Palintest
Water Analysis Technologies

Product Catalogue

For potable and processwater applications

About us

At Palintest we make water analysis technologies which help to safeguard consumers around the world each day

Providing equipment for water quality monitoring and disinfection control, our equipment empowers individuals to make water quality decisions with confidence.

Manufactured in the UK, our assured technologies are used globally in a variety of applications to protect lives and the environment.

Palintest has a long history of innovation. Beginning with Dr Palin who pioneered the use of DPD for field analysis of free and total chlorine; making water analysis accessible to all.

Building on the philosophy of Dr Palin, we are continually evaluating new and existing technologies to make water testing simple and accessible for everyone. Over the years we have developed a number of market firsts and we continue to push the boundaries of innovation to improve water quality for everyone.
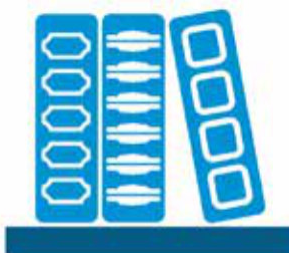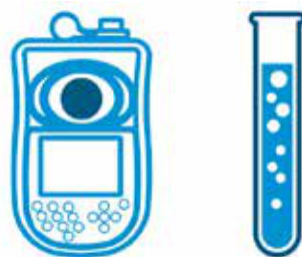
We take a local view when conducting our business, understanding that different environments require a different approach. From our headquarters in the UK, we work closely with our regional hubs to support local customers; delivering fit for purpose solutions to fulfil regional regulations and requirements.

In addition to our hubs in Australia, China and the United States, we have also developed a trusted distribution network who are strategically positioned to support your needs.

Stay in touch @Palintest

Applications

We work closely with our customers to understand their applications and the challenges they face. This in turn helps to deliver products and services which supports our customer needs.
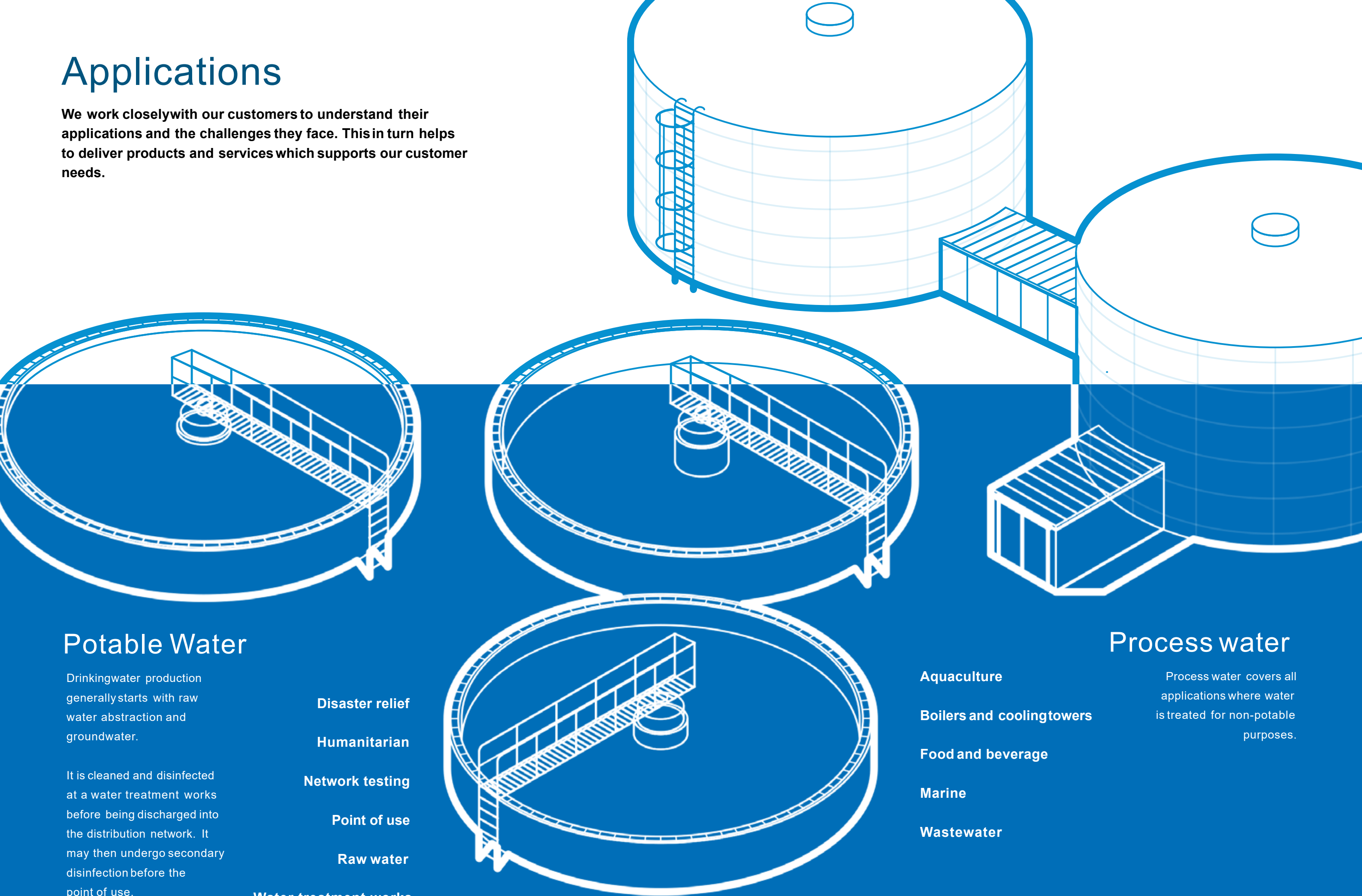
Potable Water

Drinking water production generally starts with raw water abstraction and groundwater.

It is cleaned and disinfected at a water treatment works before being discharged into the distribution network. It may then undergo secondary disinfection before the point of use.

Disaster relief

Humanitarian

Network testing

Point of use

Raw water

Water treatment works

Process water

Aquaculture

Boilers and cooling towers

Food and beverage

Marine

Wastewater

Process water covers all applications where water is treated for non-potable purposes.

Contents

Photometers

Palintest photometers are ideal for providing critical information required for drinking water, wastewater, environmental and process applications.

Suitable for a wide range of parameters, photometric analysis is a simple and effective mechanism for determining water quality parameters.

Multiparameter Photometers

Our multiparameter photometers include all Palintest reagent methods pre-calibrated into the software, providing comprehensive testing platforms for a wide range of tests.

Compact Photometers

Our compact photometer range comprises handheld units with single-parameter calibrations, ideal for quick analysis of key water quality parameters.

Configure a system:

1 **Select instrument platform:** Multiparameter or single parameter. Select kit type.

2 **Select tests:** Select parameter(s). Tablet or liquid (Tubetest) format.

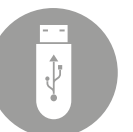**3** **Select accessories:** Such as; spare cuvettes, check standards, tubetest heater blocks.

Photometer features key:

Tablet icon: This instrument is compatible with tablet reagents.

USB icon: This instrument includes a data transfer function via USB.

Tubetest icon: This instrument is compatible with liquid tubetests reagents.

Bluetooth® icon: This instrument includes Bluetooth® for data transfer.

Multiparameter Photometers Overview

Photometer 7500 Bluetooth®

The Photometer 7500 is our most popular photometer due its versatility and simplicity of use. Reliable and intuitive it has been designed to simplify the process of testing and managing water quality data.

- Effortlessly store 500 results and transfer to the Palintest Aqua Pal App with Bluetooth®
- Covers the full range of test parameters
- Personalise your instrument by adding your own tests

Bluetooth® data transfer	USB data transfer	Tablet reagents	Tubetest reagents

Ordering Information

PTBR7500
Photometer 7500 Bluetooth® Benchtop Kit
Instrument and light cap, 10 glass cuvettes, cuvette rack, absorbent cloth, 10 mL syringe, dilution tube/sample container, cuvette brush, lint free cloth, 10 crush/stir rods, cuvette rack, USB lead, Mains Adapter, Instrument instructions, Palintest method book. Supplied in a transit carton.

PTBH7500
Photometer 7500 Bluetooth® Standard Kit
Instrument and light cap, 8 glass cuvettes, dilution tube/sample container, USB lead, cuvette brush, 10 crush/stirring rods, lint free cloth, 10 mL syringe, instrument instructions, Palintest method book. Supplied in a hard case.

PTBW7500
Photometer 7500 Bluetooth® Engineers Kit
Instrument and light cap, 8 glass cuvettes, 2 dilution tubes/sample containers, 20 mL syringe with Luer fitting, Luer filter holder, GFB filter pack, 10 mL syringe, USB lead, mains adapter, cuvette brush, 10 crush/stirring rods, cuvette rack, lint free cloth, De-ion pack, check standards, multiparameter pocket sensor, conductivity calibration solution, pH 4/7/10 calibration solutions, instrument instructions, Palintest method book. Supplied in an IP67 hard case with space for up to 4 reagent Starter Packs..

	Photometer 7100	Photometer 7500 Bluetooth®
Battery Power	✓	✓
Number of Methods	>100	>100
Drag & Drop Method Update		✓
Frequently Used Test List/Hot Keys	✓	✓
Multiple Date Formats	✓	✓
Automatic Method Set-Up	✓	✓
Timer	✓	✓
Automatic Read on Time Elapse	✓	✓
Backlight with User Control	✓	✓
Optics Accessible for Cleaning	✓	✓
Automatic Cuvette Centering	✓	✓
Numeric/Select Key Interface	✓	✓
Connectivity		Bluetooth® & USB
Mains Power		Via USB port
Bi-directional Serial Communication		✓
User Defined Tests		30
CSV Format Data Download		✓
User Access Control Lock	✓	✓
Result Log	✓	✓
Number of Results & Data Sets	100	500
Date & Time	✓	✓
Multiple Operator IDs	✓	✓
Multiple Sample IDs	✓	✓

Technical Specification

Instrument Type	Split beam colorimeter offering direct-reading of pre-programmed test calibrations, Absorbance and Transmittance
Wavelengths	450 nm, 500 nm, 550 nm, 570 nm, 600 nm, 650 nm
Accuracy	±1.0% T
Display	320 x 240 pixel LCD with backlight and contrast adjustment
User Interface	On-screen prompts in English, French, Spanish, German, Italian, Turkish and Chinese (Simplified).
Size (W x L x H) and weight	150 x 250 x 70 mm, 975 g
Power Supply	3 x 1.5v 'AA' batteries (typically 40 hours), mains power via USB port
Connectivity	Palintest Bluetooth® (4.0) profile and USB for data download
User Defined Methods	Up to 30 additional methods
Memory Capacity	Up to 500 data sets.

Photometer 7100

The Photometer 7100 provides the complete range of test parameters in a waterproof instrument certified to IP67. Proven photometric technology and reagent systems provide dependable results to enable decisions on water quality to be made instantly and with confidence.

- Simple to use
- Designed for on-site analysis
- Full range of test parameters

Tablet reagents

Tubetests reagents

Photometer Reagents
pages 14 - 17

Ordering Information

PTR7100
Photometer 7100 Benchtop Kit

Instrument, 10 glass cuvettes, dilution tube/sample container, cuvette brush, 10 crush/stirring rods, lint free cloth, absorbent cloth, instrument instructions, Palintest method book. Supplied in a cardboard carton for shipping protection.

PTH7100
Photometer 7100 Standard Kit

Instrument and light cap, 8 glass cuvettes, dilution tube/sample container, 10 mL syringe, test tube brush, 10 crush/stirring rods, lint free cloths, instrument instructions, Palintest method book. Supplied in a protective case.

Technical Specification

Instrument Type	Dual light source photometer offering direct-reading of pre-programmed test calibrations, Absorbance and Transmittance
Wavelengths	450 nm, 500 nm, 550 nm, 570 nm, 600 nm, 650 nm
Accuracy	±1.0% T
Display	320 x 240 pixel LCD with backlight and contrast adjustment
User Interface	On screen prompts available in English, French, Spanish, Italian, German and Chinese (Simplified).
Size (W x L x H) and weight	150 x 250 x 70 mm, 975 g
Power Supply	3 x 1.5v 'AA' batteries (typically 40 hours), mains power via USB port
Memory Capacity	Up to 500 data sets.

Photometer Accessories

Code	Product
PT804	Photometer 7100/7500 Check Standards. Supplied in a storage case with certificate
PT595/5	Photometer Cuvettes (x5) - glass, with caps. 20 mm OD, 77 mm tall with 10mL graduation
PT524/5	Round Test Tubes for Photometer, 10mL plastic (pack of 5)
PT502	Crush/Stirring Rods - Pack of 10 crush/stirring rods
PT503	Nessler Tubes, 50 mL, glass (pair)
PT641	Measuring Cylinder, plastic, 10mL
PT530	P/P 250 mL Graduated Bottle
PT512	Sample Container/Dilution Tube
PT516	Wash Bottle, 250 mL
PT518	Wash Bottle (for Deionised Water)
PT519	Sample Container, 50/10 mL plastic bottle
PT526	Sample Container, 20/10 mL plastic tube
PT500	De-Ion Pack (makes approximately 5 litres Deionised Water)
PT1250	Deionised Water, 500 mL
PT745	USB Power Supply Unit
PT746	USB Photometer-Computer/PSU Cable
PT361/62/65/69	Plastic Syringe (1mL - PT 361), (2 mL - PT 362), (5 mL - PT 365), (10mL - PT 369)
PT370 / 372	Plastic Syringe, Luer fitting (20 mL - PT 370), (50 mL - PT 372)
PT375	Dilution Syringe, x 10/100 (for use with PT 512)
PT376	Dilution Syringe, x 100/1000 (for use with PT 512)
PT606	Filter Holder, Luer, 2.5 cm dia
PT605	Filter 0.45µm membrane, 2.5 cm dia (Box of 50)
PT603	Filter Paper, GF/B, 2.5 cm dia (Pack of 50)
PT607	Filter Funnel, 7 cm diameter, plastic
PT618	Filter Paper, No 40, 11cm diameter (100 Circles)

