid first class post, or airmail post or mail delivery service providing guaranteed next working day delivery and proof of delivery; or
- 22.1.2 delivered to or left at the relevant party's address (but not, in either case, by one of the methods set out in Condition 22.1.1); or
- 22.1.3 sent by e-mail to that party's e-mail address.
- Any notice given in accordance with Condition 22.1 will be deemed to have been served if given:
- 22.2.1 by first class post or mail delivery service in each case as set out in Condition 22.1.1, at 9.00 a.m. on the second Business Day after the date of posting;
- 22.2.2 by airmail post as set out in Condition 22.1.1, at 9.00 a.m. on the tenth Business Day after the date of posting;
- 22.2.3 as set out in Condition 22.1.2, at the time the notice is delivered to or left at that party's address; and
- 22.2.4 as set out in Condition 22.1.3, at the time of sending the e-mail, provided that if a notice is deemed to be served before 9.00am on a Business Day it will be deemed to be served at 9.00am on that Business Day and if it is deemed to be served on a day which is not a Business Day or after 5.00pm on a Business Day it will be deemed to be served at 9.00am on the immediately following Business Day.
- 22.3 This Condition 22 will not apply to the service of any proceedings or other documents in a legal action to which the Civil Procedure Rules apply.
- 23 GENERAL**
- 23.1 The Contract constitutes the entire agreement between the parties and supersedes any prior agreement or arrangement in respect of its subject matter and:
- 23.1.1 neither party has entered into the Contract in reliance upon, and it will have no remedy in respect of, any misrepresentation, representation or statement (whether made by the other party or any other person and whether made to the first party or any other person) which is not expressly set out in the Contract;
- 23.1.2 the only remedies available for any misrepresentation or breach of any representation or statement which was made prior to entry into the Contract and which is expressly set out in the Contract will be for breach of contract; and
- 23.1.3 nothing in this Condition 23.1 will be interpreted or construed as limiting or excluding the liability of any person for fraud or fraudulent misrepresentation.
- 23.2 A delay in exercising or failure to exercise a right or remedy under or in connection with the Contract will not constitute a waiver of, or prevent or restrict future exercise of, that or any other right or remedy, nor will the single or partial exercise of a right or remedy prevent or restrict the further exercise of that or any other right or remedy. A waiver of any right, remedy, breach or default will only be valid if it is in writing and signed by the party giving it and only in the circumstances and for the purpose for which it was given and will not constitute a waiver of any other right, remedy, breach or default.
- 23.3 If any term of the Contract is found by any court or body of authority of competent jurisdiction to be illegal, unlawful, void or unenforceable, such term will be deemed to be severed from the Contract and this will not affect the remainder of the Contract which will continue in full force and effect.
- 23.4 No variation to the Contract will be effective unless it is in writing and signed by a duly authorised representative on behalf of the Supplier.
- 23.5 Nothing in the Contract and no action taken by the parties in connection with it or them will create a partnership or joint venture or relationship of employer and employee between the parties or give either party authority to act as the agent of or
- in the name of or on behalf of the other party or to bind the other party or to hold itself out as being entitled to do so.
- 23.6 Each party agrees that it is an independent contractor and is entering into the Contract as principal and not as agent for or for the benefit of any other person.
- 23.7 The Supplier's employees, agents and sub-contractors will be entitled to enforce Condition 10 subject to and in accordance with the Contracts (Rights of Third Parties) Act 1999 and the terms of the Contract.
- 23.8 The parties may vary or rescind the Contract without the consent of the Supplier's employees, agents or sub-contractors.
- 23.9 Save as provided in Condition 23.7, the parties do not intend that any term of the Contract will be enforceable under the Contracts (Rights of Third Parties) Act 1999 by any person.
- 23.10 The Supplier's rights and remedies set out in these Conditions are in addition to and not exclusive of any rights and remedies provided by law.
- 24 GOVERNING LAW AND JURISDICTION**
- 24.1 The Contract and any non-contractual obligations arising out of or in connection with it will be governed by the law of England and Wales.
- 24.2 All disputes which may arise, under, out of, or in connection with, or in relation to the Contract, including any question regarding its existence, validity or termination, shall be referred to and finally settled by arbitration under the London Court of International Arbitration (LCIA) under and in accordance with the LCIA Rules at the date thereof, which Rules are deemed to be incorporated by reference into this condition. The number of arbitrators shall be one. The seat, or legal place, of arbitration shall be England and the language used in the arbitral proceedings shall be English.
- 25 DEFINITIONS**
- The following words and expressions have the following meanings in our terms and conditions unless the context requires otherwise:
- "Applicable law"** means any: (a) law including any statute, statutory instrument, bye law, order, regulation, directive, treaty, decree, decision (as referred to in Article 288 of the Treaty on the Functioning of the European Union); (b) legally binding rule, policy, guidance or recommendation issued by any governmental, statutory or regulatory body; and/or (c) legally binding industry code of conduct or guideline, in each case in force from time to time which relates to the Contract and/or the Goods and/or the Services; "Associated Persons" means any person performing services for or on behalf of a party, including but not limited to subsidiaries, employees, agents, distributors and contractors;
- "Business Day"** means a day that is not a Saturday, Sunday or public or bank holiday in England and/or Wales;
