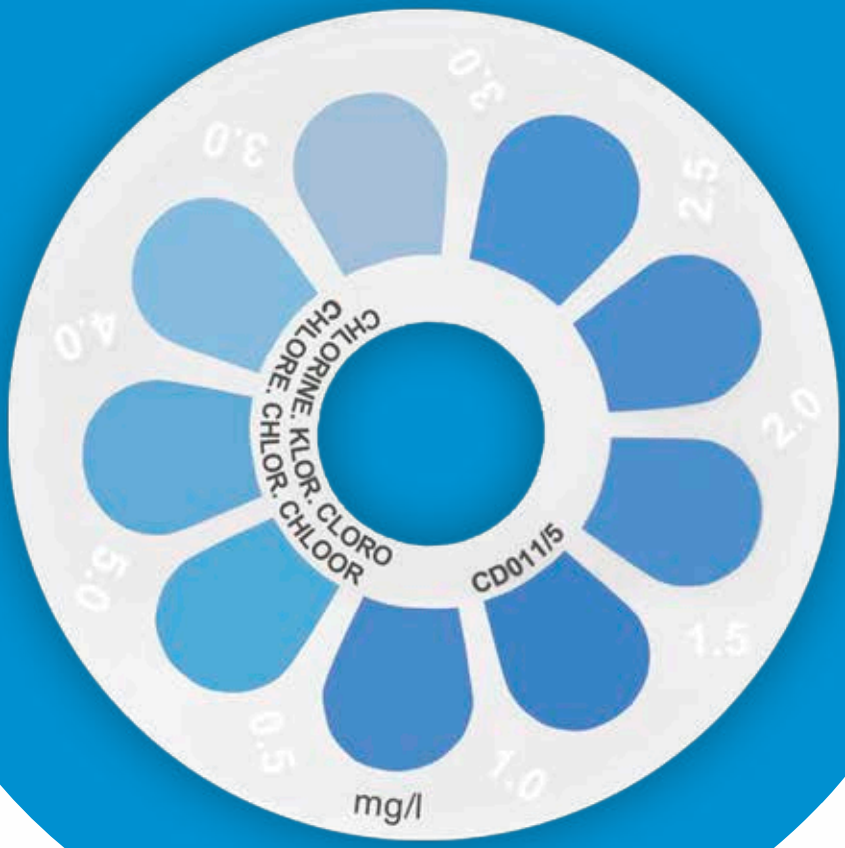
WATER TESTING CATALOGUE

FOR POTABLE AND PROCESS WATER APPLICATIONS



Palintest

Water Analysis Technologies

About us

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

Backed by over 70 years of research, our assured technologies are used in over 100 countries and across a variety of applications to protect lives and the environment, assist with regulatory compliance, and facilitate system optimisation.

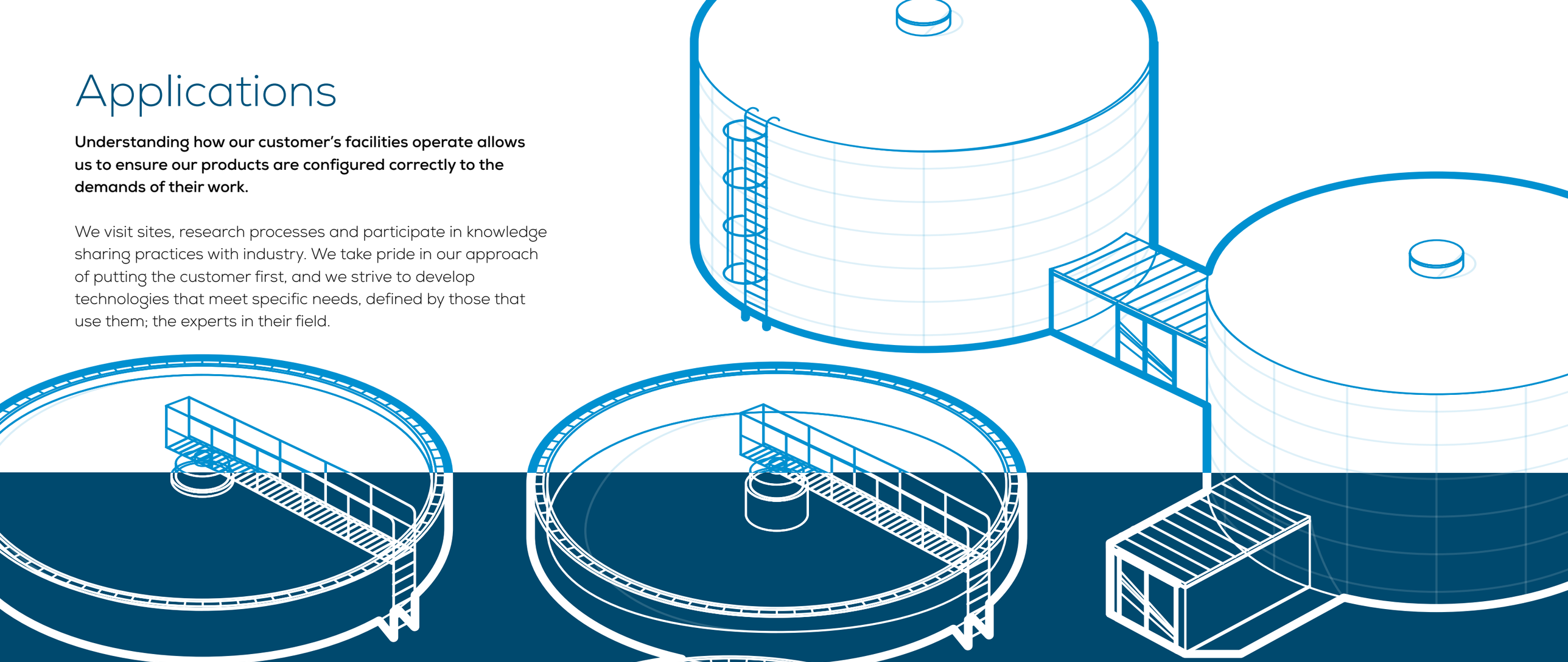
Our firm commitment to product development means we're continually evaluating new and existing technologies to make improvements to the way we operate. Over the years we have developed a number of market firsts and we continue to push the boundaries of innovation, enabling our customers to make critical decisions with confidence.

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, Singapore, the Middle East and the United States, we have also developed a trusted distribution network who are strategically positioned to support your needs.

Applications

Understanding how our customer's facilities operate allows us to ensure our products are configured correctly to the demands of their work.

We visit sites, research processes and participate in knowledge sharing practices with industry. We take pride in our approach of putting the customer first, and we strive to develop technologies that meet specific needs, defined by those that use them; the experts in their field.



Potable Water

Drinking water production generally starts with raw water abstraction (from surface water e.g lakes, reservoirs etc) and groundwater.

It's 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.

Raw water

Water treatment works

Network testing

Secondary disinfection

Point of use

Process water

We define process water as water treated for non-potable purposes such as food processing, pharmaceuticals, mining etc.

Boilers & cooling towers

Oil & gas production

Food & beverage

Mining

Aquaculture

Paper/pulp production

Contents

Photometry & Nephelometry

Photometric or colorimetric analysis is an incredibly powerful yet simple-to-use technique. Allowing a wide range of parameters to be accurately determined, it is ideal for providing critical information required for drinking water, wastewater, environmental and process applications.

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

Compact Photometers
Our compact photometer range comprises handheld units with single-parameter calibrations.

Configure a system:

1 **Select instrument platform:**
Multiparameter or single parameter.
Options for instrument only or kits.

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

3 **Select accessories:**
Such as; spare cuvettes, Check Standards, Tubetests heater blocks.

Photometer features key:

Tablet icon:
This instrument is compatible with tablet reagents.

Tubes icon:
This instrument is compatible with liquid Tubetests reagents.

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

Wireless icon:
This instrument includes a data transfer function via Bluetooth.

Touchscreen Icon:
This instrument features a touchscreen menu interface.

Multiparameter Photometers Overview

	Photometer 7100 	Photometer 7500 Bluetooth® 	Photometer 8000 
Battery Power	•	•	•
Number of Methods	>100	>100	>100
Sample ID	•	•	•
Frequently Used Test List/Hot Keys	•	•	•
Multiple Date Formats	•	•	•
Automatic Method Set-Up	•	•	•
Timer	•	•	•
Automatic Read on Time Elapse	•	•	•
Date/Time	•	•	•
Backlight with User Control	•	•	•
Accessible Optical Bench for Cleaning	•	•	•
Automatic Cuvette Centering	•	•	•
Numeric/Select Key Interface	•	•	•
Connectivity		Bluetooth SMART & USB	RS232/USB
Mains Power		Via USB port	•
Bi-directional serial communication		•	•
User Defined Tests		30	50
CSV Format Data Download		•	•
User Access Control Lock	•	•	•
Result Log		•	•
Drag and Drop Method Update		•	
RS232 Connectivity			•
Barcode reader for Tubetests			•
Touchscreen interface			•
User Favourite Test List			•
Selectable Data Download			•
Memory Capacity	100	500	1000

Photometer 8000

Designed for the laboratory, the Photometer 8000 is a sophisticated, yet easy to use, multiparameter photometer. The 8000 has multiple options for customisation including storing tests by user name, ensuring minimal operator setup and leading to efficient analysis times.