Photometer Tablet Reagents

Photometer tablet reagents are available in two pack sizes. Starter Packs (PM codes) contain 50 tests plus any optional reagents or equipment needed. Replacement Packs (AP codes) contain reagents for 250 tests unless stated otherwise.
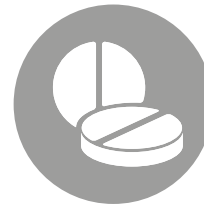
Test Name	Measurement Range	Starter Pack (50 tests)	Replacement Pack (up to 250 tests)
Alkalinity (Alkaphot M)	0 – 500 mg/L $CaCO_3$	PM250	AP250
Alkalinity (Alkaphot P)	0 – 500 mg/L $CaCO_3$	PM251	AP251
Total Alkalinity (Alkaphot)	0 – 500 mg/L $CaCO_3$	PM188	AP188
Aluminium	0 – 0.5 mg/L Al	PM166	AP166
Ammonia	0 – 1.0 mg/L N	PM152	AP152
Bromine	0 – 10 mg/L Br_2	PM060	AP060
Boron	0 – 2.5 mg/L B	PM190	AP190 (160 tests)
Calcium Hardness (Calcicol)	0 – 500 mg/L $CaCO_3$	PM252	AP252
Chloride (Chloridol)	0 – 50,000 mg/L NaCl	PM268	AP268
Chlorine - Free (DPD 1)	0 – 5 mg/L Cl_2	PM011	AP011
Chlorine – Free, extended range (DPD XF)	0 – 10 mg/L Cl_2	PM013	AP013
Chlorine – Free, Combined & Total (DPD 1 & 3)	0 – 5 mg/L Cl_2	PM031	AP031
Chlorine – Free, Combined & Total, extended range (DPD XF & XT)	0 – 10 mg/L Cl_2	PM033	AP033
Chlorine - Monochloramine (DPD 2, requires DPD 1)	0 - 5 mg/L Cl_2	-	AP021
Chlorine – Total (DPD 4)	0 – 5 mg/L Cl_2	PM041	AP041
Chlorine – Total (DPD 3 only)	0 – 5 mg/L Cl_2	-	AP031/1
Chlorine – Total, extended range (DPD XT only)	0 – 10 mg/L Cl_2	-	AP033/1
Chlorine HR	0 – 250 mg/L Cl_2	PM162	AP162
Chlorine Dioxide and Chlorite (DPD method)	0 – 10 mg/L ClO_2	PM052	AP052
Chlorine Dioxide LR (Lissamine Green B method)	0 - 2.5 mg/L ClO_2	PM064	AP064
Chlorine Dioxide HR (Lissamine Green B method)	2.5 - 20 mg/L ClO_2	PM065	AP065
Chromium VI (Chromicol)	0 - 1.0 mg/L Cr	PM281	AP281
Colour	10 – 500 mg/L Pt Co (Hazen)	PM269	-
Copper – Free, Combined & Total (Coppercol)	0 – 5 mg/L Cu	PM186	AP186
Copper - Free	0 – 5 mg/L Cu	-	AP187
Cyanuric Acid	0 - 200 mg/L CYA	PM087	AP087
DEHA	0 – 500 ppb DEHA	PM275	AP275
Fluoride	0 – 1.5 mg/L F	PM179	AP179 (200 tests)
Hardness – Total (Hardicol)	0 – 500 mg/L $CaCO_3$	PM254	AP254
Hydrazine	0 – 0.5 mg/L N_2H_2	PM103 (30 tests)	AP103 (150 tests)
Hydrogen Peroxide LR	0 – 2 mg/L H_2O_2	PM104	AP104

Test Name	Measurement Range	Starter Pack (50 tests)	Replacement Pack (250 tests)
Iron LR	0 – 1 mg/L Fe	-	AP155
Iron MR	0 – 5 mg/L Fe	PM292	AP292
Iron HR	0 – 10 mg/L Fe	PM156	AP156
Magnesium Hardness (Magnecol)	0 – 100 mg/L Mg	PM193	AP193
Manganese	0 – 0.03 mg/L Mn	PM173	AP173
Manganese HR	0 – 5 mg/L Mn	PM174	AP174
Molybdate LR	0 – 20 mg/L MoO_4	PM258	AP258 (200 tests)
Molybdate HR	0 – 100 mg/L MoO_4	PM175	AP175
Nickel (Nickeltest)	0 – 10 mg/L Ni	PM284	AP284 (200 tests)
Nitrate (Nitratest)	0 – 20 mg/L N	PM163	AP163 (200 tests)
Nitrite (Nitricol)	0 – 0.5 mg/L N	PM109	AP109
Nitrite (Nitriphot)	0 – 1500 mg/L $NaNO_2$	PM260	AP260
Organophosphonate (OP)	0 – 20 mg/L PO_4	PM262	AP262
Ozone (DPD method)	0 – 2 mg/L O_3	PM056	AP056
pH Phenol Red	pH 6.5 – 8.5	PM130	AP130
Phenol (Phenoltest)	0 – 5 mg/L C_6H_5OH	PM287	AP287 (200 tests)
PHMB (PHMB-PHOT)	0 – 100 mg/L active biocide	PM272	AP272
Phosphate LR	0 – 4 mg/L PO_4	PM177	AP177 (200 tests)
Phosphate HR	0 – 100 mg/L PO_4	PM114	AP114
Potassium	0 – 12 mg/L K	PM189	AP189
Silica	0 – 4 mg/L SiO_2	PM181	AP181 (200 tests)
Silica HR	0 – 150 mg/L SiO_2	PM290	AP290 (200 tests)
Sulfate	0 – 200 mg/L SO_4	PM154	AP154
Sulfide	0 – 0.5 mg/L S	PM168	AP168 (200 tests)
Sulfite (Sulfitest)	0 – 500 mg/L Na_2SO_3	PM266	AP266
Zinc	0 – 4 mg/L Zn	PM148	AP148

Photometer reagents are supplied in starter packs comprising consumables sufficient for testing 50 samples, or replacement packs of 200/250 tests. Test instructions are only supplied with starter packs, and can be downloaded from www.palintest.com

Photometer Tubetest Reagents

For ultimate convenience the Palintest range of Tubetest reagents offer pre-dispensed reagents for minimal handling. Each tubetest reagent is barcoded for ease of use in wastewater applications.

For a complete wastewater analysis system, use Palintest tubetests with any Palintest multiparameter photometer and heater block. Tubetest reagents are supplied in 16mm diameter tubes with each parameter often available in a wide variety of ranges to suit the application requirements.

Test Name	Measurement Range	Part Code (25 tests)
Chemical Oxygen Demand (COD) Mercury Free for Low Chloride Samples		
COD/150	$0 - 150$ mg/L O_2	PL450
COD/400	$0 - 400$ mg/L O_2	PL452
COD/1000	$0 - 1000$ mg/L O_2	PL453
COD/2000	$0 - 2000$ mg/L O_2	PL454
COD/20000	$0 - 20000$ mg/L O_2	PL456
Chemical Oxygen Demand (COD) Containing Mercury for Moderate Chloride Samples		
COD/150/M	$0 - 150$ mg/L O_2	PL460
COD/400/M	$0 - 400$ mg/L O_2	PL462
COD/1000/M	$0 - 1000$ mg/L O_2	PL463
COD/2000/M	$0 - 2000$ mg/L O_2	PL464
COD/20000/M	$0 - 20000$ mg/L O_2	PL466
Chemical Oxygen Demand (COD) Containing Mercury for High Chloride Samples		
COD/150/2M	$0 - 150$ mg/L O_2	PL461
COD/1000/2M	$0 - 1000$ mg/L O_2	PL468
COD/2000/2M	$0 - 2000$ mg/L O_2	PL465
COD/20000/2M	$0 - 20000$ mg/L O_2	PL467
Chemical Oxygen Demand (COD) Standard Solutions		
	(COD Concentration)	
COD Standard Solution, 125 mL	80 mg/L	PL470
COD Standard Solution, 125 mL	250 mg/L	PL472
COD Standard Solution, 125 mL	800 mg/L	PL474
COD Standard Solution, 125 mL	10000 mg/L	PL476

Test Name	Measurement Range	Part Code (25 tests)
Chemical Oxygen Demand (COD) Nutrients		
Ammonia 15N, Nessler Method	$0 - 15$ mg/L N	PL420
Ammonia 50N, Nessler Method	$0 - 50$ mg/L N	PL424
Ammonia 100N, Nessler Method	$0 - 100$ mg/L N	PL425
Ammonia 12N/50N, Indophenol Method	$0 - 12$ mg/L N $0 - 50$ mg/L N	PL400
Nitrate 30N	$0 - 30$ mg/L N $0 - 150$ mg/L NO_3	PL404
Total Nitrogen 30N (use with PL 404)	$0 - 30$ mg/L N	PL408
Phosphate 12P	$0 - 12$ mg/L P	PL412
Total Phosphorus 12P	$0 - 12$ mg/L P	PL416
Chemical Oxygen Demand (COD) Heavy Metals		
Chromium VI (Cr^{6+})	$0 - 10$ mg/L Cr	PL440
Total Chromium	$0 - 10$ mg/L Cr	PL436
Copper	$0 - 20$ mg/L Cu	PL427
Iron	$0 - 25$ mg/L Fe	PL434
Nickel	$0 - 20$ mg/L Ni	PL430
Zinc	$0 - 7$ mg/L Zn $0 - 35$ mg/L Zn	PL442

Code	Tubetests Accessories	
PT 589	COD Accessory Set 0 - 2000 mg/L O_2	Contains Workplace Mat, 2 mL Pipettor Tips, Metal Tubetests Rack, Thermometer (-10°C to 200°C), Standard Tubetests Heater, Safety Screen (PT 590), anodized aluminium heater block, power lead
PT 599	COD Accessory Set 0 - 20000 mg/L O_2	
PT 590	Replacement safety screen for Standard Tubetests Heater	
PT 592 UK/EU/USA	Premium Tubetests Heater including integrated safety screen, anodized aluminium heater block, power lead. *Available for compatibility with UK/EU/USA power leads.*	

Other Liquid Reagents

Test Name	Measurement Range	Part Code (30 tests)	Part Code (1000 tests)
Dissolved Oxygen 0.8	$0 - 0.8$ mg/L O_2	PL553	
Dissolved Oxygen 2.0	$0 - 2.0$ mg/L O_2	PL503	
Dissolved Oxygen 20	$0 - 20$ mg/L O_2	PL513	
Chlorine - Free (equivalent to DPD 1)	$0 - 5$ mg/L Cl_2		AT015
Chlorine - Total (equivalent to DPD 3). Use in conjunction with AT 015	$0 - 5$ mg/L Cl_2		AT035

Compact Ammonia+ Meter

Designed for wastewater and environmental monitoring the Compact Ammonia + Meter uses the Nessler method for ammonia measurement, including a high range reagent ideal for ammonia monitoring in the nitrification process.

- Choice of operating ranges for measuring up to 100 mg/L.
- Simple, language free operation; suitable for all users
- Use with pre-formulated tubetest reagents for ease of use.

Tubetest reagents

Compact Ammonia Duo

Measure Ammonia and Ammonium in drinking water, wastewater or environmental samples with the widest choice of working ranges.

Each of these methods is available in three different ranges, see reagents in table below.

- Nessler and Indophenol method analysis
- Simple, language free operation; suitable for all users
- Compatible with tablets and tubetest reagents

Tablet reagents   Tubetest reagents

Ordering Information

PTS041
Compact Ammonia+ Kit, Soft Case
Instrument, Tubetests Adaptor (PT 565), instruction manual. Supplied in a soft case with belt loop.

PTH041
Compact Ammonia+ Kit, Hard Case
Instrument, Tubetests Adaptor (PT 565), instruction manual. Supplied in a hard case.

PTC041
NDF Check Standards for Ammonia Meter
Neutral Density Filter Check Standards for Ammonia Meter. Supplied in hard case with certification.

Technical Specification

Measuring System	Single LED source, direct reading colorimeter
Ranges	0 - 15 mg/L N 0 - 50 mg/L N 0 – 100 mg/L N
Display	High clarity LCD with backlight
User Interface	Blank, read, function and power keys
Data Storage	Last 10 results
Size (W x L x H) & Weight	65 x 150 x 40 mm, 200 g
Power Supply	2 x AA batteries

Ordering Information

PTS042
Compact Ammonia Duo Kit, Soft Case
Instrument, Tubetests Adaptor (PT 565), 2 cuvettes, cuvette brush, crush/stirring rods, 50 tablet tests for ammonia, instruction manual. Supplied in a soft case with belt loop.

PTH042
Compact Ammonia Duo Kit, Hard Case
Instrument, Tubetests Adaptor (PT 565), 4 cuvettes, cuvette brush, crush/stirring rods, 50 tablet tests for ammonia, instruction manual. Supplied in a hard case.

PTC041
NDF Check Standards for Ammonia Meter
Neutral Density Filter Check Standards for Ammonia Meter. Supplied in hard case with certification.

Technical Specification

Measuring System	Dual LED source, direct reading colorimeter
Ranges	0 - 1 mg/L N 0 - 12 mg/L Indophenol 0 - 50 mg/L Indophenol 0 - 15 mg/L Nessler 0 - 50 mg/L Nessler 0 - 100 mg/L Nessler
Display	High clarity LCD with backlight
User Interface	Blank, read, function and power keys
Data Storage	Last 10 results
Size (W x L x H) & Weight	65 x 150 x 40 mm, 200 g
Power Supply	2 x AA batteries

Test Name	Measurement Range	Part Code (25 tests)
Ammonia 15N, Nessler Method	0 – 15 mg/L N	PL 420
Ammonia 50N, Nessler Method	0 – 50 mg/L N	PL 424
Ammonia 100N, Nessler Method	0 – 100 mg/L N	PL 425

Test Name	Measurement Range	Part Code (25 tests unless stated)
Ammonia Photometer Tablet Reagent	0 - 1 mg/L N	AP152 (250 tests)
Ammonia 12N/50N, Indopenol Method	0 - 12 and 0 - 50 mg/L N	PL400
Ammonia 15N, Nessler Method	0 – 15 mg/L N	PL420
Ammonia 50N, Nessler Method	0 – 50 mg/L N	PL424
Ammonia 100N, Nessler Method	0 – 100 mg/L N	PL425

Compact Chlorometer

The Compact Chlorometer ensures accurate analysis of free, combined and total chlorine in a simple-to-use portable photometer. Ideal for the field professional validating the safety of drinking water or wastewater.

- Compatible with tablets and tubetest reagents
- Measure free chlorine, monochloramine and/or total chlorine up to 5 mg/L chlorine
- Simple, language free operation; suitable for all users
- True chlorine calibration for the most accurate result

Tablet reagents

Liquid alternatives available
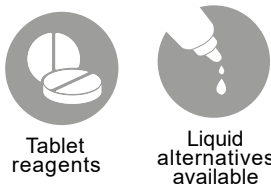
Ordering Information

PTS045D
Compact Chlorometer Kit, Soft Case
Instrument, 2 cuvettes, cuvette brush, crush/stirring rods, 50 tests for free and total chlorine, instructions. Supplied in soft case with belt loop.

PTH045D
Compact Chlorometer Kit, Hard Case
Instrument, 4 cuvettes, cuvette brush, crush/stirring rods, 100 tests for free and total chlorine, instructions. Supplied in a hard case.

PTC045
NDF Check Standards for Chlorometer
Neutral Density Filter Check Standards for Chlorometer. Supplied in hard case with certification.

Technical Specification

Measuring System	Dual LED source, direct reading colorimeter
Range	0 – 5 mg/L Chlorine
Accuracy	±1.0% T
Display	High clarity LCD with backlight
User Interface	Blank, read, function and power keys
Data Storage	Last 10 results
Size (W x L x H) & Weight	65 x 150 x 40 mm, 200 g
Power Supply	2 x AA batteries

| Test Name	Measurement Range	Part Code (250 tests)
Chlorine - Free (DPD 1)	0 – 5 mg/L Cl_2	AP011
Monochloramine (DPD 2 - use with DPD 1)	0 – 5 mg/L Cl_2	AP021
Total Chlorine (DPD 3 - use with DPD 1)	0 – 5 mg/L Cl_2	AP031/1
Free and Total Chlorine (DPD 1 & DPD 3)	0 – 5 mg/L Cl_2	AP031
Total Chlorine (DPD 4)	0 – 5 mg/L Cl_2	AP041
Free Chlorine - DPD 1 Liquid (A+B), 12 bottle pack		AT015 (1000 tests)
Total Chlorine - DPD 3 Liquid (C – use with AT 015), 12 bottle pack		AT035 (1000 tests)

Compact Chlorometer Duo

The Compact Chlorometer Duo offers the same benefits as the Compact Chlorometer with the addition of high range chlorine.

Providing analysis for drinking water compliance as well as for process water applications with higher levels of chlorine.

- Simple, language free operation; suitable for all users
- Waterproof and battery powered – ideal for field use
- Measure both high and low concentrations of chlorine

Tablet reagents

Liquid alternatives available
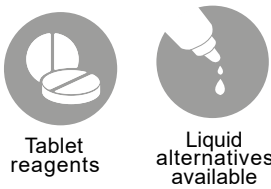
Ordering Information

PTS027
Compact Chlorometer Duo Kit, Soft Case
Instrument, 2 cuvettes, cuvette brush, crush/stirring rods, 20 tests for free and total chlorine (standard range), 20 tests for chlorine (high range), instructions. Supplied in soft case with belt loop.