- "Charges"** means the charges for the Services set out in the Supplier's quotation as those charges may be varied from time to time in accordance with Condition 7.4;
- "Conditions"** means our standard terms and conditions of supply, as varied from time to time in accordance with Condition 23.4;
- "Confidential Information"** has the meaning given to it in Condition 15.1; "Contract" means the contract between the Supplier and the Customer for the supply of the Goods and/or Services formed in accordance with Condition 2;
- "Customer"** means the person named as the customer in the Order;
- "Delivery"** means delivery or making available (if that is the case depending of the method of delivery/Incoterm used) of the Goods in accordance with Condition 4.1 and "Deliver" and "Delivered" shall be interpreted accordingly; "Expenses" means those travel, accommodation and subsistence expenses incurred by the Supplier from time to time in performing the Services;
- "Force Majeure Event"** means (a) act of God; (b) war, insurrection, riot, civil commotion, act or threat of terrorism; (c) lightning, earthquake, fire, flood, storm, or extreme weather condition; (d) theft, malicious damage; (e) strike, lockout, industrial dispute (whether affecting the workforce of a party and/or any other person); (f) pandemic, epidemic or public health crisis (g) breakdown or failure of plant or machinery; (h) inability to obtain essential supplies or materials; (i) change in Applicable Law; (j) any failure or default of a supplier or sub-contractor of the Supplier; or (k) any event or circumstance to the extent it is beyond the reasonable control of the Supplier;
- "Goods"** means the goods set out in the Order;
- "Group"** means in relation to a company, that company, any subsidiary or any holding company from time to time of that company, and any subsidiary from time to time of a holding company of that company. Each company in a "Group" is a "member of the Group";
- "Insolvency Event"** means the occurrence of any of the following events in relation to a party: (a) any step or action is taken, any notice, document, petition or application is filed at court, or any resolution is passed, in connection with the affected party entering administration, a moratorium, provisional liquidation, a company voluntary arrangement, an arrangement under Part 26A of the Companies Act 2006 or any other composition or arrangement with its creditors (other than in relation to a solvent restructuring), bankruptcy, being wound up (whether voluntarily or by order of the court, unless for the purpose of a solvent restructuring) or having a receiver appointed over any of its assets; (b) an event similar or analogous to those listed in (a) above occurs under the law of any jurisdiction of the affected party; or (c) the affected party suspends, or threatens to suspend, or ceases, or threatens to cease, to carry on all or a substantial part of its business;
- "Intellectual Property Rights"** means all intellectual and industrial property rights of any kind whatsoever including patents, supplementary protection certificates, rights in know-how, registered trademarks, registered designs, models, unregistered design rights, unregistered trademarks, rights to prevent passing off or unfair competition and copyright (whether in drawings, plans, specifications, designs and computer software or otherwise), database rights, topography rights, any rights in any invention, discovery or process, and applications for and rights to apply for any of the foregoing, in each case in the United Kingdom and all other countries in the world and together with all renewals, extensions, continuations, divisions, reissues, re-examinations and substitutions;
- "Liability"** means liability arising out of or in connection with the Contract, whether in contract, tort, misrepresentation, restitution, under statute or otherwise, including any liability under an indemnity contained in the Contract and/or arising from a breach of, or a failure to perform or defect or delay in performance of, any of a party's obligations under the Contract and/or any defect in any of the Goods, in each case howsoever caused including if caused by negligence or if caused by a deliberate and/or repudiatory breach by that party;
- "Order"** means the Customer's order for the supply of goods and/or services by the Supplier;
- "Order Acknowledgement"** means the Supplier's written acceptance of the Order;
- "Prices"** means the prices for the Goods set out in the Supplier's current price list, or as otherwise set out in the Supplier's quotation (if any quotation is provided) as those prices may be varied from time to time in accordance with Condition 7.4;
- "Sanctioned Party"** means any party or parties listed on any list of designated or other restricted parties maintained under Trade Restrictions, including but not limited to the Consolidated List of Financial Sanctions Targets in the UK maintained by HM Treasury, the consolidated list of persons, groups and entities subject to EU financial sanctions maintained by the European Commission, and the Specially Designated Nationals and Blocked Persons List maintained by the US Office of Foreign Assets Control;
- "Services"** means the services set out in the Order;
- "Specification"** means the written technical specification for the Goods; "Supplier" means Palintest Limited (registered number 01204118) whose registered office is at Palintest House, Kingsway, Team Valley Trading Estate, Gateshead, Tyne and Wear, NE11 0NS;
- "Trade Restrictions"** means any applicable export controls, trade or economic sanctions, embargoes or similar laws, regulations, rules, licences, orders or requirements including, without limitation those of the UN, UK, U.S. and the EU;
- "VAT"** means value added tax; and
- "Warranty Period"** has the meaning given to it in Condition 8.1.











# Palintest

## Head Office:

Palintest Ltd  
Kingsway  
Team Valley  
Gateshead  
NE11 0NS  
UK  
[sales@palintest.com](mailto:sales@palintest.com)

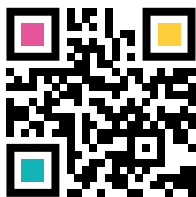
## Americas:

Palintest USA  
600 Corporate Circle, Suite F  
Golden  
CO 80401  
USA  
[info@palintestusa.com](mailto:info@palintestusa.com)

## APAC:

Palintest  
17 Maud Street  
Newstead  
QLD 4006  
Australia  
[apac@palintest.com](mailto:apac@palintest.com)

SCAN FOR MORE INFORMATION



[www.palintest.com](http://www.palintest.com)