- Touch Screen operation with intuitive menu driven selections
- Advanced optics emulates the performance of rotating the sample tube under test without using any moving parts. Barcode recognition for Tubetests reagents

PT800 / PT800CASE

Touch screen interface | USB data transfer | Tablet reagents | Tubetests reagents

Technical Specification

Instrument Type	Split beam colorimeter offering direct-reading of pre-programmed test calibrations, Absorbance and Transmittance
Wavelengths	450nm, 500nm, 550nm, 570nm, 600nm, 650nm
Accuracy	±0.8% T
Display	320 x 240 pixel LCD with touchscreen & optional backlight
User Interface	On screen prompts available in English, French, Spanish, Italian and German
Size (W x L x H) and weight	290 x 240 x 90 mm, 975 g
Power Supply	9V adaptor (supplied) or 8 x 1.5V (AA) batteries
Connectivity	RS232 or USB connection
User Defined Methods	Up to 50 additional methods
Memory Capacity	Up to 1000 data sets

Ordering Information

PT 800
Photometer 8000 Benchtop Kit
Instrument and light cap, universal mains power supply, RS-232 cable, USB cable/RS-232 converter, 8 'AA' batteries, 10 cuvettes, instrument instruction manual, Palintest System method book. Supplied in a transit case for shipping protection.

PT 800CASE
Photometer 8000 Engineers Kit
Instrument and light cap, universal mains power supply, USB cable/RS-232 converter, 8 'AA' batteries, 2 dilution tubes, 4 cuvettes, test tube brush, 10 crush/stir rods, 20ml syringe with Luer fitting, dilution syringe 10/100, De-ion pack, GFB filter pack, Luer filter holder, 4 reagent transport packs (no reagents), instrument instruction manual, method book. Supplied in an IP67 hard case.

Photometer Reagents
See the full list of tablet and liquid reagents that are pre-programmed on Palintest multiparameter Photometers.
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PTBR /BH / BW 7500

Bluetooth data transfer | USB data transfer | Tablet reagents | Tubetests reagents

Ordering Information

PTBR 7500
Photometer 7500 Bluetooth Benchtop Kit
Instrument and light cap, 10 glass cuvettes, cuvette rack, lint free cloth, 10ml 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.

PTBH 7500
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, 10ml syringe, instrument instructions, Palintest method book. Supplied in a hard case.

PTBW 7500
Photometer 7500 Bluetooth Engineers Kit
Instrument and light cap, 8 glass cuvettes, 2 dilution tubes/sample containers, 20ml syringe with Luer fitting, Luer filter holder, GFB filter pack, 10ml 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 (PM code)..

Photometer 7500

The multiparameter 7500 is our most popular photometer due its versatility and simplicity of use. Reliable and intuitive Palintest methods combine with data management via the Palintest Aqua Pal App or Web Portal.

- Effortlessly store test data and transfer to a smart phone or tablet with Bluetooth
- Develop your own tests - load them via the USB port into your photometer with a simple software tool

Technical Specification

Instrument Type	Split beam colorimeter offering direct-reading of pre-programmed test calibrations, Absorbance and Transmittance
Wavelengths	450nm, 500nm, 550nm, 570nm, 600nm, 650nm
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 Mandarin (Chinese).
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 entry-level multiparameter Photometer in the range, the 7100 is simple to use, robust in construction and designed for on-site analysis. The 7100 provides dependable results to enable decisions on water quality to be made instantly and with confidence.

- Simple operation with automatic setup for each test. Designed for Palintest reagent systems in Tablet form or liquid based Tubetests reagents with its adaptive cell holder
- Rapid access to frequently used tests from a choice of over 100 parameters/methods

PTR7100 / PTH7100

Tablet reagents

Tubetests reagents

Technical Specification

Instrument Type	Dual light source photometer offering direct-reading of pre-programmed test calibrations, Absorbance and Transmittance
Wavelengths	450nm, 500nm, 550nm, 570nm, 600nm, 650nm
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 and German
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)
Memory Capacity	Up to 100 data sets

Ordering Information

PTR 7100
Photometer 7100 Benchtop Kit
Instrument, 10 glass cuvettes, dilution tube/ sample container, cuvette brush, 10 crush/ stirring rods, lint free cloths, instrument instructions, Palintest method book. Supplied in a transit carton for shipping protection.

PTH 7100
Photometer 7100 Standard Kit
Instrument and light cap, 8 glass cuvettes, dilution tube/sample container, 10ml syringe, test tube brush, 10 crush/stirring rods, lint free cloths, instrument instructions, Palintest method book. Supplied in a hard case.

Photometer Reagents
See the full list of tablet and liquid reagents that are pre-programmed on Palintest multiparameter Photometers.

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Photometer Accessories

PT 802	Photometer 8000 Check Standards. Supplied in a storage case with certificate
PT 804	Photometer 7100/7500 Check Standards. Supplied in a storage case with certificate
PT 595/5	Photometer Cuvettes (x5) - glass, with caps. 20 mm OD, 77 mm tall with 10ml graduation
PT 524/5	Round Test Tubes for Photometer, 10 ml plastic (pack of 5)
PT 502	Crush/Stirring Rods - Pack of 10 crush/stirring rods
PT 503	Nessler Tubes, 50 ml, glass (pair)
PT 641	Measuring Cylinder, plastic, 10 ml
PT 530	P/P 250 ml Graduated Bottle
PT 512	Sample Container/Dilution Tube
PT 516	Wash Bottle, 250 ml
PT 518	Wash Bottle (for Deionised Water)
PT 519	Sample Container, 50/10 ml plastic bottle
PT 526	Sample Container, 20/10 ml plastic tube
PT 500	De-Ion Pack (makes approx 5 litres Deionised Water)
PT 1250	Deionised Water, 500ml
PT 105 (/1 /2 /3)	pH Buffer Solution, 500ml (pH 4 - PT 105/1), (pH 7 - PT 105/3), (pH 10 - PT 105/2)
PT 745	USB Power Supply Unit
PT 746	USB Photometer-Computer/PSU Cable
PT (361 / 362 / 365)	Plastic Syringe (1 ml - PT 361), (2 ml - PT 362), (5 ml - PT 365), (10 ml - PT 369)
PT (370 / 372)	Plastic Syringe, Luer fitting (20 ml - PT 370), (50 ml - PT 372)
PT 375	Dilution Syringe, x 10/100 (for use with PT 512)
PT 376	Dilution Syringe, x 100/1000 (for use with PT 512)
PT 606	Filter Holder, Luer, 2.5 cm dia
PT 605	Filter 0.45µm membrane, 2.5 cm dia (Box of 50)
PT 603	Filter Paper, GF/B, 2.5 cm dia (Pack of 50)
PT 607	Filter Funnel, 7 cm diameter, plastic
PT 618	Filter Paper, No 40, 11 cm diameter (100 Circles)

Photometer Reagents

Tablet Reagents

Photometer tablet reagents are available in two pack sizes; Starter Packs of 50 tests (PM code) and Replacement Packs of 200/250 tests (AP code).