PTH027
Compact Chlorometer Duo Kit, Hard Case
Instrument, 4 cuvettes, cuvette brush, crush/stirring rods, 100 tests for free and total chlorine (standard range), 100 tests for chlorine (high range), instructions. Supplied in a hard case.

PTC027
NDF Check Standards for Chlorometer Duo
Neutral Density Filter Check Standards for Chlorometer Duo. Supplied in hard case with certification.

Technical Specification

Measuring System	Dual LED source, direct reading colorimeter
Ranges	0 - 5 mg/L ChLorine 0 – 250 mg/L Chlorine
Display	High clarity LCD with backlight
User Interface	Blank, read, function and power keys
Data Storage	Last 10 results
Size (W x L x H) & Weight	65 x 150 x 40 mm, 200 g
Power Supply	2 x AA batteries

Test Name	Measurement Range	Part Code (250 tests)	Part Code (1000 tests)
Chlorine - Free (DPD 1)	0 – 5 mg/L Cl_2	AP011	
Monochloramine (DPD 2 - use with DPD 1)	0 – 5 mg/L Cl_2	AP021	
Total Chlorine (DPD 3 - use with DPD 1)	0 – 5 mg/L Cl_2	AP031/1	
Free and Total Chlorine (DPD 1 & DPD 3)	0 – 5 mg/L Cl_2	AP031	
Total Chlorine (DPD 4)	0 – 5 mg/L Cl_2	AP041	
Chlorine HR	0 – 250 mg/L Cl_2	AP162	
Free Chlorine - DPD 1 Liquid (A+B), 12 bottle pack			AT015
Total Chlorine - DPD 3 Liquid C (use with AT015), 12 bottle pack			AT035

Compact ClO$_2$+ Meter

The Compact ClO$_2$+ meter provides field analysis of chlorine and chlorine dioxide using the DPD method.

- Measure chlorine or chlorine dioxide on a single instrument
- Simple tablet-based measurement methods for easy field analysis
- IP67 waterproof instrument for reliability in warm or humid environments

Tablet reagents

Compact Ozone Meter

The Compact Ozone meter provides ozone testing using the DPD method in a waterproof, portable instrument. This instrument is ideally suited to drinking water, wastewater treatment and bottled water production.

- Long cuvette pathlength for superb resolution at low levels
- Waterproof and battery powered – ideal for field use
- Simple, language free operation; suitable for all users

Tablet reagents

Ordering Information

PTS046
Compact ClO2+Kit, Soft Case
Instrument, 2 cuvettes, cuvette brush, crush/stirring rods, 50 DPD 1tablets, 50 DPD 3 tablets, 50 DPD Glycine tablets, instructions. Supplied in a soft case with belt loop.

PTH046
Compact ClO2+Kit, Hard Case
Instrument, 4 cuvettes, cuvette brush, crush/stirring rods, 100 DPD 1tablets, 100 DPD 3 tablets, 100 DPD Glycine tablets, instructions. Supplied in a hard case.

PTC046
NDF Check Standards for ClO2+Meter
Neutral Density Filter Check Standards for ClO$_2$+ Meter. Supplied in hard case with certification.

Technical Specification

Measuring System	Dual LED source, direct reading colorimeter
Instrument Range	0 – 5 mg/L Chlorine 0 – 10 mg/L ClO$_2$
Display	High clarity LCD with backlight
User Interface	Blank, read, function and power keys
Data Storage	Last 10 results
Size (W x L x H) & Weight	65 x 150 x 40 mm, 200 g
Power Supply	2 x AA batteries

Test Name	Measurement Range	Part Code (250 tests)
Chlorine Dioxide and Chlorine - Free (DPD 1)	0 – 5 mg/L Cl$_2$	AP011
Monochloramine (DPD 2 - use with DPD 1)	0 – 5 mg/L Cl$_2$	AP021
Total Chlorine (DPD 3 - use with DPD 1)	0 – 5 mg/L Cl$_2$	AP031/1
Free and Total Chlorine (DPD 1 & DPD 3)	0 – 5 mg/L Cl$_2$	AP031
Total Chlorine (DPD 4)	0 – 5 mg/L Cl$_2$	AP041
DPD Acidifying		AT052
DPD Glycine		AT056
DPD Neutralising		AT058

Ordering Information

PTS043
Compact Ozone Meter Kit, Soft Case
Instrument, 2 cuvettes, cuvette brush, crush/stirring rods, 100 tests for ozone, instructions. Supplied in a soft case with belt loop.

PTH043
Compact Ozone Meter, Hard Case
Instrument, 4 cuvettes with lids, cuvette brush, 4 crush rods, 200 DPD No 4 Tablets, Instructions. Supplied in a hard case.

PTC043
NDF Check Standards for Ozone Meter
Neutral Density Filter Check Standards for Ozone Meter. Supplied in hard case with certification.

Technical Specification

Measuring System	Dual LED source, direct reading colorimeter
Instrument Range	0 – 3 mg/L Ozone
Display	High clarity LCD with backlight
User Interface	Blank, read, function and power keys
Data Storage	Last 10 results
Size (W x L x H) & Weight	65 x 150 x 40 mm, 200 g
Power Supply	2 x AA batteries

Test Name	Measurement Range	Part Code (250 tests)
Ozone	0 – 3 mg/L O$_3$	AP056
DPD Glycine (250F)		AT056

Turbimeter Plus

Turbidity and Total Suspended Solids (TSS) are two of the most important indicator parameters for water quality monitoring. The new Turbimeter Plus has been developed with leading water utility companies and provides the ideal testing platform for drinking water, wastewater and safe water monitoring.

- Fast and reliable results within 5 seconds
- Unique Quadoptix™ technology using four light paths through the samples for increased accuracy
- Specifically designed for field use with storage for 1000 results and battery power for approximately 10,000 tests
- USB connectivity for power and data downloads
- IP67 certified with a waterproof USB socket

USB data transfer	Tablet reagents	Tubetests reagents

Ordering Information

PTH092
Turbimeter Plus Kit
Instrument, 4 SDVB calibration standards, 4 sample test tubes, silicone oil, dilution tube, cleaning cloths, instructions. Supplied in a hard case.

PTC092
Turbimeter Plus Calibration Set
Replacement SDVB calibration standards provided in hard case with certificate.

Accessories

PT555	Sample Tubes - Pack of 5 glass test tubes with caps, 25mm (outer diameter) with 10mL graduation
PT120	Silicone oil, 10 mL
PT663	Cuvette Brush For cleaning test tubes, 120 mm length

Technical Specification

Optical System	QuadoptiX™ optical system with two independent 860nm LED sources, ISO 7027 Compliant
Instrument Range	0.01– 1050 NTU
Display	High clarity LCD with backlight
User Interface	Soft key access with English, French and Spanish
Result Units	NTU, FNU, FTU, mg/L (TSS mode)
Modes	Turbidity (normal, average, continuous capture), Total Suspended Solids
Data Storage	1000 results including date, time, sample ID, operator ID and mode. Last 12 good calibrations including Operator ID
Size (W x L x H) & Weight	82 x 225 x 50mm, 340 g
Power Supply	2 x AA batteries or via USB

Combined Photometer Kits

Combine measurement of Turbidity and Total Suspended Solids with a range of disinfection or nutrient parameters. These kits provide an ideal solution for field validation of drinking water treatment, pipework contractors and wastewater compliance monitoring.

PTH7091
Turbimeter and Chlorometer Combined Kit.
See pages 20 and 24 for full product information. Supplied in a hard case.

PTH7092
Turbimeter and Chlorometer Duo Combined Kit.
See pages 21 and 24 for full product information. Supplied in a hard case.

PTH7093
Turbimeter and ClO2+ Combined Kit.
See pages 22 and 24 for full product information. Supplied in a hard case.

PTH7094
Turbimeter and Ozone Combined Kit.
See pages 23 and 24 for full product information. Supplied in a hard case.

PTH7095
Turbimeter and Ammonia Duo Combined Kit.
See pages 19 and 24 for full product information. Supplied in a hard case.

PTH7096
Turbimeter and Ammonia+ Combined Kit.
See pages 18 and 24 for full product information. Supplied in a hard case.

Arsenator
Digital Arsenic Test Kit

The Palintest Arsenator kit solves the complex problem of how to measure Arsenic in the field accurately and safely. Built around an unique tri-filter assembly, the Palintest Arsenator simplifies and improves field arsenic testing to exceed the WHO guideline value of 10 ppb in drinking water.

- Sensitivity down to 2 parts per billion - unique in a field analysis system
- 3-stage filter system increases sensitivity, removes interference from Sulfide and protects the operator.
- Comprehensive field kit containing all required accessories and consumable.

Ordering Information

PT981
Palintest Arsenator Kit
Palintest Arsenator digital arsenic test kits, hard case. Includes: Digital Arsenator device, tri-filter arsenic trap, 100 mL reaction vessel, destruction filter holder (x5), detection filter holder (x5) hydrogen Sulfide filter (x10), reagents for 420 tests, visual comparison chart, forceps, gloves, dilution tube, cuvette brush, 9V battery, screwdriver, and instructions.

PT983
Palintest Arsenic Refill Pack
Arsenic Refill Pack, comprising: reagents for 200 tests, arsenic detection filters (x200), arsenic destruction filters (x200), destruction filter holders (x2), detection filter holders (x2), A1 reagent sachets (x200), A2 tablet reagents (x200), hydrogen Sulfide removal filters (x5).

Technical Specification

Measuring System	Colorimeter
Range	2 – 100 ppb (µg/L As)
Display	LCD
Reaction time	20 minutes
Size (W x L x H) & Weight	390 x 330 x 95 mm, 1.75g

26

Kemio Technology

SMARTER **SAFER** **TRACEABLE**

The next generation measurement platform

A sophisticated electrochemical technique, which removes complexity for the user. Using our patented single-use sensor technology, reduce user errors and deliver quality results that you can trust.

Get consistent results from all your operators. Kemio minimises user input, to ensure **repeatable and reliable results** each time.

Kemio is **suitable for all users**, ready straight out of the box, with **no training required.** Helping to **improve operational efficiency**, by reducing labour time and minimizing disruption.

Go paperless, **protect your data** and meet your **compliance requirements**. The integrated data log summarises 10,000 results to provide a traceable, auditable dataset.

Kemio is **personalised to your testing needs**, add your unique test and application information to give meaning to your results.

Kemio delivers the results you need from a method you can trust.
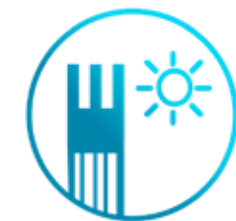
Advantages over other methods

A clear pass/ fail result.
No calculations required

Digital data log, ideal for audits

Electronic measurement, not affected by ambient light quality

No glassware

Not affected by colour in the sample

Not affected by turbidity or floating particles

How it works

Kemio is powered by patented, single-use sensors which generate an electrical current by reacting to the chemicals in the water sample. Kemio measures this electrical signal to determine the concentration of chemical within the sample.

The simple test method minimizes potential user errors to ensure repeatable and reliable results.
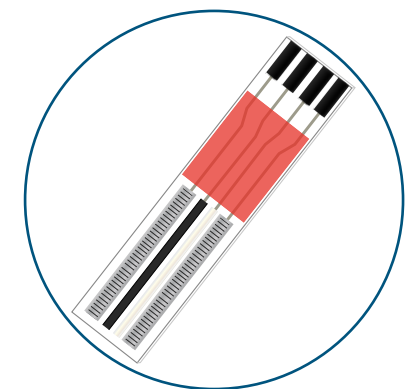
Kemio Disinfection

Expert testing for critical disinfection parameters

No training required
Suitable for all users, with clear visual instructions for performing a test

Reduce uncertainty
Act on clear pass/fail results based on your specification

Suitable for all sample types
Not affected by coloured or turbid samples

Fully traceable results
Go paperless and manage up to 10,000 data sets

Personalised to your testing needs
Add your own test limits and information to drive corrective action and give meaning to your results

x1 use
Single use disposable sensor

USB data transfer

Testing for		Range	Temperature
Chlorine	Standard range	0.02 - 10 mg/L free chlorine 0.02 - 75 mg/L total chlorine	2°C - 35°C 2°C - 35°C
	High range	0.1- 25 mg/L free chlorine 1- 500 mg/L total chlorine	5°C - 25°C 5°C - 30°C
Chlorine Dioxide		0.02 - 50 mg/L	5°C - 40°C
Chlorite		0.02 - 50 mg/L	5°C - 40°C
Peracetic Acid (PAA)		5 - 2000 mg/L	5°C - 30°C

Technical Specification	
Measuring System	Chronoamperometry
Ambient Temperature Range	0° C - 50° C
Display	High clarity LCD screen
Language	English, French, Spanish, and Chinese (Simplified)
Connectivity	USB
Information Input	Barcode scanner, on-screen keyboard, on-screen keypad
Data Storage	10,000 test results with all test information
Size (W x L x H) & Weight	156 mm x 180 mm x 95 mm, 1012g
Battery	2300mAh NiMH Rechargeable Battery Pack Only battery packs supplied by Palintest can be used with Kemio
Power Supply	USB power and external charger
Rating	IP67 waterproof

Kitting Options

Instrument   Case

Kemio
Disinfection

Test Type:

Chlorine
Chlorine Dioxide
Chlorite
Peracetic Acid (PAA)

Benchtop Kit

Instrument, check standards, USB cable, international power adapter, quickstart instructions in a recycleable cardboard container for benchtop applications.

Part Code: KEMR10DIS

Soft Case Kit

Instrument, protective case, check standards, USB cable, international power adapter, quick start instructions in soft case for transporting Kemio and consumables.

Part Code: KEMS10DIS

*Sensors ordered separately for benchtop and soft case kit

Chlorite Hard Case Kit

Instrument, check standards, USB cable, international power adapter, quickstart instructions, 200 chlorine dioxide/chlorite sensors, 100 chlorine sensors, reagents, degassing equipment and consumables required for chlorite measurement, including vessel, filter and pump.

Part Code: KEMH10DIS
*Required for Chlorite testing

Kemio sensor packs	Range	Part Code
Kemio Sensors for Chlorine (Standard Range)	Free Chlorine: 0.02 - 10 mg/L Total Chlorine: 0.02 - 75 mg/L	100 pack: KEM21CLO 500 pack: KEM25CLO
Kemio Sensors for Chlorine (High Range)	Free Chlorine: 0.1- 25 mg/L Total Chlorine: 1- 500 mg/L	100 pack: KEM21CHR 500 pack: KEM25CHR
Kemio Sensors for Chlorine Dioxide and Chlorite	Chlorine Dioxide: 0.02 – 50 mg/L Chlorite: 0.02 – 50 mg/L chlorite	100 pack: KEM21CDX 500 pack: KEM25CDX
Kemio Sensors for Peracetic Acid (PAA)	Peracetic Acid (PAA): 5 – 2000 mg/L	100 pack: KEM21PAA 500 pack: KEM25PAA

Accessories	Part Code
Kemio Check Standards	KEMC10
Kemio Stylus Pen	KEM306
Kemio Protective Case	KEM307
Kemio Sample Vessel	KEM308

Consumables	Part Code
CR-1 Reagent (Chlorite test)	PT546
CR-2 Reagent (Chlorite test)	PT547
Glycine Reagent (Chlorine Dioxide and Chlorite test)	PT549

Electrochemical Meters and Probes

Enjoy the simplicity of probe-based measurements for core water quality parameters such pH, conductivity, Total Dissolved Solids (TDS) and Dissolved Oxygen (DO) with a range of meters and accessories.

Add further analytical capability with ion selective electrodes and optical probes in the Macro 900 Water Quality System.

With a range of products to suit all budgets and performance requirements, the Palintest Electrochemical Meters and Probes spans complete Water Quality Systems to simple Pocket Meters.

	Pocket Meter Range	Micro 600 Range	Micro 800 Range	Macro 900 Water Quality System
pH	✓	✓	✓	✓
ORP/mV		✓	✓	✓
Temperature	✓	✓	✓	✓
Conductivity	✓	✓	✓	✓
Total Dissolved Solids	✓	✓	✓	✓
Salinity	✓	✓	✓	✓
Seawater Specific Gravity (SSG)			✓	✓
Resistivity				✓
Galvanic DO		✓		
Optical DO			✓*	✓
Atmospheric Pressure			✓*	✓
GPS Position			✓*	✓
Depth				✓
Ammonia/Ammonium				✓
Blue-Green Algae (BGA)				✓
Calcium				✓
Chloride				✓
Chlorophyll				✓
Dissolved Organic Material (CDOM/FDOM)				✓
Fluorescein				✓
Fluoride				✓
Nitrate				✓
Refined Oils/Hydrocarbons				✓
Rhodamine WT				✓
Turbidity				✓

* Micro 800 Optical DO only

Meters and Probes are supported with a full range of certified calibration and storage solutions for Good Laboratory Practice (GLP) implementation.

Macro 900
Water Quality System

More than a meter and a heavy-duty probe, the Macro 900 Water Quality System is a full monitoring station built for application specific configuration and short to medium term field deployment.

- Fully customisable for your own application
- Guaranteed long life with Kevlar cables
- Store 1000 data sets for full data analysis
- Perform location tracking and analysis with in-built GPS

Creating your bespoke Macro 900 Water Quality System is a simple process of combining three core components:

• The Macro 900 Meter – completely waterproof and supplied in a rugged carry case with space for probes and accessories. The Meter provides data capture (3000 sets), probe configuration and calibration whilst also measuring atmospheric pressure (for automatic DO correction) and GPS position.

• The Macro Accessory Probe (MAP) – manufactured in anodized marine-grade aluminium, the MAP is available with or without depth. Including pH/ORP, temperature, conductivity, TDS, salinity, resistivity, SSG and optical DO as standard, the probes are designed for up to 30m immersion and narrow enough for boreholes insertion.

• Accessories – fully bespoke your system by selecting the Kevlar-reinforced cable length(s) of up to 30m, ion selective electrodes and/or optical probes for additional parameters plus calibration solutions and other system hardware.

The MacroLink software suite included provides professional data reports including results mapped to geographical outputs

Product	Part Code
Macro 900 Meter and case	PT1401
MAP 2000 Probe with core parameters	PT1528
MAP 2100 Probe with core parameters plus depth	PT1529

Core Parameters

	Range	Resolution	Accuracy
pH	0 – 14	0.01	±0.01
ORP	-2000 to 2000 mV	0.1mV	±5 mV
Temperature	-5 to 50 °C	0.01°C	±0.1°C
Conductivity (EC)	0 to 200,000 µS/cm	1(0 to 9,999 µS/cm) 0.01(10.00 – 99.99 mS/cm) 0.1(100.0 – 200.0 mS/cm)	±1%of reading or ±1µS/cm, whichever is greater
Total Dissolved Solids	0 to 100,000mg/L	1(0 – 9,999 mg/L) 0.01(10.00 – 100.00 g/L)	±1%of reading or ±1mg/L, whichever is greater
Resistivity	5Ω.cm - 1MΩ.cm	1(5 – 9,999 Ω.cm) 0.1(10.0 – 1,000.0 kΩ.cm)	±1%of reading or ±1Ω.cm, whichever is greater
Salinity	0 – 70 PSU 0 – 70.00 ppt (g/kg)	0.01PSU 0.01ppt	±1%of reading or ±0.1unit, whichever is greater
Seawater Specific Gravity	0 – 50 σ	0.1 σ	±1.0 σ
Dissolved Oxygen	0 – 50 mg/L 0 – 500%saturation	0.01 0.1%	±1%(0- 20 mg/L/0 -200%) ±10%(20 – 50 mg/L, 200 – 500%)
Depth (MAP 2100)	± 0 – 60 m	0.01m	±2%

Optional Accessories Cables	Part Code
Kevlar-reinforced inner with all metal connectors for high integrity connection. Bespoke lengths available on request.	
3 m	PT1530
10m	PT1531
20m	PT1532
30m	PT1533

Optional Probes		
Up to two ISEs or one ISE and one optical probe can be inserted simultaneously, and exchanged or removed as required.		
Ion Selective Electrodes (ISE)	**Range**	**Part Code**
Ammonia/Ammonium	0 – 9,000 mg/L	PT1541
Calcium	0 – 2,000 mg/L	PT1544
Chloride	0 – 20,000 mg/L	PT1543
Fluoride	0 – 1,000mg/L	PT1545
Optical Probes	**Range**	**Part Code**
Blue-Green Algae (fresh water)	0 – 300,000 cells/mL	PT1552
Blue-Green Algae (seawater)	0 – 300,000 cells/mL	PT1553
Chlorophyll	0 – 500 µg/L	PT1556
Dissolved Organic Material (CDOM/FDOM)	0 – 20,000 µg/L	PT1558
Fluorescein	0 – 500 µg/L	PT1555
Refined Oil (Hydrocarbons)	0 – 10,000µg/L	PT1557
Rhodamine WT	0 – 500 µg/L	PT1554
Turbidity	0 – 3,000 NTU	PT1551
Additional Accessories		**Part Code**
Flow Cell (for use with third-party pumping device)		PT1570
Probe Hanger		PT1571

Micro 800
Optical DO Meter

Offering the simplest high performance system for Dissolved Oxygen (DO), the Micro 800 is the choice for critical water quality applications.

The key features of the meter and probe include:

• **Absolute simplicity** – automatic correction of DO measurements for atmosphere pressure, temperature and salinity as standard.
• **Long life optical technology –** suitable for low-flow or anoxic conditions with a lifetime of up to two years per sensor.
• **More than just DO** – conductivity, Total Dissolved Solids, salinity, SSG and resistivity are recorded alongside atmospheric pressure and 3D sample location.

Provided in a robust field case with a 3m cable as standard, the Micro 800 Optical DO Meter delivers absolute confidence in this critical parameter wherever it is measured.

	Range	Resolution	Accuracy
Dissolved Oxygen	0 – 50 mg/L 0 – 500% saturation	0.01 0.1%	±1%(0- 20 mg/L/0 -200%) ±10%(20 – 50 mg/L, 200 – 500%)
Temperature	-5 to 50 °C	0.01°C	±0.1°C
Conductivity (EC)	0 to 200,000 µS/cm	1(0 to 9,999 µS/cm) 0.01(10.00 – 99.99 mS/cm) 0.1(100.0 – 200.0 mS/cm)	±1% of reading or ±1µS/cm, whichever is greater
Total Dissolved Solids	0 to 100,000 mg/L	1(0 – 9,999 mg/L) 0.01(10.00 – 100.00 g/L)	±1% of reading or ±1mg/L, whichever is greater
Resistivity	5Ω.cm - 1MΩ.cm	1(5 – 9,999 Ω.cm) 0.1(10.0 – 1,000.0 kΩ.cm)	±1% of reading or ±1Ω.cm, whichever is greater
Salinity	0 – 70 PSU 0 – 70.00 ppt (g/kg)	0.02 PSU 0.01ppt	±1% of reading or ±0.1unit, whichever is greater
Seawater Specific Gravity	0 – 50 σ	0.1 σ	±1.0 σ

Ordering Information	Part Code
Micro 800 Optical DO Kit, Hard Case	PT1303

Micro 800
pH, Conductivity and
Multiparameter Meters

Available as individual pH, conductivity/ TDS and Multiparameter meters plus a unique Optical DO meter, the Micro 800 series incorporates key elements of Good Laboratory Practice with rugged sensors and data management.

Features of the Micro 800 include:

• **Simplified calibration protocols** – automatic calibration standard recognition and temperature compensation with built-in reminders for calibration due

• **Full data reporting and recording** – memory for up to 500 data sets with time/ date stamp, last good calibration record and pH electrode health indication, readings and trend shown on large backlit LCD screen

• **Comprehensive kit contents** – provided in a hard case with a calibration buffers and standards for immediate use

Suitable for portable or benchtop use, the Micro 800 range is the ideal solution for water quality professionals seeking an advanced system for core measurements.

PT1330 Micro 800 pH meter shown in image

Product Selection

	Micro 800 pH	Micro 800 Conductivity/TDS	Micro 800 Multiparameter
pH	✓		✓
ORP	✓		✓
Conductivity		✓	✓
TDS		✓	✓
Salinity		✓	✓
Temperature	✓	✓	✓

Ordering Information	Part Code
Micro 800 pH Meter Kit	PT1330
Micro 800 Conductivity/TDS Meter Kit	PT1340
Micro 800 Multiparameter Meter Kit	PT1350
Replacement pH Electrode (Double Junction)	PT1330PH
Replacement Temperature Probe	PT1330ATC
Optional/Replacement ORP Electrode	PT1330ORP
Replacement Conductivity Probe	PT1340CON

	Range	Resolution	Accuracy
pH	-2.00 – 16.00	0.01	±0.01
ORP	-2000 to +2000 mV	0.1mV (up to ±999.9), 1mV above	±0.2 mV or ± 0.5%, whichever is greater
Conductivity (EC)	0 to 200,000 µS/cm 0 – 200 mS/cm	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 - 200,000 mg/L 0 – 200 ppt	0.01(0 – 99.99 mg/L) 0.1(100.0 – 200.0 ppt)	±1% of full scale or ±1mg/L, whichever is greater
Salinity	0 – 50.00 ppt	0.01ppt	±1% of full scale
Temperature	-10 to +110°C	0.1°C	±0.5°C

Micro 600 pH, Conductivity, TDS and Dissolved Oxygen Meters

The Micro 600 combines reliability with accuracy and is delivered as dedicated kits including all accessories necessary to use immediately.

Available for the core parameters of pH, ORP, conductivity, Total Dissolved Solids and galvanic Dissolved Oxygen (DO).

The Micro 600 includes:

• **Simplified calibration protocols** – up to 3 points for pH, a point per range for conductivity and TDS with automatic calibration standard recognition

• **Reliable measurements in varying conditions -** automatic temperature compensation of results and peak hold function for identification of true result in changing systems.

• **Rugged configuration for use anywhere –** provided in a hard case for protection, the instrument is further protected by a rubber sleeve with integrated benchtop stand.

Supported by a full range of calibration standards and spares, the Micro 600 provides dependable service for general purpose applications.

PT1200 Micro 600 pH Meter shown in image

Product Selection

	Micro 600 pH Meter	Micro 600 Conductivity Meter	Micro 600 TDS Meter	Micro 600 DO Meter
pH	✓			
ORP	✓			
Conductivity		✓		
TDS			✓	
Dissolved Oxygen				✓
Temperature	✓	✓	✓	✓

Ordering Information	Part Code
Micro 600 pH Meter Kit	PT1200
Replacement pH Electrode	PT110/1B
Optional/Replacement ORP Electrode	PT110/3B
Micro 600 Conductivity Meter Kit	PT1220
Micro 600 TDS Meter Kit	PT1210
Replacement Conductivity/TDS Probe	PT142/1
Micro 600 Dissolved Oxygen Meter Kit	PT1240
Replacement Galvanic DO probe, 3m Cable	PT1240DO3
Replacement Temperature Probe, Micro 600 Series	PT140/4

	Range	Resolution	Accuracy
pH	0.00 – 14.00	0.01	±0.01
ORP	-1000 to +1000mV	1mV	±2 mV
Conductivity (EC)	0 – 200,000 µS/cm 0 – 200 mS/cm (Auto-ranging)	0.01(0 to 19.99 µS/cm) 0.1(20.0 to 199.9 µS/cm) 1(200 to 1999 µS/cm) 0.01(2.00 to 19.99 mS/cm) 0.1(20.0 – 200.0 mS/cm)	±1% of full scale or ±1µS/cm, whichever is greater
Total Dissolved Solids (TDS)	0 - 100,000mg/L 0 – 100 ppt (Auto-ranging)	0.01(0 – 9.99 mg/L) 0.1(10.0 – 99.9 mg/L) 1(100 – 999 mg/L) 0.01(1.00 – 9.99 ppt) 0.1(10.0 – 100 ppt)	±1% of full scale or ±1mg/L, whichever is greater
Dissolved Oxygen (DO)	0.00 – 20.00 mg/L 0 – 200% saturation	0.01 0.1%	±1.5% full scale
Temperature	0.0 to 100°C	0 0.1°C	±0.5°C

Pocket Meters
pH, Conductivity, TDS and Multiparameter

Palintest Pocket Meters combine great pricing with surprisingly sophisticated instruments for simple 'dip and read' approach for core water quality parameters.

Available as dedicated instruments for pH, conductivity and Total Dissolved Solids plus a convenient multiparameter version for even greater efficiency,

The Pocket Meters provide

• **Simplicity of use** – large LCD display shows result and temperature, automatic temperature compensated of results and calibration standards recognition.

• **Great value** – including features found in higher priced meters, the Pocket Meters are a great choice for monitoring on a budget and feature user-replaceable sensors

• **Designed for field use –** light and compact, Pocket Meters are completely waterproof and provide hundreds of results from a single set of batteries

Provided as meters only, select calibration buffers and standards from p45 for a full package.
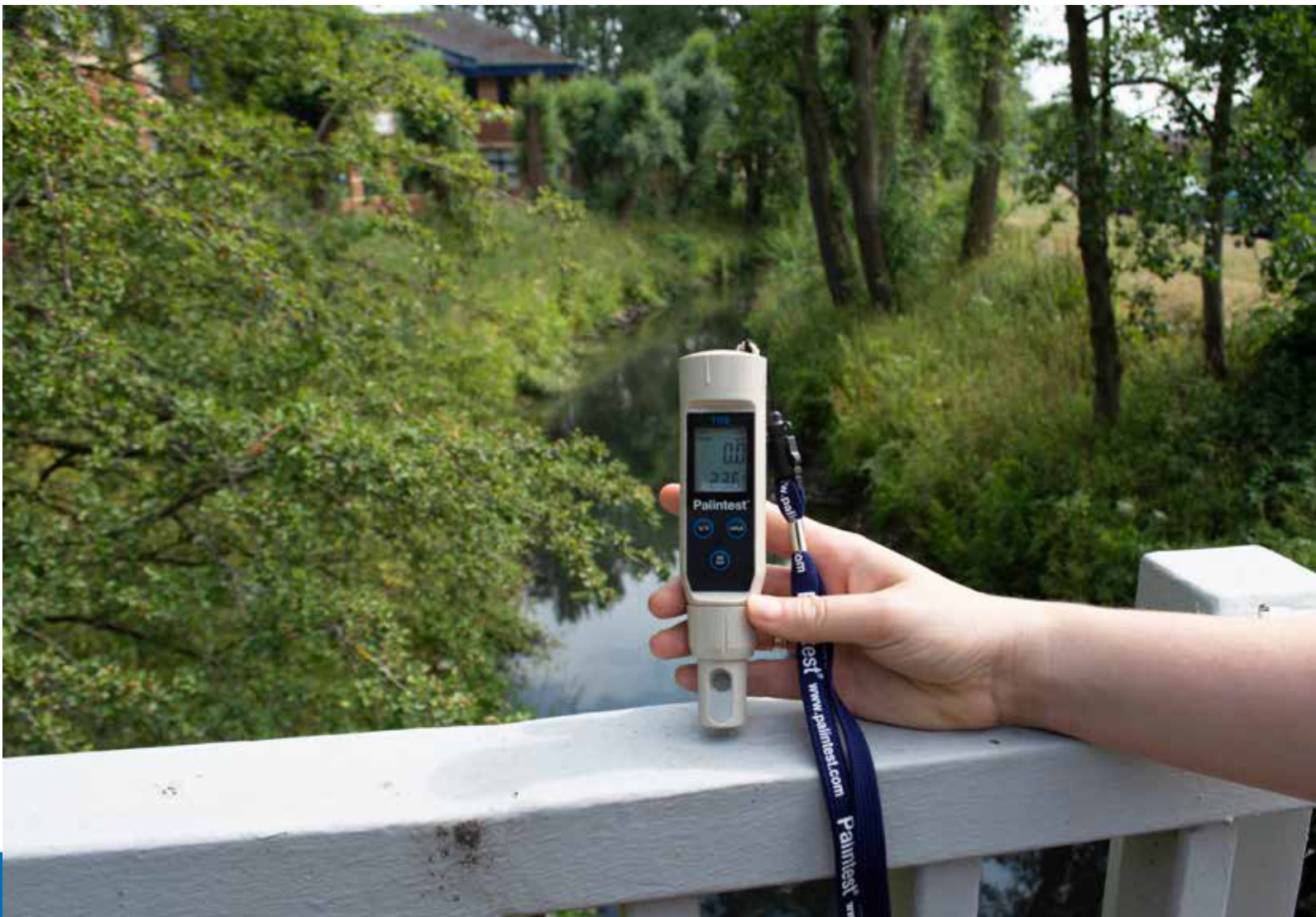
PT155 pH Pocket Meter shown in image