Test Name	Measurement Range	Starter Pack (50 tests)	Replacement Pack (250 tests)
M – Alkalinity (Alkaphot M™)	0 – 500 mg/L $CaCO_3$	PM 250	AP 250
P – Alkalinity (Alkaphot P™)	0 – 500 mg/L $CaCO_3$	PM 251	AP 251
Total Alkalinity (Alkaphot)	0 – 500 mg/L $CaCO_3$	PM 188	AP 188
Aluminium	0 – 0.5 mg/L Al	PM 166	AP 166
Ammonia	0 – 1.0 mg/L N	PM 152	AP 152
Bromine	0 – 10 mg/L Br_2	PM 060	AP 060
Boron	0 – 2.5 mg/L B	PM 190	AP 190 (160 tests)
Calcium Hardness (Calcicol™)	0 – 500 mg/L $CaCO_3$	PM 252	AP 252
Chloride (Chloridol™)	0 – 50,000 mg/L NaCl	PM 268	AP 268
Chlorine - Free (DPD 1)	0 – 5 mg/L Cl_2	PM 011	AP 011
Chlorine – Free, extended range (DPD XF)	0 – 10 mg/L Cl_2	PM 013	AP 013
Chlorine – Free, Combined & Total (DPD 1 & 3)	0 – 5 mg/L Cl_2	PM 031	AP 031
Chlorine – Free, Combined & Total, extended range (DPD XF & XT)	0 – 10 mg/L Cl_2	PM 033	AP 033
Chlorine – Total (DPD 4)	0 – 5 mg/L Cl_2	PM 041	AP 041
Chlorine – Total (DPD 3 only)	0 – 5 mg/L Cl_2	-	AP 031/1
Chlorine – Total, extended range (DPD XT only)	0 – 10 mg/L Cl_2	-	AP 033/1
Chlorine HR	0 – 250 mg/L Cl_2	PM 162	AP 162
Chlorine Dioxide and Chlorite (DPD method)	0 – 10 mg/L ClO_2	PM 052	AP 052
Chlorine Dioxide LR (Lissamine Green B method)	0 - 2.5 mg/L ClO_2	PM 064	AP 064
Chlorine Dioxide HR (Lissamine Green B method)	2.5 - 20 mg/L ClO_2	PM 065	AP 065
Chromium VI (Chromicol™)	0 - 1.0 mg/L Cr	PM 281	AP 281
Colour	10 – 500 Hazen Units/ 10 – 500 mg/L PtCo	PM 269	-
Copper – Free, Combined & Total (Coppercol)	0 – 5 mg/L Cu	PM 186	AP 186
Copper - Free	0 – 5 mg/L Cu	-	AP 187
Cyanuric Acid	0 - 200 mg/L CNA	PM 087	AP 087
DEHA	0 – 500 ppb DEHA	PM 275	AP 275
Fluoride	0 – 1.5 mg/L F	PM 179	AP 179 (200 tests)
Hardness – Total (Hardicol)	0 – 500 mg/L $CaCO_3$	PM 254	AP 254
Hydrazine	0 – 0.5 mg/L N_2H_2	PM 103 (30 tests)	AP 103 (150 tests)
Hydrogen Peroxide LR	0 – 2 mg/L H_2O_2	PM 104	AP 104
Hydrogen Peroxide HR	0 – 100 mg/L H_2O_2	PM 105	AP 105
Iron LR	0 – 1 mg/L Fe	-	AP 155
Iron MR	0 – 5 mg/L Fe	PM 292	AP 292
Iron HR	0 – 10 mg/L Fe	PM 156	AP 156
Magnesium Hardness (Magnecol)	0 – 100 mg/L Mg	PM 193	AP 193
Manganese	0 – 0.03 mg/L Mn	PM 173	AP 173
Manganese HR	0 – 5 mg/L Mn	PM 174	AP 174
Molybdate LR	0 – 20 mg/L MoO_4	PM 258	AP 258 (200 tests)
Molybdate HR	0 – 100 mg/L MoO_4	PM 175	AP 175
Nickel (Nickeltest™)	0 – 10 mg/L Ni	PM 284	AP 284
Nitrate (Nitratest™)	0 – 20 mg/L N	PM 163	AP 163
Nitrite (Nitricol)	0 – 0.5 mg/L N	PM 109	AP 109
Nitrite (Nitriphot)	0 – 1500 mg/L $NaNO_2$	PM 260	AP 260
Organophosphonate (OP)	0 – 20 mg/L PO_4	PM 262	AP 262
Ozone (DPD method)	0 – 2 mg/L O_3	PM 056	AP 056
pH Phenol Red	pH 6.5 – 8.5	PM 130	AP 130
Phenol (Phenoltest™)	0 – 5 mg/L C_6H_5OH	PM 287	AP 287 (200 tests)
PHMB (PHMB-PHOT)	0 – 100 mg/L active biocide	PM 272	AP 272
Phosphate LR	0 – 4 mg/L PO_4	PM 177	AP 177 (200 tests)
Phosphate HR	0 – 100 mg/L PO_4	PM 114	AP 114
Potassium	0 – 12 mg/L K	PM 189	AP 189
Silica	0 – 4 mg/L SiO_2	PM 181	AP 181 (200 tests)
Silica HR	0 – 150 mg/L SiO_2	PM 290	AP 290 (200 tests)
Sulphate	0 – 200 mg/L SO_4	PM 154	AP 154
Sulphide	0 – 0.5 mg/L S	PM 168	AP 168 (200 tests)
Sulphite (Sulphitest™)	0 – 500 mg/L Na_2SO_3	PM 266	AP 266
Zinc	0 – 4 mg/L Zn	PM 148	AP 148

Photometer Reagents

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 Reagents

Tubetests

For ultimate convenience the Palintest range of Tubetests reagents offer pre-dispensed reagents for minimal handing with barcoded reagent labelling for ease of use in wastewater applications.

Available in packs of 25 tests, add any multiparameter photometer to your heater block and reagents for a complete wastewater analysis system.

- 16mm (outer diameter) tubes for improved resolution – larger diameter tubes are more sensitive in the lower part of the measuring range
- Full range of accessory heater blocks, tube racks, workplace mats and pipettes to provide the complete solution for Tubetests analysis
- Barcoded reagent labels for automatic test selection on the Photometer 8000 – including automatic blanking for COD testing

Test Name	Measurement Range	Part Code (25 tests)
Mercury Free for Low Chloride Samples		
COD/150	0 – 150 mg/L O_2	PL 450
COD/400	0 – 400 mg/L O_2	PL 452
COD/1000	0 – 1000 mg/L O_2	PL 453
COD/2000	0 – 2000 mg/L O_2	PL 454
COD/20000	0 – 20000 mg/L O_2	PL 456
Containing Mercury for Moderate Chloride Samples		
COD/150/M	0 – 150 mg/L O_2	PL 460
COD/400/M	0 – 400 mg/L O_2	PL 462
COD/1000/M	0 – 1000 mg/L O_2	PL 463
COD/2000/M	0 – 2000 mg/L O_2	PL 464
COD/20000/M	0 – 20000 mg/L O_2	PL 466
Containing Mercury for High Chloride Samples		
COD/150/2M	0 – 150 mg/L O_2	PL 461
COD/1000/2M	0 – 1000 mg/L O_2	PL 468
COD/2000/2M	0 – 2000 mg/L O_2	PL 465
COD/20000/2M	0 – 20000 mg/L O_2	PL 467
COD Standard Solutions (COD Concentration)	**(Nominal COD Concentration)**	
COD Standard Solution, 125ml	80 mg/L	PL 470
COD Standard Solution, 125ml	250 mg/L	PL 472
COD Standard Solution, 125ml	800 mg/L	PL 474
COD Standard Solution, 125ml	10000 mg/L	PL 476

Test Name	Measurement Range	Part Code (25 tests)
Nutrients		
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 – 50 mg/L N	PL 425
Ammonia 12N/50N, Indophenol Method	0 – 50 mg/L N 0 – 50 mg/L N	PL 400
Nitrate 30N	0 – 30 mg/L N /0 – 150 mg/L NO_3	PL 404
Total Nitrogen 30N (use with PL 404)	0 – 30 mg/L N	PL 408
Phosphate 12P	0 – 12 mg/L P	PL 412
Total Phosphorus 12P	0 – 12 mg/L P	PL 416
Heavy Metals		
Chromium VI (Cr^{6+})	0 – 10 mg/L Cr	PL 440
Total Chromium	0 – 10 mg/L Cr	PL 436
Copper	0 – 20 mg/L Cu	PL 427
Iron	0 – 25 mg/L Fe	PL 434
Nickel	0 – 20 mg/L Ni	PL 430
Zinc	0 – 7 mg/L Zn / 0 – 35 mg/L Zn	PL 442

Tubetests Accessories

PT 589	Standard Tubetests Heater, Safety Screen (PT 590), anodized aluminium heater block, power lead
PT 590	Replacement safety screen for Standard Tubetests Heater
PT 592 UK	Premium Tubetests Heater including integrated safety screen, anodized aluminium heater block, power lead (UK adaptor)
PT 592 EU	Premium Tubetests Heater including integrated safety screen, anodized aluminium heater block, power lead (EU adaptor)
PT 592 USA	Premium Tubetests Heater including integrated safety screen, anodized aluminium heater block, power lead (US adaptor)

Other Liquid Reagents

Test Name	Measurement Range	Part Code (30 tests)
Dissolved Oxygen 0.8	0 – 0.8 mg/L O_2	PL 553
Dissolved Oxygen 2.0	0 – 2.0 mg/L O_2	PL 503
Dissolved Oxygen 20	0 – 20 mg/L O_2	PL 513
Chlorine - Free (equivalent to DPD 1)	0 – 5 mg/L Cl_2	AT 015
Chlorine - Total (equivalent to DPD 3). Use in conjunction with AT 015	0 – 5 mg/L Cl_2	AT 035

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
- Specifically designed for field use with storage for 1000 results and battery power for approximately 10,000 tests
- Unique Quadoptix technology with four individual measurement points for increased reliability
- Variety of operating and reading modes including TSS, Average and Continuous Capture
- USB connectivity for power, downloading data and installing software upgrades
- IP67 certified with a waterproof USB socket

USB icon

PTH092

Technical Specification

Optical System	QuadoptiX™ optical system with two independent 860nm LED sources, ISO 7027 Compliant
Ranges	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

Ordering Information

PTH 092
Turbimeter Kit
Instrument, 4 SDVB calibration standards, 4 sample cuvettes, silicone oil, dilution tube, cleaning cloths, instructions. Supplied in a hard case.