Product Selection

	pH Pocket Meter	Conductivity Pocket Meter	TDS Pocket Meter	Multiparameter Pocket Meter
pH	✓			✓
Conductivity		✓		✓
TDS			✓	✓
Salinity				✓
Temperature	✓	✓	✓	✓

Ordering Information	Part Code
pH Pocket Meter	PT155
Replacement pH Electrode Module	PT155PH
Conductivity Pocket Meter	PT157
Replacement Conductivity Probe Module	PT157CON
TDS Pocket Meter	PT153T
Replacement TDS Probe Module	PT153TDS
Multiparameter Pocket Meter	PT162
Replacement Multiparameter Electrode/Probe Module	PT162M

	Range	Resolution	Accuracy
pH	0.00 – 15.00	0.01	±0.01
ORP	-1000 to +1000mV	1mV	±2 mV
Conductivity (EC)	0 – 20,000 µS/cm 0 – 20 mS/cm (Auto-ranging)	0.1(0.0 to 199.9 µS/cm) 1(200 to 1999 µS/cm) 0.01(2.00 to 20.00 mS/cm)	±1%of full scale or ±1µS/cm, whichever is greater
Total Dissolved Solids (TDS)	0 - 2,000 mg/L 0 – 10 ppt (Auto-ranging)	1(0 – 999 mg/L) 0.01(1.0 – 10.00 ppt)	±1%of full scale or ±1mg/L, whichever is greater
Salinity	0 – 10.00 ppt 0 – 1.00%	0.01ppt 0.01%	±1%of full scale or ±1mg/L, whichever is greater
Temperature	0.0 to 50°C	0 0.1°C	±0.5°C

Probe / Electrode Calibration Buffers, Standards and Care Solutions

Ensure your data is valid with frequent calibration of probes and electrodes using solutions incorporating audit traceability. Prevent unexpected failures of probes in the field with storage and care solutions.

pH Buffers and ORP Standard

Ordering Information	Part Code
pH Buffer Tablet Pack (pH 4, 7 and 10)	PT105/5
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

Conductivity and TDS Calibration Standards

Ordering Information	Part Code
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

Dissolved Oxygen Standard

Ordering Information	Part Code
Zero Oxygen Solution, 500mL	PT125/3

Care Solutions and Deionised Water

Ordering Information	Part Code
Electrode Care Pack, pH	PT105/4
Deionised Water, 500mL	PT1250

Electrochemical Sensors

Clever electrochemical techniques combined into a compact, portable instrument.

Simplifying complex test procedures, sensor technology reduces potential user errors, enabling critical water quality decisions with confidence.

The SA1100 Scanning Analyzer provides USEPA approved field measurement of lead and copper in a robust, portable instrument featuring unique disposal sensor technology.

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

- Simple test protocol – fill the sample container, add the buffer tablet, insert the sensor and close the lid.
- Accurate and sensitive – with a lower limit of detection of 2 ppb of lead or 50 ppb of copper, the SA1100 can detect the smallest heavy metal contamination.
- Waterproof and battery powered field instrument – supplied in a shoulder case with all accessories required for immediate testing.

EPA Approved ✓	x1 use	USB
US EPA approved	Single use sensor	USB data transfer

Ordering Information

PT430
Lead (Pb) Scanning Analyzer Test Kit
SA1100 Scanning Analyzer instrument, sensor pack (PT435: comprising x10 electrodes and test consumables), calibration chip and instructions.

PT431
Copper (Cu) Scanning Analyzer Test Kit
SA1100 Scanning Analyzer instrument, sensor pack (PT436: comprising x10 electrodes and test consumables), calibration chip and instructions.
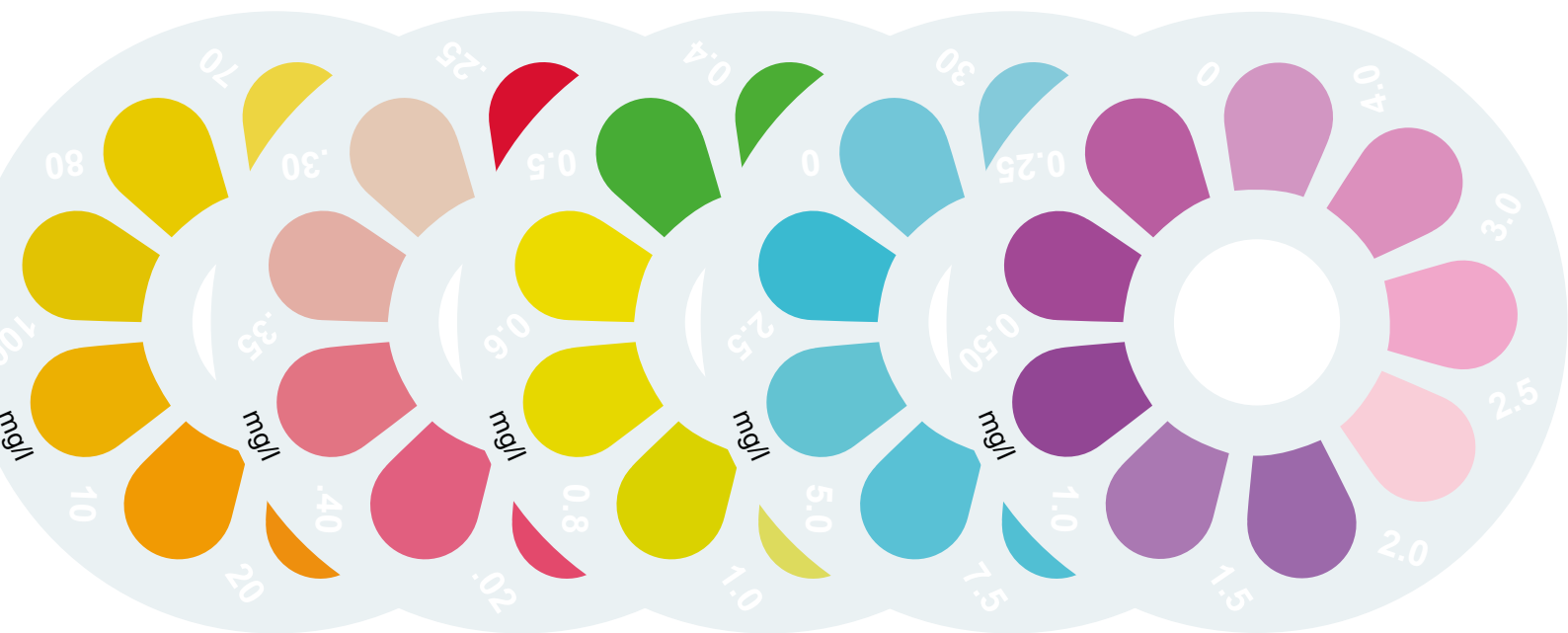
CS640
SA1100 Check Standards

Technical Specification

Measuring System	Voltammetry
Range	2 to 100µg/L (Pb) 50 to 2000 µg/L (Cu)
Display	High clarity LCD with backlight
Language	English, French, Spanish, German and Italian language options
Connectivity	USB-B
Data Storage	500 results including date, time, test ID and sample ID
Size (W x L x H) & Weight	170 x 126 x 116mm, 975g
Power Supply	4 x AA batteries
Rating	IP67 waterproof

Replacement sensor packs	Part Code
SA1100 Lead sensor pack for clean water. Comprising: x10 electrodes, x10 tablets, x10 graduated tubes, crushing rods and calibration chip.	PT435
SA1100 Copper sensor pack for clean water. Comprising: x10 electrodes, x10 tablets, x10 graduated tubes, crushing rods and calibration chip.	PT436

Visual Analysis Products

Conveniently packaged in hard compact cases, Pocket Kits contain reagents and all accessories required to perform simple visual testing of parameters ranging from ammonia to zinc.

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

Our Visual Test Kits provide a similar range of parameters to our Photometric products, however unlike instruments, these methods use visual comparisons of colour changes to determine results.

.

Visual Test Kits are ideally suited to applications where the volume of testing is high and where approximate screening of samples is required.

Parameter	Measurement Range	Part Code (50 tests)
Alkalinity - Total	0 – 500 mg/L $CaCO_3$	PK072
Aluminium	0 – 0.5 mg/L Al	PK166
Ammonia	0 – 1.0mg/L N	PK152
Calcium Hardness	0 – 500 mg/L $CaCO_3$	PK077
Chloride	0 – 1000 mg/L Cl^- (up to 2500 possible)	PK079
Chlorine - Free and Total	0 – 2 mg/L Cl_2	PK011
Chlorine (Chlorocol)	0 – 50 mg/L Cl_2	PK080
Chlorine HR	0 – 250 mg/L Cl_2	PK162
Cleaning Acid Strength	0 - 10%	PK078
Copper (Coppercol)	0 - 5 mg/L Cu	PK186
Hardness	0 – 500 mg/L $CaCO_3$	PK096
Hardness Yes/No	Up to 4, 8, or 20 mg/L $CaCO_3$	PK101
Nitrate	0 – 17mg/L N	PK184
Nitrite (Nitricol)	0 – 0.5 mg/L N	PK109
Organophosphonate	0 – 20 mg/L P	PK158
pH - Phenol Red	pH 6.8 - 8.4	PK131
pH - Universal	pH 4 - 11	PK136
Phosphate HR	0 – 100 mg/l PO_4	PK114
QAC (Quatest)	0 – 500 mg/L	PK165
Sulfate	0 – 200 mg/L SO_4	PK154
Zinc	0 - 2 mg/L Zn	PK149

Contour Comparator

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

- Compact size with grip feature for ease of handling
- High clarity and durable colour discs
- Choose either a single or dual parameter kit. Each kit contains the instrument disc(s), cuvettes, brush, stirring rods and reagents for 30 tests

Parameter	Measurement Range	Single Parameter Kit (includes 30 tests)	Replacement Discs (each)	Replacement Reagents (250 tests)
Alkalinity	0 - 250 mg/L CaCO$_3$	CKH1192	CKD1192	AK192
Aluminium	0 - 0.5 mg/L Al	CKH1166	CKD1166	AK166
Ammonia	0 - 1mg/L N	CKH1152	CKD1152	AK152
Bromine	0-8 mg/L Br$_2$	CKD1005	CKD1005	AK060
Chlorine - (DPD 1, Free)	0 - 5 mg/L Cl$_2$	CKH1001	CKD1001	AK011
Monochloramine (DPD 2, requires DPD 1)	0 - 5 mg/L Cl$_2$	-	-	AK021
Chlorine - (DPD 3, Total, requires DPD 1)	0 - 5 mg/L Cl$_2$	-	-	AK031/1
Chlorine - (DPD 1 & 3, Free/Total/Combined)	0 - 5 mg/L Cl$_2$	-	-	AK031
Chlorine - (DPD 4, Total)	0 - 5 mg/L Cl$_2$	-	-	AK041
Chlorine - Free and Total Chlorine	0 - 2 mg/L Cl$_2$	CKH1002	CKD1002	-
Chlorine - Free and Total Chlorine	0 - 1mg/L Cl$_2$	CKH1003	CKD1003	-
Chlorine HR	0 - 50 mg/L Cl$_2$	CKH162/50	CKD162/50	-
Chlorine HR	0 - 250 mg/L Cl$_2$	CKH162/250	CKD162/250	AK162
Copper	0 - 5 mg/L Cu	CKH1186	CKD1186	AK186
Fluoride	0 - 1.5mg/L F	CKH1179	CKD1179	AK179

Parameter	Measurement Range	Kit Part Code (30 tests)	Comparator Disc	Reagents (250 tests)
Hydrogen Peroxide LR	0 - 1mg/L H$_2$O$_2$	CKH1104	CKD1104	AK104
Hydrogen Peroxide HR	0 - 100mg/L H$_2$O$_2$	CKH1105	CKD1105	AK105
Iron MR	0 - 10mg/L Fe	CKH1292	CKD1292	AK292
Manganese	0 - 0.03 mg/L Mn	CKH1173	CKD1173	AK173
Manganese HR	0 - 5 mg/L Mn	CKH1174	CKD1174	AK174
Molybdate HR	0 - 100mg/L MoO$_4$	CKH1175	CKD1175	AK175
Nitrate	0 - 15mg/L N	CKH1163	CKD1163	AK163
Nitrite	0 - 0.4 mg/L N	CKH1109	CKD1109	AK109
Ozone	0 - 1.0mg/L O$_3$	CKH1056	CKD1056	AK056
Phosphate LR	0 - 4 mg/L PO$_4$	CKH1177	CKD1177	AK177(200 tests)
Phosphate HR	0 - 100mg/L PO$_4$	CKH1114	CKD1114	AK114
Silica	0 - 4 mg/L SiO$_2$	CKH1181	CKD1181	AK181
Sulfide	0 - 0.5 mg/L S	CKH1168	CKD1168	AK168
Zinc	0 - 4 mg/L Zn	CKH1148	CKD1148	AK148
pH Bromocresol Purple	pH 5.2 - 6.8	CKH1128	CKD1128	AK128
pH Bromothymol Blue	pH 6.0 - 7.6	CKH1129	CKD1129	AK129
pH Phenol Red	pH 6.8 - 8.4	CKH1131	CKD1131	AK131
pH Thymol Blue	pH 8.0 - 9.6	CKH1135	CKD1135	AK135
Universal pH	pH 4 - 11	CKH1006	CKD1006	AK136

Dual-Parameter Kits	Measurement Range	Part Code
Free & Total Chlorine, Phenol Red	0 - 5 mg/L Cl$_2$ and pH 6.8 - 8.4	CKH2001
Free & Total Chlorine, Phenol Red	0 - 2 mg/L Cl$_2$ and pH 6.8 - 8.4	CKH2002
Free & Total Chlorine, Phenol Red	0 - 1mg/L Cl$_2$ and pH 6.8 - 8.4	CKH2003
Bromine, pH Phenol Red	0 - 8 mg/L Br$_2$ and pH 6.8 - 8.4	CKH2005
Free & Total Chlorine, Chlorine HR	0 - 5 and 0 - 250 mg/L Cl$_2$	CKH2006
Free & Total Chlorine, Dual Range	0 - 1and 0 - 5 mg/L Cl$_2$	CKH2007
Hydrogen Peroxide, Dual Range	0 - 1and 0 - 100mg/L H$_2$O$_2$	CKH2104
Copper and pH Phenol Red	0 - 5 mg/L Cu and pH 6.8 - 8.4	CKH2186

Contour Comparator Accessories

Ordering Information	Part Code
Comparator Cuvettes, 10mL square comparator cuvettes, pack of 5	PT521/5
Dilution Tube, Graduated tube for sample dilution. Graduations at x2, x3, x4, x5, x10	PT512
Cuvette Brush, for cleaning cuvettes, length 120mm	PT663
Crush/Stirring Rods. Pack of 10.	PT502

Drop Count

Dropper titration provides a cost effective and accurate means of determining water quality in the field. Palintest provide an extensive range of tests based on this technology, and the kits are available for use in a wide range of applications. Carefully chosen chemistries and easy to follow, pictorial instructions make drop tests simple to perform with accurate results:

• Cost effective method of testing, with no expensive equipment necessary
• Simple to use - tests can be easily performed by non-techincal personnel, with minimum training
• Individual test kits can be combined in order to build a bespoke portable kit.

PT202
Standard Drop Count Kit
Standard Drop Count Kit includes two sample vessels, two square test tubes, 20 mL syringe, crush/stir rod and full instructions. Contains no reagents.

Parameter	Measurement Range	Part Code
Alkalinity M	0 - 300+ mg/L	DC510
Alkalinity M	0 - 1200+ mg/L	DC511
Alkalinity P	0 - 300+ mg/L	DC515
Alkalinity P	0 - 1200+ mg/L	DC516
Alkalinity P/OH	0 - 1200+ mg/L	DC520
Calcium Hardness	0 - 1200+ mg/L	DC526
Chloride	0 - 150+ mg/L	DC533
Chloride	0 - 600+ mg/L	DC534
Hardness (Total)	0 - 30+ mg/L	DC541
Hardness (Total)	0 - 300+ mg/L	DC543
Hardness (Total)	0 - 600+ mg/L	DC544
Organophosphonate	0 - 30+ mg/L	DC548
Nitrite	0 - 1500+ mg/L	DC562
Sulfite	0 - 150+ mg/L	DC565
Sulfite	0 - 600+ mg/L	DC566
Tannin	0 - 300+ mg/L	DC575

Ordering Information	Part Code
Standard Drop Count Kit	PT202

Tablet Count

These tests are particularly useful for the routine control of industrial waters such as boiler water and cooling water systems, as well as in swimming pools, natural waters and similar applications:

• Intuitive test methods suitable for use by all personnel with mininum training required
• Cost-effective and provides quick results on-site
• Can be used as a stand-alone kit or combined with comparator or photometer-based kits
• Wide range of test concentrations can be measured.

Parameter	Measurement Range	Part Code (approx. 50 tests)
Alkalinity M	0 - 1000 mg/L $CaCO_3$	AS071
Alkalinity P	0 - 1000 mg/L $CaCO_3$	AS073
Alkalinity P/Caustic	0 - 1000 mg/L $CaCO_3$	AS075
Calcium Hardness	0 – 500 mg/L $CaCO_3$	AS077
Chloride	0 - 1000 mg/L Cl	AS079
Cleaning Acid Strength	0 – 10%	AS078
Hardness LR	0 – 50 mg/L $CaCO_3$	AS097
Hardness	0 – 500 mg/L $CaCO_3$	AS096
Hardness Yes/No	4, 8, 20 mg/L $CaCO_3$	AS101
Nitrite	0 - 1500 mg/L $NaNO_2$	AS111
Sulfite LR	0 - 50 mg/L Na_2SO_3	AS144
Sulfite HR	0 - 500 mg/L Na_2SO_3	AS145
Sulfate	0 - 200 / 3000 mg/L SO_4	AS154
Organophosphonate	0 - 20 mg/L Active OP	AS158
QAC (Quatest)	0 - 500 mg/L QAC	AS165
Tannin	0 - 200 mg/L Tannin	AS171

VCDK
Visual Arsenic
Test Kit

Sewage Effluent
Test Kit

The Visual Colour Detection Kit operates using the same unique 3-stage filter system as in the Palintest Digital Arsenic Test Kit, but the resulting colour change is compared and analysed against a calibrated colour chart by the user, as opposed to being measured on a colorimeter.

- Simple test protocol with packaged reagents and visual test determination.
- Employs the unique 3-stage filter system for increased sensitivity and operator safety.
- Lightweight field case containing all parts required for use.

The Palintest Sewage Effluent Kit provides a simple means of checking the quality of sewage effluents. It is used extensively for control testing at small sewage works. Based on simplified methods of sewage effluent testing, the kit contains tests for the essential quality control checks required for the day-to-day operation of sewage effluent treatment plants.

Increasing attention is being paid to the quality of sewage effluents. This is coupled with the imposition of more stringent quality standards. It is important that the condition of sewage effluent discharges be checked to ensure they conform to consent limits. Similarly, the importance of regular testing by sewage works operators as a check on the efficiency of the works is widely recognised.

Ordering Information

SP304
Sewage Effluent Test Kit
Hard carry case comprising: Acidifying SE tablets (x300), Permanganate Value tablets (x300), Universal pH tablets (x100), sample containers (100 mL, x3), plastic test tubes (10 mL, x2), turbidity tube (13 inches), test tube brush (12cm), and a thermometer, Contour Comparator and Universal pH disk'.

Ordering Information

PTH10605
VCDK Visual Arsenic Test Kit
(200 tests)
Includes: tri-filter arsenic trap, 100 mL reaction vessel, destruction filter (x4), detection filter holder (x4), hydrogen Sulfide filter (x4), reagents for 200 tests, visual comparison chart, forceps, dilution tube, cuvette brush, instructions, supplied in a hard case kit.

PTH10600
VCDK Visual Arsenic Test Kit
(100 tests)
Includes: tri-filter arsenic trap, 100 mL reaction vessel, destruction filter (x3), detection filter holder (x3), hydrogen Sulfide filter (x4), reagents for 100 tests, visual comparison chart, forceps, dilution tube, cuvette brush, instructions, supplied in a hard case kit.

PT983
Arsenic Refill Pack
Arsenic Refill Pack, comprising: reagents for 200 tests, arsenic detection filters (x200), arsenic destruction filters (x200), destruction filter holders (x2), detection filter holders (x2), A1 reagent sachets (x200), A2 tablet reagents (x200), hydrogen Sulfide removal filters (x5).

Technical Specification

Measuring System	Colorimeter
Range	2 – 100 µg/L
Reaction time	20 minutes

Parameter	Measurement Range
Permanganate Value (0 to 30+)	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.
pH (4 to 8)	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 in conjunction with a printed colour strip. in conjunction with a printed colour strip' replacing with 'and Contour Comparator equipped with Universal pH disk
Turbidity and TSS (0 to 500 JTU)	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.
Temperature (-10° to +50°)	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.
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.

Microbiological Testing

Critical for Water Safety Plan implementation, the presence of pathogens in potable and process water applications often the prime focus for water quality testing. Test methods for Faecal Indicator Organisms (FIO), specific pathogens and general microbiological activity form a crucial component in monitoring programmes for compliance and risk management.

Target Organism	Qualitative/Semi-Quantitative	Quantitative
Total Colony Count/Heterotrophic Plate Count (HPC)	Dipslides	Membrane Filtration
Total Coliforms	Colitag™P/A	Colitag™MPN
		Membrane Filtration
Faecal Coliforms		Membrane Filtration
E. coli	Colitag™P/A	Colitag™MPN
		Membrane Filtration
Samonella typhi		Membrane Filtration
Faecal Streptococci		Membrane Filtration
Pseudomonas aeruginosa		Membrane Filtration
Yeasts and Mould	Dipslides	

Colitag™
Total Coliforms and *E. coli*

Designed and USEPA approved for water quality testing, Colitag™ is the simplest and most flexible method for Total Coliforms and E. coli. Available in Presence/Absence or Most Probable Number formats, Colitag™ delivers fast, reliable and definite results in the field or the laboratory.

The key features include:

• Rapid results, ready when you are – available in as little as 16 hours when speed of data availability is key, the unique Colitag™ formulation allows results to be reported up to the maximum 48 hour incubation window without compromising data quality

• Simplicity and flexibility – use as either Presence/Absence or Most Probable Number test format with a simple three step protocol suitable for field or laboratory use. Only one reagent is required to support the wide incubation window available.

• Data you can trust – results are unmistakeable for positive and negative results for Total Coliforms and E.coli with the vivid yellow and fluorescent indication. The unique formulation also leads in minimising false negatives, particularly for chlorinated samples.

Backed by over 30 years of global experience and packaged in convenient single-use sachets, Colitag™ is available as a refill pack and supported by a comprehensive range of dedicated accessories and Starter Kits.

Ordering Information	Part Code
Colitag™ Refill Pack, 20 tests	CT220
Colitag™ Refill Pack, 100 tests	CT200
120mL Sterile Sample Vessel with Thiosulfate, 100 pack	CT230
120mL Sterile Sample Vessel w/out Thiosulfate, 100 pack	CT105
Colitag™ MPNplate™ 1600 Most Probable Number Device, 100 pack	CT260
Sealing Tool for MPNplate™ 1600 Most Probable Number Device	CT265
Handheld UV Lamp, Long Wavelength	CT102

Starter kits

Designed to simplify implementation of Colitag™ testing for users, Starter Kits include everything required to commence testing for Total Coliform and *E. coli* in single part code.

	Economy	Standard	Heavy Duty
MPN	CT305	CT355	CT365
Number of Tests	20	100	100
120mL Sterile Containers with Thiosulfate	✓	✓	✓
MPNplate 1600	✓	✓	✓
Handheld UV Lamp	✓	✓	✓
Multivolt Incubator		✓	
Potaflex Incubator			✓
Presence/Absence	CT300	CT325	CT335
Number of Tests	20	100	100
120mL Sterile Containers with Thiosulfate	✓	✓	✓
Handheld UV Lamp	✓	✓	✓
Multivolt Incubator		✓	
Potaflex Incubator			✓

Dipslides

Simple and economic to use, Palintest Dipslides are ideal for cooling water circuits, institutional hygiene and applications where indication of general microbiological contamination is required.

Palintest Dipslides include the following:

• **Suitable for liquid and surface testing** – either immerse the Dipslide within the sample or place in contact with the surface under test.

• **Available in two formats** – supplied in packs of 10, Dipslides are suitable for Total Colony (TTC) only or Total Colony plus Yeasts and Mould (TTC/M) for full compliance checking.

• **Simple result determination** – compare the clearly visible colonies produced with the supplied standard chart.

Palintest Dipslides are suitable for use within the range of incubators on page 62.

Ordering Information	Part Code
Dipslides, TTC (10 pack)	PT711
Dipslides, TTC/M (10 pack)	PT710

Microbiological Media for Membrane Filtration

For use in conjunction with the durable Membrane Filtration apparatus found in the Wagtech range (p65-76).

Nutrient media is available in the following formats for a focused range of bacteriological targets:

• **Bulk reagents** – Membrane Lauryl Sulfate Broth (MLSB) supplied as powder for cost-effective preparation of nutrient media for Total and Faecal Coliform enumeration,. Use with absorbent pads/ petri dishes and membrane filters.

• **Ampoules** – Prepared media packaged in 2.2mL dose, use with absorbent pads/ petri dishes and membrane filters.

• **Nutrient pads** – convenient single-use format containing dehydrated media pads in petri dishes with suitable membrane filters

Ordering Information	Part Code
Membrane Lauryl Sulfate Broth, 500g	PTW10452
Membrane Lauryl Sulfate Broth, 38.1g	PTW10454
Coliform Starter Pack (MLSB), 200 tests	PTW10450
Faecal Coliform Ampoules, 50 tests	PTW10468
Total Coliform Ampoules, 50 tests	PTW10470
Nutrient Pad Set for Pseudomonas aeruginosa, 100 tests	PTW10062
Nutrient Pad Set for E. coli and Faecal Coliforms, 100 tests	PTW10064
Nutrient Pad Set for Total Coliforms and E. coli (Chromocult), 100 tests	PTW10065
Nutrient Pad Set for Total Colony Count, 100 tests	PTW10066
Nutrient Pad Set for Salmonella typhi, 100 tests	PTW10067
Nutrient Pad Set for E. coli, 100 tests	PTW10068
Nutrient Pad Set for E. coli and Coliforms (Endo), 100 tests	PTW10069

Incubators and Accessories

Complete your installation with a choice of incubators and accessories to support field or laboratory deployment of microbiological water quality testing.

Two incubators are available for use with Dipslides, Colitag™ and other media. The Multivolt Incubator features a lightweight but rugged polymer construction, the Potaflex is housed within a robust steel case for optimal protection and includes the unique Flexi Rack System (FRS) to safely carry a mix of test formats.

Accessories including aluminium petri dishes, membrane filters and absorbent pads are available in convenient bulk packs for volume users. Thermometers for incubator validation and disposable gloves are also available.

Multivolt Incubator   Potaflex

	Multivolt Incubator	Potaflex
Temperature Range	(Ambient + 5) - 45°C	20 - 50°C
Power Supply	12V DC, 110-230V AC	12V DC, 110– 230V AC
User Settings	Temperature only	Temperature and time
User Interface	Temperature set dial, power and heating LEDs	LCD display with current temperature and time remaining
Size (external)	20.6 x 32 x 25.7 cm	18.4 x 19.6 x 27.1cm
Size (Incubation Chamber)	20.0 x 21.0 x 17.0 cm	10.8 x 13.5 x 13.5 cm
Construction Materials	Lid – polycarbonate Base - HIPS	Folded steel, powder coated
Weight, kg	2.1	5.0
Dipslide Capacity	20-25	8
Sterile Container Capacity	12	4
MPN plate Capacity	4	2
Petri Dish Capacity	80	40
Nutrient Pad Set Capacity	28	20