Accessories

PTC 092	Turbimeter Plus Calibration Set - Replacement SDVB calibration standards provided in hard case with certificate
PT 555	Sample Tube - Pack of 5 glass cuvettes with caps. 25mm (outer diameter) with 10ml graduation
PT 120	Silicone oil, 10 ml
PT 121	4000 NTU Formazin stock solution, 100 ml
PT 663	Cuvette Brush - For cleaning cuvettes, length 120 mm
PTC 090	Turbimeter Calibration Set - Replacement SDVB calibration standards for the previous generation Turbimeter

Compact Chlorometer

PTS045D / PTH045D

Tablet reagents (liquid alternatives available)

The Compact Chlorometer ensures accurate analysis of free, combined and total chlorine in a simple-to-use portable photometer.

- True chlorine calibration – results are calibrated against real chlorine samples for the most accurate result
- DPD method application – both tablet and liquid reagents are available to measure free chlorine, monochloramine and/or total chlorine up to 5 mg/L chlorine
- Two button operation – blank and read simply with a single button push

Ordering Information

PTS 045D
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.

PTH 045D
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.

Accessories

PTC 045	Chlorometer NDF Check Standards. 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	AP 011
Monochloramine (DPD 2 - use with DPD 1)	0 – 5 mg/L Cl_2	AP 021
Total Chlorine (DPD 3 - use with DPD 1)	0 – 5 mg/L Cl_2	AP 031/1
Free and Total Chlorine (DPD 1 & DPD 3)	0 – 5 mg/L Cl_2	AP 031
Total Chlorine (DPD 4)	0 – 5 mg/L Cl_2	AP 041
Free Chlorine - DPD 1 Liquid (A+B), 12 bottle pack		AT 015
Total Chlorine - DPD 3 Liquid (C – use with AT 015), 12 bottle pack		AT 035

Compact Chlorometer Duo

Whether testing drinking water compliance using the DPD method or measuring higher levels of chlorine concentration for process applications via the Chlorine HR method, the Compact Chlorometer Duo provides both.

- Simple operation – blank or measure with a single buttont
- Waterproof and battery powered – ideal for field use
- Measure both high and low concentrations of chlorine on n one meter

Tablet reagents (liquid alternatives available)

PTH027 / PTS027

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 40mm, 200 g
Power Supply	2 x AA batteries

Ordering Information

PTH 027
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.

PTS 027
Compact Chlorometer Duo, 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.

Accessories

PTC 027	Chlorometer Duo NDF Check Standards. Supplied in hard case with certification.

Test Name	Measurement Range	Part Code (250 tests)
Chlorine - Free (DPD 1)	0 – 5 mg/L Cl_2	AP 011
Monochloramine (DPD 2 - use with DPD 1)	0 – 5 mg/L Cl_2	AP 021
Total Chlorine (DPD 3 - use with DPD 1)	0 – 5 mg/L Cl_2	AP 031/1
Free and Total Chlorine (DPD 1 & DPD 3)	0 – 5 mg/L Cl_2	AP 031
Total Chlorine (DPD 4)	0 – 5 mg/L Cl_2	AP 041
Chlorine HR	0 – 250 mg/L Cl_2	AP 162
Free Chlorine - DPD 1 Liquid (A+B), 12 bottle pack		AT 015
Total Chlorine - DPD 3 Liquid (C – use with AT 015), 12 bottle pack		AT 035

Compact ClO2+ Meter

The Compact ClO2+ meter provides field analysis of chlorine and chlorine dioxide using the DPD method.

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

PTH046 / PTS046

Tablet reagents

Ordering Information

PTH 046
Compact ClO2+ Meter Kit, Hard Case
Instrument, 4 cuvettes, cuvette brush, crush/stirring rods, 100 DPD 1 tablets, 100 DPD 3 tablets, 100 DPD Glycine tablets, instructions. Supplied in a hard case.

PTS 046
Compact ClO2+ Meter Kit, Soft Case
Instrument, 2 cuvettes, cuvette brush, crush/stirring rods, 50 DPD 1 tablets, 50 DPD 3 tablets, 50 DPD Glycine tablets, instructions. Supplied in a soft case with belt loop.

Accessories

PTC 046	Compact ClO2+ NDF Check Standards. Supplied in hard case with certification.

Technical Specification

Measuring System	Dual LED source, direct reading colorimeter
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	AP 011
Monochloramine (DPD 2 - use with DPD 1)	0 – 5 mg/L Cl_2	AP 021
Total Chlorine (DPD 3 - use with DPD 1)	0 – 5 mg/L Cl_2	AP 031/1
Free and Total Chlorine (DPD 1 & DPD 3)	0 – 5 mg/L Cl_2	AP 031
Total Chlorine (DPD 4)	0 – 5 mg/L Cl_2	AP 041
DPD Acidifying		AT 052
DPD Glycine		AT 056
DPD Neutralising		AT 058

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.

Tablet reagents

PTH043 / PTS043

Technical Specification

Measuring System	Dual LED source, direct reading colorimeter
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 40mm, 200 g
Power Supply	2 x AA batteries

Ordering Information

PTH 043
Compact Ozone Meter Kit, Hard Case
Instrument, 4 cuvettes, cuvette brush, crush/stirring rods, 200 tests for ozone, instructions. Supplied in a hard case.

PTS 043
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.

Accessories

PTC 043	Ozone Meter NDF Check Standards. Supplied in hard case with certification.

Test Name	Measurement Range	Part Code (250 tests)
Ozone	0 – 3 mg/L O_3	AP 056
DPD Glycine (250F)		AT 056

Compact
Ammonia+ Meter

PTH041 / PTS041

Tubetests reagents

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. The Meter features a choice of operating ranges for measuring up to 100 mg/L.

Ordering Information

PTH 041
Compact Ammonia+ Kit, Hard Case
Instrument, Tubetests Adaptor, instruction manual. Supplied in a hard case.

PTS 041
Compact Ammonia+ Kit, Soft Case
Instrument, Tubetests Adaptor, instruction manual. Supplied in a soft case with belt loop.

Accessories

PTC 041	Ammonia+ Meter NDF Check Standards. 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

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

Compact
Ammonia Duo

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

The Ammonia Duo Meter provides for a wider range of applications, with a choice of Nessler or Indophenol method analysis and reagent formats.

Tubetests reagents

Tablet reagents

PTH042 / PTS042

Technical Specification

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

Ordering Information

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.

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.

Accessories

PTC041	Ammonia Duo Meter NDF Check Standards. Supplied in hard case with certification.

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

Combination
Photometer Kits

Combine 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.

Ordering Information

PTH7091
Turbimeter/Chlorometer Kit, Hard Case
Turbimeter Plus, 4 SDVB calibration standards, 4 sample cuvettes, silicone oil, dilution tube, cleaning cloths, Compact Chlorometer, cuvette brush, crush/stirring rods, 100 tests for free and total chlorine, instructions.
Supplied in a hard case.

PTH7092
Turbimeter/Chlorometer Duo Kit, Hard Case
Turbimeter Plus, 4 SDVB calibration standards, 4 sample cuvettes, silicone oil, dilution tube, cleaning cloths, Compact Chlorometer Duo, cuvette brush, crush/stirring rods, 50 tests for free and total chlorine (standard range), 50 tests for chlorine (high range), instructions.
Supplied in a hard case.

PTH7093
Turbimeter/ClO2+ Meter Kit, Hard Case
Turbimeter Plus instrument, 4 SDVB calibration standards, 4 sample cuvettes, silicone oil, dilution tube, cleaning cloths, Compact ClO2+ Meter, cuvette brush, crush/ stirring rods, 50 DPD 1 tablets, 50 DPD 3 tablets, 50 DPD Glycine tablets, instructions.
Supplied in a hard case.

PTH7094
Turbimeter/Ozone Meter Kit, Hard Case
Turbimeter Plus instrument, 4 SDVB calibration standards, 4 sample cuvettes, silicone oil, dilution tube, cleaning cloths, Compact Ozone Meter, cuvette brush, crush/stirring rods, 100 tests for ozone, instructions.
Supplied in a hard case.

PTH7095
Turbimeter/Ammonia + Meter Kit, Hard Case
Turbimeter Plus instrument, 4 SDVB calibration standards, 4 sample cuvettes, silicone oil, dilution tube, cleaning cloths, Compact Ammonia + Meter, Tubetests Adaptor, instructions.
Supplied in a hard case.

PTH7096
Turbimeter/Ammonia Duo Kit, Hard Case
Turbimeter Plus instrument, 4 SDVB calibration standards, 4 sample cuvettes, silicone oil, dilution tube, Compact Ammonia Duo Meter, Tubetests Adaptor, cuvette brush, crush/stirring rods, 50 tablet tests for ammonia, cleaning cloths, instructions.
Supplied in a hard case.

Over 50 years' of experience in providing water testing instruments, kits and chemical reagents for drinking water, wastewater and process water applications

Palintest

Water Analysis Technologies

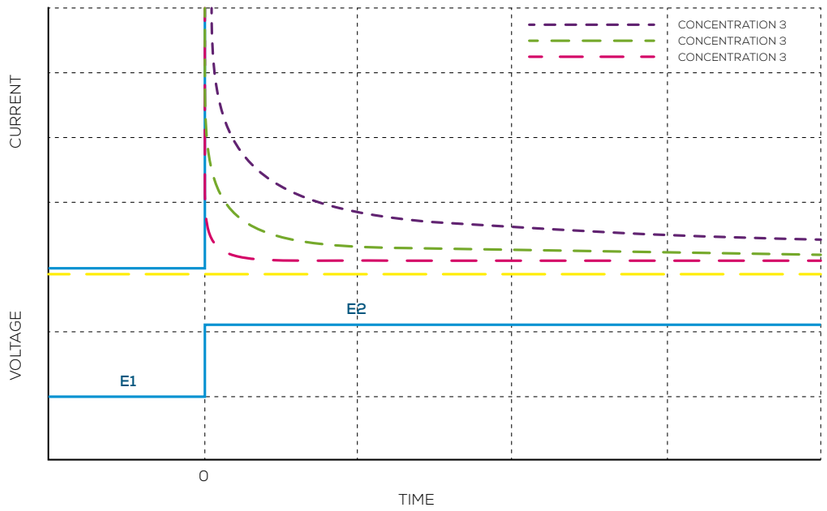
Sensor Technology

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

Simple test method – fill the sample container, insert the sensor and close the lid is often all that is required.

Repeatable and accurate results – simple measurement techniques coupled with state-of-the-art electronic instruments ensure even the lowest concentrations can be determined with confidence.

Suitable for even the most difficult samples – the sensor technique is not affected by solids or sample colour.



Sensor Technology Overview

	ChlordioX Plus	ChlordioXense	ChloroSense	Scanning Analyzer
				
Measuring Range	0 – 50 mg/L (Chlorine Dioxide) 0 - 10 mg/L (Free Chlorine) 0 - 50 mg/L (Chlorite)	0 – 50 mg/L (Chlorine Dioxide)	0 - 10 mg/L (Free Chlorine) 0 - 100 mg/L (Total Chlorine)	2 - 100 µg/L (Lead) 50 - 2000 µg/L (Copper)
Connectivity	USB	USB	USB	USB
Data Storage	500 results	500 results	500 results	500 results

Single-use electrodes

Convinient packaging and a simple mode of delivery - useful in variety of applications

Technically intuitive operation

Fill with sample water, insert electrode, and close the lid to begin the test sequence.

USB connectivity

Store results with time and date stamps, then export data via USB.

ChlordioX Plus

The ChlordioX Plus offers unique sequential sensor technology for determining Chlorine Dioxide, Chlorite and Free Chlorine, with USEPA approval.

Measuring Chlorite is a regulatory requirement when using Chlorine Dioxide as a drinking water disinfectant and the ChlordioX Plus has been designed to provide full analysis and control for all samples including solutions containing Free Chlorine.

- Simple sequential method without reagent or sample preparation – ideal for all users
- Electrochemical measuring technique – no interference from sample colour or solids
- Superb performance – report results with confidence.

CS400

Technical Specification

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

Ordering Information

CS400
ChlordioX Plus Kit
ChlordioX Plus instrument, USB cable, de-gasser assembly and battery operated pump, batteries, CDX test sensors (x200) including calibration chip, CS test sensors (x100) including calibration chip, glycine solution, CR-1 reagent, CR-2 reagent, sample bottle, stirring rods, Check Standards and instructions.

Accessories

CS190	ChlordioX Check Standards
PT546	CR-1 Reagent (for chlorite test)
PT547	CR-1 Reagent (for chlorite test)
PT549	Glycine Reagent

Replacement sensor packs	Part Code
Chlorine Dioxide and/or Chlorite Sensors (100/pk)	CDX310
Chlorine Dioxide and/or Chlorite Sensors (500/pk)	CDX350

CS300

ChlordioXense

Measure chlorine dioxide with this USEPA approved technology. The ChlordioXense offers optimal precision and accuracy in applications such as drinking water, institutional hygiene, cooling tower and food manufacturing.

Chlorine dioxide has a number of advantages as a disinfectant but measurement methods in the field can be difficult to carry out repeatably. The ChlordioXense uses unique disposable sensor technology to remove operator dependence and deliver accurate chlorine dioxide results.

- Simple test procedure – fill the sample vessel, insert the sensor and close the lid
- Results available in less than one minute – no lengthy measurement times
- Waterproof USB connection – download data without any additional software and upload software updates.

Ordering Information

CS300
ChlordioXense Kit
ChlordioXense instrument, USB cable, CDX sensors (x100) including calibration chip, glycine solution, sample bottle, stirring rods, Check Standards and instructions. Supplied in a protective shoulder case.

Accessories

CS190	ChlordioX Check Standards

Technical Specification

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

Replacement sensor packs	Part Code
Chlorine Dioxide and/or Chlorite Sensors (100/pk)	CDX310
Chlorine Dioxide and/or Chlorite Sensors (500/pk)	CDX350

ChloroSense

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

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

- Simple and rapid measurement process – fill the sample vessel, insert the sensor then close the lid - in less than one minute results for free and total chlorine are available
- No reagents and no glassware – ideal for food processing applications
- Waterproof USB connection – for instrument settings, software update and data download of results log.

CS100

Technical Specification

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

Ordering Information

CS100
ChloroSense Kit
ChloroSense instrument, USB cable, CS sensors (x100) including calibration chip, sample bottle, Check Standards and instructions. Supplied in a protective shoulder case.

Accessories

CS180	ChloroSense Check Standards

Replacement sensors packs	Part Code
Chlorine Sensors (free and total) (100/pk)	CS110
Chlorine Sensors (free and total) (500/pk)	CS150

Scanning Analyzer

PT430 / PT431

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.

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.

Note: PT430 and PT431 are the same instrument, supplied with the respective sensor packs for either Pb or Cu. Either instrument can be ordered and used to test both Pb and Cu, by ordering the respective sensors packs (see replacement packs below)

Accessories

CS640	SA1100 Check Standards

Technical Specification

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

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

Electrochemical Meters

pH

Product ID	Parameters	Range	Resolution	Accuracy	Code
pH Pocket Sensor	pH °C	-10 to 15 pH 0 to 50 °C	0.01 pH 0.1 °C	±0.01 pH ±0.5 °C	PT155
Micro 600 pH Meter	pH ORP* °C	0 to 14 pH ±1000 mV 0 to 100 °C	0.01 pH 1 mV 0.1 °C	±0.01 pH ±2 mV ±0.5 °C	PT1200
Micro 800 pH Meter	pH ORP* °C	-2 to 16 pH ±2000 mV -10 to 110 °C	0.01 pH 0.1 mV (for ±999.9 mV) 1 mV beyond 0.1 °C	±0.01 pH ±0.2 mV +2 LSD or +0.5 % of reading 0.5 °C	PT1330

*Requires optional ORP electrode purchased seperately

Conductivity / Total Dissolved Solids

Product ID	Parameters	Range	Resolution	Accuracy	Code
Pocket Conductivity Sensor	EC °C	0 to 200.0 µS/cm 0 to 2000 µS/cm 0 to 20.00 mS/cm 0 to 50 °C	0.1 µS/cm 1 µS/cm 0.01 mS/cm ±0.1 °C	±1% full scale ±0.5 °C	PT157
Micro 600 Conductivity Meter	EC °C	0 to 19.99 µS/cm 20.0 to 199.9 µS/cm 200 to 1999 µS/cm 2.00 to 19.99 mS/cm 20.0 to 199.0 mS/cm 0 to 80 °C	0.05% full scale ±0.1 °C	±1% full scale + 1 LSD ±0.5 °C	PT1220
Pocket TDS Sensor	TDS °C	0 to 2000 ppm 0 to 10 ppt 0 to 50 °C	10 ppm 0.1 ppt ±0.1 °C	±1% full scale ±0.5 °C	PT153T
Micro 600 TDS Meter	TDS °C	0 to 9.99 ppm 10.0 ppm to 99.9 ppm 100 ppm to 999 ppm 1.00 to 9.99 ppt 10.0 to 99.9 ppt 0 to 80 °C	0.05 % full scale ±0.1 °C	±1% full scale + 1 LSD ±0.5 °C	PT1210
Micro 800 Conductivity/TDS Meter	EC TDS Salinity °C	0 to 200 mS/cm 0 to 200 ppt 0 to 50 ppt -10 °C to +110 °C	0.01 µS/cm to 0.1 mS/cm 0.01 ppm to 0.1 ppt 0.01 ppt 0.1 °C	±1% full scale ±1% full scale ±1% full scale +0.5 °C	PT1340