Ordering Information	Part Code
Multivolt Incubator	CT109
Potaflex	PTW10051

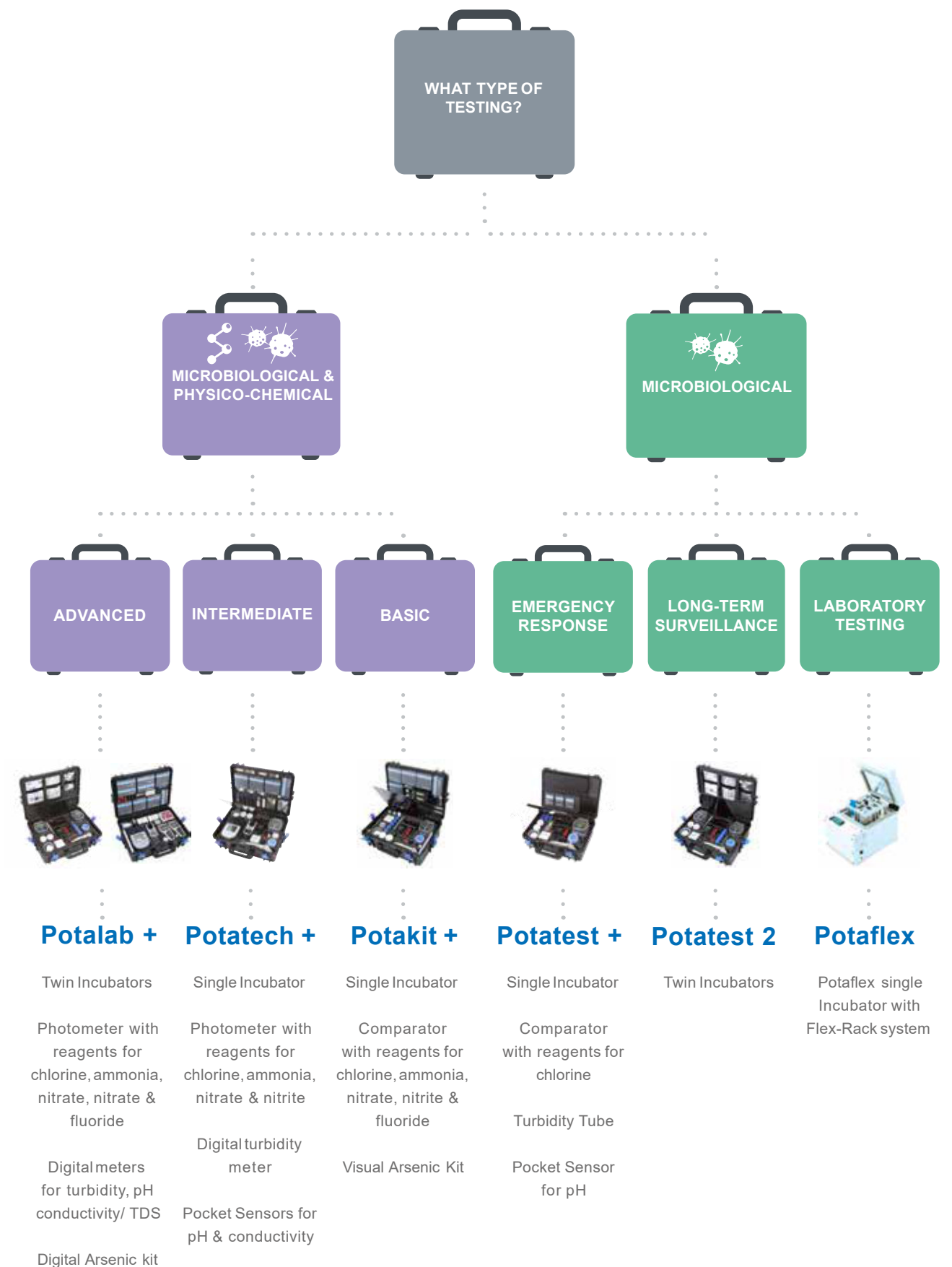| Ordering Information	Part Code
Aluminium Petri Dishes, 47mm diameter (20 pack)	PTW10420
Membrane Filters, 0.45µm mesh, 47mm diameter (200 pack)	PTW10459
Absorbent Pads, 47mm diameter (100 pack)	PTW10463
Absorbent Pads and Membrane Filters (200 pack)	PTW10460
Membrane Filters, 0.45µm mesh, 47mm diameter (1000 pack)	PTW10461
Absorbent Pads and Membrane Filters (1000 pack)	PTW10462
Incubator Thermometer, 0 - 50°C	PT680
Disposable gloves, polythene (10 pairs)	PT675

Wagtech

Portable water quality laboratories

Wagtech has long been established as the leading supplier of portable water test kits to the international development and humanitarian sectors. Wagtech kits are designed to determine the safety of drinking water sources on-site, working in remote locations away from laboratories.

Emergency Response -   Remote Locations -   Limited Water Infrastructure

Kit Selector

WHAT TYPE OF TESTING?

MICROBIOLOGICAL & PHYSICO-CHEMICAL

MICROBIOLOGICAL

ADVANCED | **INTERMEDIATE** | **BASIC** | **EMERGENCY RESPONSE** | **LONG-TERM SURVEILLANCE** | **LABORATORY TESTING**

Potalab +
Twin Incubators

Photometer with reagents for chlorine, ammonia, nitrate, nitrate & fluoride

Digital meters for turbidity, pH conductivity/ TDS

Digital Arsenic kit

Potatech +
Single Incubator

Photometer with reagents for chlorine, ammonia, nitrate & nitrite

Digital turbidity meter

Pocket Sensors for pH & conductivity

Potakit +
Single Incubator

Comparator with reagents for chlorine, ammonia, nitrate, nitrite & fluoride

Visual Arsenic Kit

Potatest +
Single Incubator

Comparator with reagents for chlorine

Turbidity Tube

Pocket Sensor for pH

Potatest 2
Twin Incubators

Potaflex
Potaflex single Incubator with Flex-Rack system

Potalab +
Advanced portable water quality laboratory

Ideally suited to longer term surveillance and professional monitoring, the Potalab provides portable analysis of a wide and comprehensive range of key drinking water quality parameters where the most important factor is to obtain laboratory levels of accuracy.

- High capacity microbiological analysis – dual incubators with independent temperature control for simultaneous determination of up to 40 samples. Suitable for thermotolerant or faecal coliforms and total coliforms
- Advanced physico-chemical analysis - includes the Photometer 7500, Turbimeter Plus, Palintest Arsenator and electrochemical meters for pH and conductivity/ TDS
- Versatile and flexible – suitable for use in the laboratory, as a makeshift central water laboratory or as an entirely self-contained field kit with independent power.

Technical Specification

Potalab Incubator	Test Protocols	37°C and 44°C temperature selections with up to 6 user-defined profiles from 20 - 50°C. User selectable time periods for all temperatures, automatic resuscitation period inclusion
	Temperature Stability	±0.1°C
	Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation
	User Interface	On screen and audible prompts (incubator only) available in English, French, Spanish and Chinese (Simplified).
	Data Log	Last five incubation cycles performance report
	Connectivity	Micro-USB connection to Windows and Android devices for data download and audible prompt upload via dedicated App
	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, 5 full cycles from a fully charged battery
Potalab Kit	Microbiological Capacity	Dual incubators with consumables for 200 tests for Thermotolerant/ Faecal Coliforms or Total Coliforms. Optional Nutridisk capability for additional parameters including Faecal Streptococci and *E. coli*
	Physico-Chemical Parameters	Ammonia, Arsenic, Free and Total Chlorine, Fluoride, Nitrate, Nitrite, Turbidity, pH, Conductivity, Total Dissolved Solids. Additional parameters available
	Size & Weight	2x heavy duty field cases, each 555 x 428 x 211mm, 12 kg (M), 11 kg (C)

Ordering Information

PTW10010
Wagtech Potalab. Supplied in two cases: Microbiological (M) and Physico-Chemical (C).

Microbiological (M) Kit comprises:
- Dual Potalab Incubators with independent temperature control and audible prompts, 2 petri dish racks, high performance Lead Acid battery with capacity for at least 5 cycles per incubator, mains charger with international adaptors, vehicle socket battery power lead, crocodile clip power leads.
- Membrane Filtration assembly, bronze disc, pistol grip vacuum pump with no-kink silicone tubing, 5 Media Measuring Devices (MMDs), 38.1g Membrane Lauryl Sulfate Broth, 5 Pasteur pipettes, hand lens, forceps, 40 Aluminium re-usable petri dishes, 200 sterilised and sealed membrane filters, 200 absorbent pads, absorbent pad dispenser, steel sampling cup, sampling cable.

Physico-Chemical (C) Kit comprises:

- Photometer 7500 and light cap, 6 photometer cuvettes, photometer reagents for 200 tests for Free and Total Chlorine, Ammonia, Fluoride, Nitrite and Nitrate.
- Turbimeter Plus, SDVB calibration standards, 4 Turbimeter sample cuvettes, silicone oil, cleaning/oiling cloth.
- Palintest Arsenator Digital Arsenic Test System, unique three-stage filter assembly, conical flask, consumables for 200 Arsenic tests.
- Micro 800 pH/ Temperature Meter with pH calibration buffers.
- Micro 800 Conductivity/ TDS Meter with conductivity calibration standard.
- Cuvette brush, 2 Dilution tubes, crush/stir rods, De-ion pack, instructions.

PTW10010XA
Wagtech Potalab XA. Supplied in two cases. Configuration as per PTW10010 but excluding the digital arsenic test kit.

Microbiological Incubator
Incubate 20 samples in each unit simultaneously. Store and transfer data.

Measure over 50 chemicals
Add additional Palintest reagent sets for use with the Photometer 7500.

Convenient hand-held meters
Simple to use and portable meters facilitate routine sample testing and control.

Potatech +
Intermediate portable
water quality laboratory

The single incubator version of the advanced Potalab kit, the Potatech features a complete set of digital instruments but remains lightweight and portable for rural and remote water monitoring.

Previously called the 'Basic Water Safety Planning Kit', the Potatech is designed and supplied for the field monitoring aspect of the Joint Monitoring Programme (JMP). A favourite of WASH professionals, the Potatech combines sophisticated instrumentation with high levels of portability to provide a detailed assessment of the microbiological, physical and chemical quality of a water supply.

- Field microbiological analysis – single incubator constructed from thermally efficient materials and using a high capacity battery
- Reliable physico-chemical analysis – includes the Photometer 7100, Turbimeter Plus and Pocket Sensors for pH and conductivity.

Ordering Information

PTW10480
Potatech+

Wagtech Potatech+ kit comprising:

- Wagtech Incubator with standard test protocols and audible prompts, petri dish racks, high performance Lead Acid battery with capacity for at least 5 cycles per charge, mains charger with international adaptors, vehicle socket battery power lead, crocodile clip power leads.
- Membrane Filtration assembly, bronze disc, pistol grip vacuum pump with no-kink silicone tubing, 5 Media Measuring Devices (MMDs), 38.1g Membrane Lauryl Sulfate Broth, 5 Pasteur pipettes, hand lens, forceps, 20 Aluminium re-usable petri dishes, 200 sterilised and sealed membrane filters, 200 absorbent pads, absorbent pad dispenser, steel sampling cup, sampling cable.
- Polypropylene 250 mL beaker, quick start promptcards, sterilisable integrated work surface.
- Photometer 7100 and light cap, 6 photometer cuvettes, photometer reagents for 200 tests for Free and Total Chlorine, Ammonia, Nitrite and Nitrate.
- Turbimeter Plus, SDVB calibration standards, 4 Turbimeter sample cuvettes, silicone oil, cleaning/oiling cloth.
- Pocket pH Sensor and pH calibration buffers Pocket Conductivity Sensor with conductivity calibration standard.
- Cuvette brush, 2 Dilution tubes, crush/stir rods, De-ion pack, instructions.

Technical Specification

Potatech Incubator	Test Protocols	37°C and 44°C temperature selections, user selectable time profiles, automatic resuscitation period profile
	Temperature Stability	±0.1°C
	Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation
	User Interface	On screen and audible prompts (incubator only) in English, French, Spanish and Chinese (Simplified).
	Data Log	Last five incubation cycles performance report
	Connectivity	Micro-USB connection to Windows and Android devices for data download and audible prompt upload via dedicated App
	Size & Weight	110 x 123 x 145 mm, 690g
	Power Supply	Replaceable lead acid battery with mains, vehicle and external charging options
	Power Consumption	High thermal efficiency heating system, 5 full cycles from a fully charged battery
Potatech Kit	Microbiological Capacity	Single incubator with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms. Optional Nutridisk capability for additional parameters including Faecal Streptococci and *E. coli*
	Physico-Chemical Parameters	Ammonia, Free and Total Chlorine, Fluoride, Nitrate, Nitrite, Turbidity, pH, and Conductivity. Additional parameters available
	Size & Weight	555 x 428 x 211mm, 13kg

Microbiological Incubator

Incubate 20 samples simultaneously. Store and transfer data.

Measure over 50 chemicals

Add additional Palintest reagent sets for use with the Photometer 7100.

Convenient pocket sensors

Simple to use and portable sensors facilitate routine sample testing and control.

Potakit +
Basic portable
water quality laboratory

Designed for routine testing in the field, the Wagtech Potakit includes a combination of visual and digital test instruments that offer an affordable yet accurate testing solution.

The Potakit is the kit of choice for NGOs and water technicians implementing small-scale rural WASH programmes and for organisations with limited funds but who still wish to conduct an accurate assessment of key drinking water quality parameters in the field.

- Complete physico-chemical analysis – visual testing apparatus for turbidity, ammonia, arsenic, free and total chlorine, fluoride, nitrite and nitrate plus pocket sensors for pH and conductivity
- The Potakit is supplied with consumables and parts sufficient for processing/analysing 200 samples.

Technical Specification

Potakit Incubator	Test Protocols	37°C and 44°C temperature selections, user selectable time profiles, automatic resuscitation period profile
	Temperature Stability	±0.1°C
	Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation
	User Interface	On screen and audible prompts (incubator only) in English, French, Spanish and Chinese (Simplified).
	Data Log	Last five incubation cycles performance report
	Connectivity	Micro-USB connection to Windows and Android devices for data download and audible prompt upload via dedicated App
	Size & Weight	110 x 123 x 145 mm, 690g
	Power Supply	Replaceable lead acid battery with mains, vehicle and external charging options
	Power Consumption	High thermal efficiency heating system, 5 full cycles from a fully charged battery
Potatech Kit	Microbiological Capacity	Single incubator with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms. Optional Nutridisk capability for additional parameters including Faecal Streptococci and *E. coli*
	Physico-Chemical Parameters	Ammonia, Arsenic, Free and Total Chlorine, Nitrate, Nitrite, Turbidity, pH, Conductivity. Additional parameters available.
	Size & Weight	555 x 428 x 211mm, 13kg

Ordering Information

Wagtech Potakit+ kit comprising:

- Wagtech Incubator with standard test protocols and audible prompts, petri dish racks, high performance Lead Acid battery with capacity for at least 5 cycles per charge, mains charger with international adaptors, vehicle socket battery power lead, crocodile clip power leads.
- Membrane Filtration assembly, bronze disc, pistol grip vacuum pump with no-kink silicone tubing, 5 Media Measuring Devices (MMDs), 38.1g Membrane Lauryl Sulfate Broth, 5 Pasteur pipettes, hand lens, forceps, 20 Aluminium re-usable petri dishes, 200 sterilised and sealed membrane filters, 200 absorbent pads, absorbent pad dispenser, steel sampling cup, sampling cable.
- Polypropylene 250 mL beaker, quick start prompt cards, sterilisable integrated work surface. Contour Comparator and discs, 4 comparator cuvettes, comparator reagents for 200 tests for Free and Total Chlorine, Ammonia, Fluoride, Nitrite and Nitrate.
- Visual Arsenic Detection Kit with consumables for 200 tests. Double length Turbidity Tube. Pocket pH Sensor and pH calibration buffers. Pocket Conductivity Sensor with conductivity calibration standard, Cuvette brush, 2 Dilution tubes, crush/stir rods, De-ion pack, instructions.
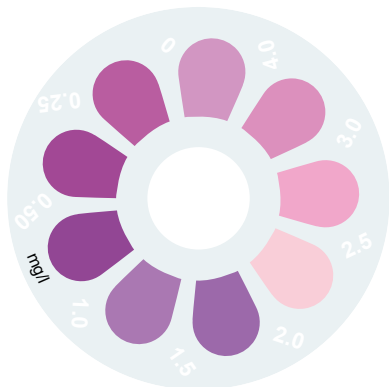
Wagtech Potakit XA. Configuration as per PTW10030 but excluding the visual arsenic test kit.

Microbiological Incubator
Incubate 20 samples simultaneously. Store and transfer data.

Measure over 50 chemicals
Add additional Colour Discs and reagents for use with the Colour Comparator.

Convenient pocket sensors
Simple to use and portable sensors facilitate routine sample testing and control

Potatest +
Rapid response
water quality laboratory

Widely used by organisations involved in large-scale emergencies or simple water quality testing projects, the Potatest is a lightweight microbiological test kit offering low-cost, rapid response testing of basic water quality parameters.

Designed to complement the increased emphasis now being placed upon water safety plans (WSPs) and their role in assessing and managing risk throughout each step of the drinking water supply process.