Dissolved Oxygen

Product ID	Parameters	Range	Resolution	Accuracy	Code
Micro 600 DO Meter	DO °C	0 to 20.00 mg/L or ppm 0 to 50 °C	0.01 mg/L or ppm 0.1 °C	±1.5% full scale ±0.5 °C	PT1240
Micro 800 DO Meter	DO EC Salinity °C	0 to 50 mg/L 0 to 200 mS/cm 0 to 70 ppt -5 °C to +50 °C	0 to 0.01 mg/L ±1% full scale 0.01 ppt 0.1 °C	±1% reading ±1% full scale ±1% reading 0.5 °C	PT1303

Multiparameter

Product ID	Parameters	Range	Resolution	Accuracy	Code
Pocket Multiparameter Sensor	pH EC TDS Salinity °C	0 to 14 pH 0 to 199.9 µS/cm 200 to 1999 µS/cm 2.00 to 20.00 mS/cm 0 to 99.9 ppm 100 to 999 ppm 1.00 to 10.00 ppt 0 to 99.9 ppm 100 to 999 ppm 1.00 to 10.00 ppt 0 to 1.00 % 0 to 50 °C	0.01 mg/L or ppm 0.1 µS/cm 1 µS/cm 0.01 mS/cm 0.1 ppm 1.0 ppm 0.01 ppt 0.1 ppm 1 ppm 0.01 ppt 0.1 °C	±0.01 pH ±1% full scale ±1% full scale ±1% full scale ±0.5 °C	PT162
Micro 800 Multiparameter Meter	pH ORP* EC TDS °C	-2.00 to 16.00 pH ±2000 mV 0 to 200 mS/cm 0 to 200 ppt -10 to +110 °C	0.01 pH 0.1 mV (for ±999.9 mV, 1 mV beyond) 0.01 µS/cm to 0.1 mS/cm 0.01 ppm to 0.1 ppt ±0.5 °C	±0.01 pH ±0.2 +2 LSD or ±0.5% ±1% full scale ±1% full scale ±0.5 °C	PT1350
Macro 900 Multiparameter Meter	pH ORP EC TDS Resistivity Salinity Density (SPG) Depth °C	0 to 14 pH ±0.01 pH 0 to 200 mS/cm (0 to 200,000 µS/cm) 0 to 100,000 mg/L 5 Ωcm to 1 MΩcm 0 to 70.00 ppt 0 to 50 st 0 to 30 m -5 °C to 50 °C	0.01 pH 0.1 mV 0 to 9999 µS/cm 10.00 to 99.99 mS/cm 100.0 to 200.0 mS/cm 0 to 9999 mg/L 10.00 to 100.00 g/L 5 to 9999 Ωcm 10.0 to 1000.0 KΩcm 0.01 ppt 0.1 st 0.01 m 0.1 °C	±0.01 pH ±5 mV ±1% of reading or ±1 µS/cm (if greater) ±1% of reading or ±1 mg/L (if greater) ±1% of reading or ±1 Ωcm (if greater) ±1% of reading or ±0.1 unit of reading ±1.0 st ±0.1 m ±0.5 °C	(PT1401 + PT1529)**

*Requires optional ORP electrode purchased seperately

**Based on standard configuration. Additional parameters (electrodes) avaiable, and cable also needs to be ordered.

pH
Pocket Sensor

PT155

Pocket Sensors combine a simple to use menu system and intuitive user interface, providing the ideal solution for quick and easy in-situ testing.

- Double junction electrode with polymer gel electrolyte
- Wide dynamic measuring range
- IP67 waterproof casing protects the instrument in all environments
- Replaceable sensor for quick and simple maintenance on the go

Technical Specification

	pH	Temperature
Range	-1.0 to 15.0 pH	0 to 50 °C
Resolution	0.01 pH	0.1 °C
Accuracy	±0.01 pH	±0.5 °C
Calibration	Up to 3 points	
Power	4 x A76/LR44 button cell batteries	
Size & Weight	165 x 38 x 38 mm, 90g	

Ordering Information

PT155	pH pocket sensor
PT155PH	Replacement pH sensor

PT1220

Micro 600
pH Meter

The Micro 600 analyses pH/temperature as well as millivolts, enabling oxidation-reduction potential measurements to be recorded. The advanced technology of this meter make it the ideal choice where a laboratory specification instrument is required for both benchtop and field use.

- Multi-point calibration (up to 3 points) with automatic buffer recognition
- Automatic Temperature Compensation (ATC) maintains accuracy under fluctuating sample temperatures
- Control disinfectant dosing with ORP measurement option

Technical Specification

	pH	mV (ORP)	Temperature
Range	0.00 to 14.00 pH	±1000 mV	0 to 100 °C
Resolution	0.01 pH	1 mV	0.1 °C
Accuracy	±0.01 pH	±2 mV	±0.5 °C
Temperature Compensation	Auto/manual; one point per range		
Calibration	Up to 3 points		
Power	4 x AAA batteries		
Size & Weight	157 x 85 x 42 mm, 255g		

Ordering Information

PT1200	Micro 600 pH handheld meter
PT110/1B	Replacement pH electrode
PT110/3B	ORP electrode
P140/4	Replacement temperature probe

Micro 800 pH Meter

The top of the range pH meter, featuring a double junction electrode and temperature measurement, the Micro 800 facilitates Good Laboratory Practice (GLP) with advanced features such as calibration reminders, pH slope indicator and data download via USB.

- Large display - view measurement with temperature and % slope
- Automatic buffer recognition for rapid calibration
- User adjustable calibration reminders
- Store 500 tests and export with USB and RS232
- Time and date stamps on results and calibration for GLP

PT1330

Technical Specification

	pH	mV (ORP)	Temperature
Range	-2.00 to 16.00 pH	±2000 mV	-10 to 110 °C
Resolution	0.01 pH	0.1 mV (for ±999.9 mV) 1 mV beyond	0.1 °C
Accuracy	±0.01 pH	±0.2 mV +2 LSD or +0.5 % of reading (whichever is greater)	0.5 °C
Calibration	Up to 5 points		Offset in 0.1 increments, ±10 °C
Temperature Compensation	Automatic or manual from -10 to 110 °C		
Memory	Stores up to 500 data sets		
Output	USB and RS232		
Real-Time Clock	Time and date stamp on calibration and stored data		
Power	2 x AA batteries		
Size & Weight	200 x 83 x 57 mm, 500g		

Ordering Information

PT1330	Micro 800 pH handheld meter
PT1330PH	Replacement double junction pH electrode
PT1330ATC	Replacement temperature electrode
PT1330ORP	ORP electrode

PT157
PT153T

Conductivity & TDS Pocket Sensors

- Automatic standard recognition for straightforward calibration
- Automatic temperature compensation and termperature displayed on screen
- Waterproof to IP67 to protect the instrument in all environments.

Technical Specification

	Conductivity Sensor PT157	TDS Sensor PT153T
Range	0 to 200.0 µS/cm 0 to 2000 µS/cm 0 to 20.00 mS/cm	0 to 2000 ppm 0 to 10 ppt
Resolution	0.1 µS/cm 1 µS/cm 0.01 mS/cm	10 ppm 0.1 ppt
Accuracy	±1% full scale	
Temperature Range	0 to 50 °C	
Temperature Resolution	±0.1 °C	
Temperature Accuracy	±0.5 °C	
Calibration	Up to 3 points	
Power	4 x A76/LR44 button cell batteries	
Size & Weight	165 x 38 mm, 90g	

Ordering Information

PT157	Conductivity Pocket Sensor
PT157CON	Replacement conductivity sensor compartment
PT153T	TDS Pocket Sensor
PT153TDS	Replacement TDS sensor compartment

Micro 600
EC / TDS

The Micro 600 handheld conductivity and TDS meters enable users to have confidence in their results with intelligent software and an advanced probe specification:

- Automatic temperature compensation (ATC) for optimum accuracy under fluctuating temperatures
- Multi-point push-button calibration
- Electrode with built-in ATC designed for minimal air bubble entrapment during measurement

PT1220

PT1210

Technical Specification

	Micro 600 Conductivity Meter PT1220	Micro 600 TDS Meter PT1210
Range	0 to 19.99 µS/cm 20.0 to 199.9 µS/cm 200 to 1999 µS/cm 2.00 to 19.99 mS/cm 20.0 to 199.0 mS/cm	0 to 9.99 ppm 10.0 ppm to 99.9 ppm 100 ppm to 999 ppm 1.00 to 9.99 ppt 10.0 to 99.9 ppt
Resolution	0.05 % full scale	
Accuracy	±1% full scale + 1 LSD	
Temperature Range	0 to 80 °C	
Temperature Resolution	±0.1 °C	
Temperature Accuracy	±0.5 °C	
Calibration	Up to 5 points (1 per range)	
Power	4 x AAA batteries	
Size & Weight	157 x 85 x 42 mm, 255g	

Ordering Information

PT1220	Micro 600 TDS handheld meter
PT1210	Micro 600 TDS handheld meter
PT142/1	Replacement TDS/Conductivity probe

PT1340

Micro 800
EC & TDS

The Micro 800 meter combines the top of the range conductivity electrode with additional software functionality. Ensure Good Laboratory Practice (GLP) by utilising advanced features such as calibration reminders, and download data via USB.

- Toggle between Conductivity, TDS or Salinity, making the kit suitable for use in a diverse range of applications from drinking water, cooling towers and effluent testing
- Large onboard memory with simple data download via USB or RS 232, perfect for demonstrating compliance
- Large LCD screen full of test information allowing full control and ensuring ease of use for operators whatever the test environment.

Technical Specification

	Conductivity	TDS	Salinity	Temperature
Range	0 to 200 mS/cm	0 to 200 ppt	0 to 50 ppt	-10 °C to +110 °C
Resolution	0.01 µS/cm to 0.1 mS/cm	0.01 ppm to 0.1 ppt	0.01 ppt	0.1 °C
Accuracy	±1% full scale			+0.5 °C
Calibration	Auto/manual; one point per range	Manual; one point per range		Offset in 0.1 increments, ±10 °C
Memory	Up to 500 data sets			
Output	USB and RS232			
Real-Time Clock	Time and date stamp on calibration and stored data			
Power	2x AA batteries			
Size & Weight	200 x 83 x 57 mm, 500 g			

Ordering Information

PT1340	Micro 800 Conductivity/TDS handheld meter
PT1340CON	Replacement probe for Micro 800 Conductivity/TDS meter

Micro 600 Dissolved Oxygen

PT1240

The Micro 600 Handheld DO meter combines Galvanic DO and temperature measurement. The advanced technology of this meter makes it suitable for both benchtop and field use.

- Easy calibration can be performed at 100% and/or 0% and mg/l or ppm against a known solution
- Automatic Temperature Compensation (ATC) guarantees the highest accuracy under varying temperature conditions
- Compensates for salinity and barometric pressure following manual input, for increased accuracy
- Supplied in a carrying case along with all consumables and parts required for immediate operation

Technical Specification

	Dissolved Oxygen	% Saturation	Temperature
Range	0 to 20.00 mg/L or ppm	0 to 200%	0 to 50 °C
Resolution	0.01 mg/L or ppm	0.1%	0.1 °C
Accuracy	±1.5% full scale		±0.5 °C
Manual Salinity Correction	0.0 to 50.0 ppt		
Manual Barometric Pressure Correction	500 to 1499 mmHg or 66.6 to 199.9 kPa		
Calibration	2 points (0%, 100%) and 1 point in a known solution (mg/L)		
Special Functions	Auto Power-Off after 20 minutes. Result hold function, and self diagnostic error messages		
Power	4 x AAA batteries		
Size & Weight	157 x 85 x 43 mm, 255g		

Ordering Information

PT1240	Micro 600 DO handheld meter
PT148/3	Replacement Galvanic DO probe

PT1303

Micro 800 Dissolved Oxygen

The most advanced DO Meter in the range, the Micro 800 features an Optical DO probe to provide high accuracy results and maintenance free operation:

- Data storage capacity with integrated GPS function allowing for results to be viewed on a map to facilitate monitoring
- Minimal calibration and maintenance required
- Automatic measurement and compensation of temperature, salinity and barometric pressure
- Accuracte measurement even in samples with no flow rate thanks to an advanced optical system

Technical Specification

	DO	Conductivity	Salinity	Temperature
Range	0 to 50 mg/L (0 - 500%)	0 to 200 mS/cm	0 to 70 ppt	-5 °C to +50 °C
Resolution	0 to 0.01 mg/L (0 to 0.1%)	0.01 µS/cm to 0.1 mS/cm	0.01 ppt	0.1 °C
Accuracy	±1% reading (0 to 20 mg/L)	±1% full scale	±1% reading	0.5 °C
Calibration	2 point	Auto/manual; one point per range	-	
Memory	Stores up to 3000 data sets			
Output	USB			
Real-Time Clock	Time, date and GPS stamp on calibration and stored data			
GPS Accuracy	±10m			
Power	5x AA batteries			
Size & Weight	180 x 90 x 40 mm, 450g			

Ordering Information

PT1303	Micro 800 optical DO - meter and probe, supplied in a hard case
PT1320	Replacement optical DO probe for Micro 800
PT1381	Link software for Micro 800
PT1465	Replacement optical DO cap set for Micro 800
PT1484	USB cable for Micro 800

Pocket Sensor Multiparameter

This compact, portable device allows highly accurate testing of multiple parameters in one sample and is suitable for a wide range of applications:

- Long life sensor – replaceable sensor with gel based electrolyte to minimise maintenance
- Wide dynamic range in a compact design. Use in any application from RO to hydroponics
- Convenience of 5 parameters in one meter that fits in your pocket
- Intuitive menu operation and dual display.

PT162

Technical Specification

	pH	Conductivity	TDS	Salinity	Temperature
Range	0 to 14.00 pH	0 to 199.9 µS/cm 200 to 1999 µS/cm 2.00 to 20.00 mS/cm	0 to 99.9 ppm 100 to 999 ppm 1.00 to 10.00 ppt	0 to 99.9 ppm 100 to 999 ppm 1.00 to 10.00 ppt 0 to 1.00 %	0 to 50 °C
Resolution	0.01 pH	0.1 µS/cm 1 µS/cm 0.01 mS/cm	0.1 ppm 1.0 ppm 0.01 ppt	0.1 ppm 1 ppm 0.01 ppt	0.1 °C
Accuracy	±0.01 pH	±1% full scale	±1% full scale	±1% full scale	±0.5 °C
Calibration	Up to 5 (Auto)	3 Auto, 3 Manual	Up to 3 points (Manual)	Up to 3 points (Manual)	
Power	5x A76 micro alkaline batteries				
Size & Weight	165 x 38 mm, 90 g				

Ordering Information

PT162	Multiparameter Pocket Sensor
PT162M	Replacement multiparameter sensor compartment

Micro 800 Multiparameter

PT1350

This Micro 800 combines the top of the range conductivity and pH electrodes to allow for simple and accurate measurements in a variety of applications. Advanced features such as calibration reminders, pH slope indicators and USB data transfer facilitate Good Laboratory Practice (GLP).

- Carry out multiple measurements simultaneously, and toggle results on the intuitive user interface
- Intelligent software featuring diagnostic functionality including troubleshooting prompts and a simple calibration process
- Automatically store the date and time of results and calibration data, and export by USB.

Technical Specification

	pH	mV (ORP)	Conductivity	TDS	Temperature
Range	-2.00 to 16.00 pH	±2000 mV	0 to 200 mS/cm	0 to 200 ppt	-10 to +110 °C
Resolution	0.01 pH	0.1 mV (for ±999.9 mV, 1 mV beyond)	0.01 µS/cm to 0.1 mS/cm	0.01 ppm to 0.1 ppt	±0.5 °C
Accuracy	±0.01 pH	±0.2 +2 LSD or ±0.5% (whichever is greater)	±1% full scale	±1% full scale	±0.5 °C
Calibration	Up to 6 points	±200 mV	Auto.Manual 1 point per range	Manual; 1 point per range	Offset in 0.1 increments, ±10 °C
Memory	Stores up to 500 data sets				
Output	USB or RS232				
Real-Time Clock	Time and data stamp on calibration and stored data				
Power	2 x AA batteries				
Size & Weight	200 x 83 x 57 mm, 500 g				

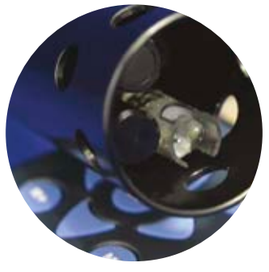
Ordering Information

PT1350	Micro 800 Multiparameter Meter
PT1330PH	Replacement pH electrode
PT1340CON	Replacement Conductivity/TDS electrode
PT1330ORP	ORP electrode (optional; required for ORP measurement)

Macro 900 Multiparameter

Combining an intuitive user interface with a suite of advanced software tools including GPS mapping and trending data, the Macro 900 is the highest specification instrument in the range. The system can be configured to meet individual requirements by customising the kit with a range of optional ion-selective electrodes and optical probes.