- Removable water safety kit (WSK) – contains instruments and visual test equipment to determine whether a full microbiological verification is required
- Rapid field microbiological analysis – using membrane filtration protocols for screening of faecal and/or total coliforms.

Ordering Information

PTW10005
Potatest+

Wagtech Potatest+ kit comprising:

- Wagtech Incubator with standard test protocols and audible prompts, petri dish racks, high performance Lead Acid battery with capacity for at least 5 cycles per charge, mains charger with international adaptors, vehicle socket battery power lead, crocodile clip power leads.

- Membrane Filtration assembly, bronze disc, pistol grip vacuum pump with no-kink silicone tubing, 5 Media Measuring Devices (MMDs), 38.1g Membrane Lauryl Sulfate Broth, 5 Pasteur pipettes, hand lens, forceps, 20 Aluminium re-usable petri dishes, 200 sterilised and sealed membrane filters, 200 absorbent pads, absorbent pad dispenser, steel sampling cup, sampling cable.

- Polypropylene 250 mL beaker, quick start prompt cards, sterilisable integrated work surface. Contour Comparator and discs, 4 comparator cuvettes, comparator reagents for 250 tests for Free and Total Chlorine. Double length Turbidity Tube. Pocket pH Sensor and pH calibration buffers. Cuvette brush, Dilution tube, crush/stir rods, De-ion pack, instructions.

Technical Specification

Potatest Incubator	Test Protocols	37°C and 44°C temperature selections, user selectable time profiles, automatic resuscitation period profile
	Temperature Stability	±0.1°C
	Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation
	User Interface	On screen and audible prompts (incubator only) in English, French, Spanish and Chinese (Simplified).
	Data Log	Last five incubation cycles performance report
	Connectivity	Micro-USB connection to Windows and Android devices for data download
	Size & Weight	110 x 123 x 145 mm, 690g
	Power Supply	Replaceable lead acid battery with mains, vehicle and external charging options
	Power Consumption	High thermal efficiency heating system, 5 full cycles from a fully charged battery
Potatest Kit	Microbiological Capacity	Single incubator with consumables for 200 tests for Thermotolerant/Faecal Coliforms or Total Coliforms. Optional Nutridisk capability for additional parameters including Faecal Streptococci and E.coli
	Physico-Chemical Parameters	Free and Total Chlorine, Turbidity, pH Additional parameters available.
	Size & Weight	464 x 366 x 176 mm, 9 kg

Microbiological Incubator
Incubate 20 samples simultaneously. Store and transfer data.
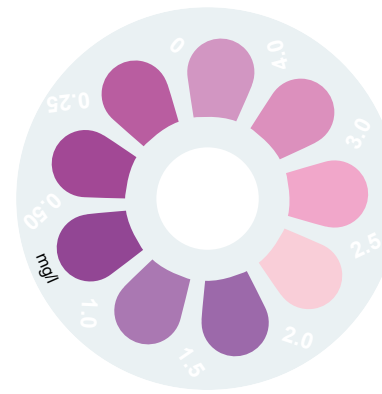
Measure over 50 chemicals
Add additional Colour Discs and reagents for use with the Colour Comparator.

Water Safety Kit (WSK) module
Removable section designed for measuring key parameters regularly.

Potatest 2 Microbiological water quality laboratory

Featuring twin digital incubators, this kit is capable of carrying out simultaneous incubation of both thermotolerant and total coliforms. Custom incubation profiles allow the user to conduct a wider range of bacteriological parameters.

- Complete indicator organism analysis – determine both faecal/ thermotolerant and total coliforms simultaneously or use a variety of Nutridisks
- Convenient kit format – all required items are laid out for ergonomic use and aseptic procedures
- Manage date – download incubator data and add colony counts for a complete microbiological report.

Ordering Information

PTW10020
Potatest 2

Wagtech Potatest 2 kit comprising:

- Dual Potalab Incubators with independent temperature control and audible prompts, 2 petri dish racks, high performance Lead Acid battery with capacity for at least 5 cycles per incubator, mains charger with international adaptors, vehicle socket battery power lead, crocodile clip power leads.

- Membrane Filtration assembly, bronze disc, pistol grip vacuum pump with no-kink silicone tubing, 5 Media Measuring Devices (MMDs), 38.1g Membrane Lauryl Sulfate Broth, 5 Pasteur pipettes, hand lens, forceps, 40 Aluminium re-usable petri dishes, 200 sterilised and sealed membrane filters, 200 absorbent pads, absorbent pad dispenser, steel sampling cup, sampling cable.

- Polypropylene 250 mL beaker, quick start prompt cards, full microbiological instruction manual, sterilisable integrated work surface.

Technical Specification

Potatest 2 Incubator	Test Protocols	37°C, 44°C, up to 6 user-defined profiles from 20 - 50°C, user selectable time periods for all temperatures, automatic resuscitation period inclusion
	Temperature Stability	±0.1°C
	Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation
	User Interface	On screen and audible prompts (incubator only) in English, French, Spanish and Chinese (Simplified).
	Data Log	Last five incubation cycles performance report
	Connectivity	Micro-USB connection to Windows and Android devices for data download
	Size & Weight (each)	110 x 123 x 145 mm, 690g
	Power Supply	Replaceable lead acid battery with mains, vehicle and external charging options
	Power Consumption	High thermal efficiency heating system, 5 full cycles from a fully charged battery
Potatest Kit	Microbiological Capacity	Dual incubator configuration with consumables for 200 tests for Thermotolerant/ Faecal Coliforms or Total Coliforms. Optional Nutridisk capability for additional parameters including Faecal Streptococci, Pseudomonas aeruginosa, Salmonella and *E. coli*
	Size & Weight	555 x 428 x 211mm, 12kg

Microbiological Incubators

Two incubators for simultaneous analysis of a wide range of samples

Designed for field use

Expertly designed in a portable carry case for testing in remote environments

Configure a portable laboratory

Add pre-prepared Nutridisks to create a bespoke microbiological laboratory.

Potaflex
Microbiological
water quality laboratory

The Potaflex offers dedicated testing of microbiological water quality in a fixed site laboratory. The incubator features a unique Flexi-rack system that can accommodate a variety of media options. Operators can choose to use either the standard aluminium petri dishes or pre-prepared NutriDiscs.

- Flexible media options – the Flexi-Rack System (FRS) supports petri dishes, NutriDiscs and dipslides.
- Comprehensive kit components – includes Membrane Filtration hardware, Coliform Starter Pack and accessories.

PTW10050
Potaflex

Potaflex Incubator with adjustable temperature control, mains charger with international adaptors, external battery connectors. Flexi-RackSystem (FRS) assembly with capacity for 40 petri dishes, 20 pre-prepared Nutridisks or 8 dipslides (or a combination of each).

Membrane filtration assembly, bronze disc, pistol grip vacuum pump with no-kink silicone tubing, media measuring devices (MMDs x5), 38.1g Membrane Lauryl Sulfate Broth, Pasteur pipettes (x5), hand lens, forceps, Aluminium re-usable petri dishes (x40), sterilised and sealed membrane filters (x200), absorbent pads (x200), absorbent pad dispenser, steel sampling cup, sampling cable and instructions.

Technical Specification

Temperature Settings	Adjustable from 20°C - 50°C with user-selectable time profiles
Temperature Stability	±0.5°C
User Interface	LCD display with temperature and time remaining display
Power Supply	Mains power (110– 230V AC), external 12V DC battery connection
Weight	5 kg

The portable design of the kits makes them particularly effective when working in regions that lack a water supply infrastructure or where one has been compromised, such as in the aftermath of natural disasters.

Description	Part Code
Replacement Incubator - Potatest/Potakit/Potatech Replacement incubator for Potatest, Potakit and Potatech. Excludes mains adaptor, in-vehicle charger and external battery connectors.	PT1005
Incubator Battery Replacement battery for use in the Potatest, Potakit, and Potatech kits.	PTW10425
Replacement Incubator - Potalab/Potatest 2 Replacement incubator for Potalab and Potatest 2. Excludes mains adaptor, in-vehicle charger and external battery connectors.	PT1010
Incubator Battery Replacement battery for use in the Potalab and Potatest 2 kits.	PTW10424
Membrane Filtration Unit Complete membrane filtration unit including sampling cup, retrieval cord, gas-grade silicone filtration assembly, reversible filter cup, bronze disc.	PTW10400
Pistol Grip Hand Vacuum Pump High performance vacuum pump with 6 mm tubing connector .	PTW10401
Aluminium Petri Dishes Set of 20 dishes, 47 mm diameter.	PTW10420
Absorbent Pad Dispenser Replacement unit used in all kits for dispensing pads onto Petri Dishes.	PTW 10464
Coliform Starter Pack 200 tests for either thermotolerant (faecal) coliforms or total coliforms including membrane filters, absorbent pads, membrane lauryl Sulfate broth (38.1g).	PTW10450
Membrane Lauryl Sulfate Broth 500g (MLSB) powder for field preparation of nutrient media. Supplied in sealed pack with tamper seal.	PTW10452
Membrane Lauryl Sulfate Broth 38.1g MLSB powder for field preparation of nutrient media. Supplied in sealed pack with tamper seal.	PTW10454
Membrane Filters (200 pack) White, gridded membrane for simple colony count. 0.45 µm mesh size, 47 mm diameter, supplied in sterile sealed individual pack.	PTW10459
Absorbent Pads and Membranes (200 pack) White, gridded membrane for simple colony count. 0.45 µm mesh size, 47 mm diameter, supplied in sterile sealed individual pack. Absorbent pads, 2 packs of 100 each for use with pad dispenser.	PTW10460
Membrane Filters (1000 pack) White, gridded membrane for simple colony count. 0.45 µm mesh size, 47 mm diameter, supplied in sterile sealed individual pack.	PTW10461
Absorbent Pads and Membranes (1000 pack) White, gridded membrane for simple colony count. 0.45 µm mesh size, 47 mm diameter, supplied in sterile sealed individual pack, 5 packs of 200 each. Absorbent pads, 10 packs of 100 each for use with absorbent pad dispenser.	PTW10462
Absorbent Pads (100 pack) For use with pad dispenser.	PTW10463

Wagtech kits are supplied as standard with MLSB media for enumerating total/ faecel coliforms. The kits can then be extended by ordering sterile, dehydrated culture media, in the format of NutriDiscs that target more specific organisms such as E. coli.

These NutriDiscs can be used in the standard Wagtech incubators, and also in the flexible Potaflex incubator. The Potaflex offers the additional advantage of allowing for both plate-based tests such as NutriDiscs, alongside alternative media delivery devices such as Dipslides.

Description	Part Code
NutriDisc Pack for Faecal Streptococci Azide NutriDisc Set Set comprises 100 tests, supplied in sealed packs of 10.	PTW10060
NutriDisc Pack for Pseudomonas Aeruginosa Cetrimide NutriDisc Set Set comprises 100 tests, supplied in sealed packs of 10.	PTW10062
NutriDisc Pack for *E. coli* and Faecal Coliforms M-FC NutriDisc Set Set comprises 100 tests, supplied in sealed packs of 10.	PTW10064
NutriDisc Pack for Total Coliforms and *E. coli* Chromocult NPS NutriDisc Set Set comprises 100 tests, supplied in sealed packs of 10.	PTW10065
NutriDisc Pack for Total Colony Forming Units Plate Count NutriDisc Set Set comprises 100 tests, supplied in sealed packs of 10.	PTW10066
NutriDisc Pack for Salmonella Typhi Bismuth-Sulfite NutriDisc Set Set comprises 100 tests, supplied in sealed packs of 10.	PTW10067
NutriDisc Pack for *E. coli* ECD NPS NutriDisc Set Set comprises 100 tests, supplied in sealed packs of 10.	PTW10068
NutriDisc Pack for *E. coli* and Coliforms Endo NPS NutriDisc Set Set comprises 100 tests, supplied in sealed packs of 10.	PTW10069

Disinfection

Instachlor and Steadichlor

Available in formulations to support instant disinfection or longer term dosing, Palintest's disinfection products are supplied in convenient tablet format delivering a defined dosage for new and existing infrastructure sanitisation.

Instachlor provides a practical solution for applications in chlorination, disinfection and sterilisation. Instachlor PR tablets are a range of rapid dissolving chlorine release tablets for professional applications in water treatment, disinfection and emergency chlorination.

The tablets are prepared from an effervescent formulation containing sodium dichloroisocyanurate - an organic chlorine donor and dissolve rapidly when added to water to release chlorine into solution.

Quantity of water which can be treated with each tablet to provide the various chlorine doses referred to:

Code	Description	Volume of water (Litres)			Tablets
		for 1mg/L	for 2.5 mg/L	for 5 mg/L	
WT406	Instachlor - PR 5	5	2	1	500
WT415	Instachlor - PR 40	50	20	10	250
WT424	Instachlor - PR 150	150	60	30	250
WT442	Instachlor - PR 1000	1000	400	200	100
WT446	Instachlor - PR 1000	1000	400	200	300
WT448	Instachlor - PR 3000	3000	1200	600	200

Available chlorine concentration provided by each tablet when added to various volumes of water:

Code	Description	Available Chlorine (mg/L) provided			
		in 1 litre	in 10 litres	in 100 litres	in 1000 litres
WT406	Instachlor - PR 5	5	0.5	-	-
WT415	Instachlor - PR 40	50	5	0.5	-
WT424	Instachlor - PR 150	150	15	15	0.15
WT442	Instachlor - PR 1000	1000	100	10	1
WT446	Instachlor - PR 1000	1000	100	10	1

Ordering Information

Code	Description	NaDCC	Available chlorine content	Nominal tablet weight	Tablet diameter
WT406	Instachlor - PR 5	8.5 mg	5.1mg	0.06g	5 mm
WT415	Instachlor - PR 40	67 mg	40.2 mg	0.35g	10 mm
WT424	Instachlor - PR 150	250 mg	150 mg	1.08g	16 mm
WT442	Instachlor - PR 1000	1.7g	1g	3.25g	18 mm
WT446	Instachlor - PR 1000	1.7g	1g	3.25g	18 mm

Disinfection
Steadichlor

Steadichlor provides practical solutions for applications in chlorination, disinfection and sterilisation.

Steadichlor tablets offer a simple and effective means of water chlorination without the need for complex dosing equipment. The tablets dissolve in water to give a slow steady chlorine release. The dissolving time is approximately four hours in flowing water or 12-24 hours in static water. Steadichlor tablets are prepared from calcium hypochlorite. In use, the tablets do not contribute any substances not normally present in treated mains water.

Disinfection of water mains and tanks

The Steadichlor system is established as one of the simplest means of disinfecting new or repaired water mains and tanks. A feature of the Steadichlor system is the unique Palintest Chlorocol test, especially developed for the control of mains disinfection procedures.

Pipe diameter	Spacing between each tablet (metres) required to give minimum 30 mg/L chlorine dose
80 mm	3
100 mm	4
150 mm	6
200 mm	8
250 mm	10
300 mm	12
400 mm	15
450 mm	18

Chlorination of water

Steadichlor tablets offer an ideal means of chlorinating water in tanks, wells or small reservoirs, and waste water in tanks or effluent streams.

The tablets should be used in accordance with standard chlorination practice depending on the water to be treated and the purpose of treatment.

Where chlorination is to be carried out to disinfect the water, a free chlorination residual of at least 1 mg/L should be achieved in the treated water. Note that it will normally be necessary to add a higher chlorine dose to satisfy the chlorine demand.

Volume of water to be treated	No. of tablets to give 1 mg/L chlorine dose
14000 Litres	1
28000 Litres	2
56000 Litres	4

Ordering Information

Code	Tablet diameter
WT123	10 mm

Distributed By:

Palintest
Water Analysis Technologies
A HALMA COMPANY

www.palintest.com