- Constructed from annodised aluminium and featuring a protective sleeve, the probes are protected from the environment
- Fully customisable for your application. Pick and choose your own ISE and optical probes
- Guaranteed long life with Kevlar cables connecting your IP67 rated meter to the probe
- Store 1000 data sets, including GPS data to allow for ensuing visual analyses of a survey area



Technical Specification of standard probe configuration (PT1528 / PT1529)

	Range	Resolution	Accuracy
Optical Dissolved Oxygen	0 to 500 % / 0-50.00 mg/L	0.1 % / 0.01 mg/L	0 to 200%; ±1% of reading
Conductivity	0 to 200 mS/cm (0 to 200,000 µS/cm)	0 to 9999 µS/cm 10.00 to 99.99 mS/cm 100.0 to 200.0 mS/cm	±1% of reading or ±1 µS/cm (if greater)
Total Dissolved Solids	0 to 100,000 mg/L	0 to 9999 mg/L 10.00 to 100.00 g/L	±1% of reading or ±1 mg/L (if greater)
Resistivity	5 Ωcm to 1 MΩcm	5 to 9999 Ωcm 10.0 to 1000.0 KΩcm	±1% of reading or ±1 Ωcm (if greater)
Salinity	0 to 70.00 ppt	0.01 ppt	±1% of reading or ±0.1 unit of reading
Seawater Specific Gravity	0 to 50 st	0.1 st	±1.0 st
pH	0 to 14 pH (±625 mV)	0.01 pH (±0.1 mV)	±0.01 pH (±5 mV)
ORP	±2000 mV	0.1 mV	±5 mV
Temperature	-5 °C to 50 °C	0.1 °C	±0.5 °C
Depth	0 to 30 m	0.01 m	±0.1 m

STEP 1 **Select Probe**
Use PT1401 Meter with either PT1528 or PT1529.

STEP 2 **Select cable**
Select a cable based on available lengths.

STEP 3 **Cable + optional probe/ISEs**
Choose either up to 2 ISEs, or 1x ISE and 1x Optical.

Technical Specification of optional Ion-Selective Electrodes (ISEs)

	Range	Resolution	Accuracy
Ammonium/Ammonia (PT1541)	0 – 9,000 mg/L (ppm)	2 Auto-range scales: 0.00 - 99.99 mg/L 100.0 – 8,999.9 mg/L	±10% of reading
Nitrate (PT1542)	0 – 30,000 mgL (ppm)	2 Auto-range scales: 0.00 - 99.99 mg/L 100.0 – 29,999.9 mg/L	±10% of reading
Chloride (PT1543)	0 – 20,000 mgL (ppm)	2 Auto-range scales: 0.00 - 99.99 mg/L 100.0 – 19,999.9 mg/L	±10% of reading
Calcium (PT1544)	0 – 2,000 mgL (ppm)	2 Auto-range scales: 0.00 - 99.99 mg/L 100.0 – 1,999.9 mg/L	±10% of reading
Fluoride (PT1545)	0 – 2,000 mgL (ppm)	2 Auto-range scales: 0.00 - 99.99 mg/L 100.0 – 999.9 mg/L	±10% of reading

Technical Specification of optional Optical Probes

	Range	Resolution	Accuracy
Turbidity (PT1551)	0 – 3000 NTU	2 Auto-range scales (NTU): 0 - 99.9 NTU, 100 – 3000	±2% of reading
Blue-Green Algae (fresh) (PT1552)	0 – 300,000 cells/ml	1 cell/ml	±2% of reading
Blue-Green Algae (saline) (PT1553)	0 – 200,000 cells/ml	1 cell/ml	±2% of reading
Rhodamine Water Tracer (PT1554)	0 – 500 µg/L	0.1 µg/L	±5% of reading
Fluorescein Water Tracer (PT1555)	0 – 500 µg/L	0.1 µg/L	±5% of reading
Chlorophyll (PT1556)	0 – 500 µg/L	0.1 µg/L	±2% of reading
Refined Oil (Hydrocarbons) (PT1557)	0 – 10,000 µg/L	0.1 µg/L	±2% of reading

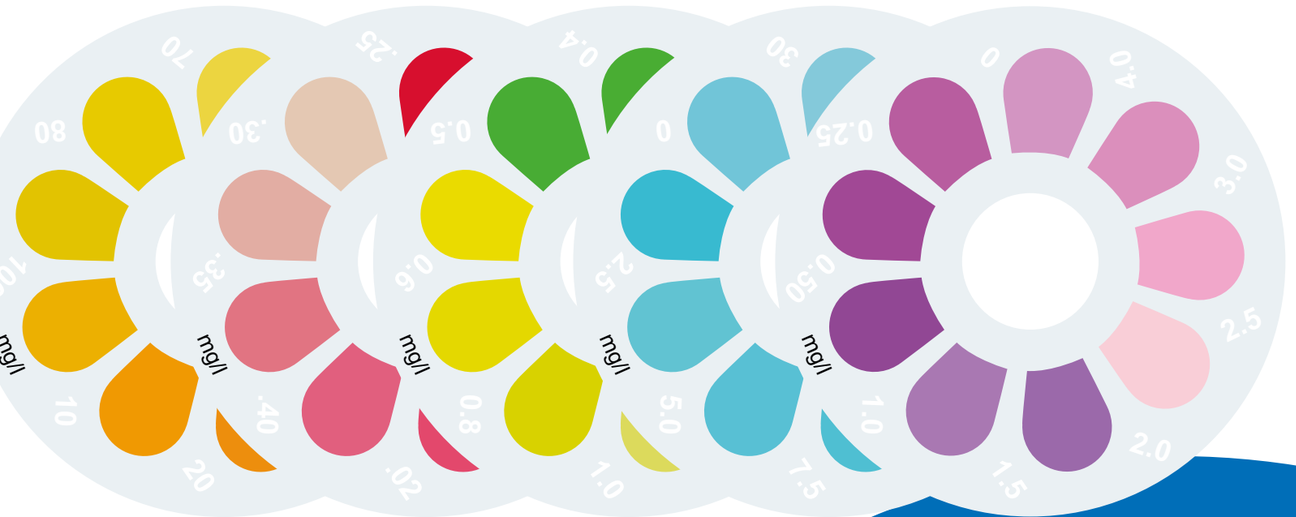
Ordering Information

1	PT1401 (Meter)	Macro 900 Meter with integral GPS and atmospheric pressure monitoring, Macro Link software CD, USB cable, screwdriver, quick release lanyard, 5 AA batteries supplied in a heavy duty case with foam insert.
2	PT1528	MAP 2000 probe (see table opposite)
	PT1529	MAP 2100 probe (as PT1528 but including depth)
3	Additional Probes?	Choose either up to x2 ISEs or x1 ISE and x1 Optical
	Cable (not included)	Choose from: PT1530 (3m), PT1531 (10m), PT1532 (20m), PT1533 (30m)

Visual Analysis Products

Our Visual Test Kits provide a similar range of parameters to our Photometric products, but using simpler test methods and analysis techniques, relying on visual comparison of colour changes in order 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 of a higher concern than detailed and accurate analyses.



Pocket Kits

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 and professional water treatment control, Pocket Kits are all based on tablet reagents and visual colour comparison or colour/turbidity change methods.

Parameter	Measurement Range	Part Code (pk 50)
Alkalinity - Total	0 – 500 mg/L $CaCO_3$	PK072
Aluminium	0 – 0.5 mg/L Al	PK166
Ammonia	0 – 1.0 mg/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 – 17 mg/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
Sulphate	0 – 200 mg/L SO_4	PK154
Zinc	0 - 2 mg/L Zn	PK149

Contour Comparator

Simple to use, and with a a wide range of both single- and dual-comparator 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 (incl. 30 tests)	Replacement Discs (each)	Replacement Reagents (pk 250)
Alkalinity	0 - 250 mg/L $CaCO_3$	CKH 1192	CKD 1192	AK 192
Aluminium	0 - 0.5 mg/L Al	CKH 1166	CKD 1166	AK 166
Ammonia	0 - 1 mg/L N	CKH 1152	CK 1152	AK 152
Chlorine - (DPD 1, Free)	0 - 5 mg/L Cl_2	CKH 1001	CKD 1001	AK 011
Monochloramine (DPD 2, requires DPD 1)	0 - 5 mg/L Cl_2	-	-	AK 021
Chlorine - (DPD 3, Total, requires DPD 1)	0 - 5 mg/L Cl_2	-	-	AK 031/1
Chlorine - (DPD 1 & 3, Free/Total/ Combined)	0 - 5 mg/L Cl_2	-	-	AK 031
Chlorine - (DPD 4, Total)	0 - 5 mg/L Cl_2	-	-	AK 041
Chlorine - Free and Total Chlorine	0 - 2 mg/L Cl_2	CKH 1002	CKD 1002	-
Chlorine - Free and Total Chlorine	0 - 1 mg/L Cl_2	CKH 1003	CKD 1003	-
Chlorine HR	0 - 50 mg/L Cl_2	CKH 162/50	CKD 162/50	-
Chlorine HR	0 - 250 mg/L Cl_2	CKH 162/250	CKD 162/250	AK 162
Copper	0 - 5 mg/L Cu	CKH 1186	CKD 1186	AK 186
Fluoride	0 - 1.5 mg/L F	CKH 1179	CKD 1179	AK 179
Hydrogen Peroxide LR	0 - 1 mg/L H_2O_2	CKH 1104	CKD 1104	AK 104
Hydrogen Peroxide HR	0 - 100 mg/L H_2O_2	CKH 1105	CKD 1105	AK 105
Iron MR	0 - 10 mg/L Fe	CKH 1292	CKD 1292	AK 292
Manganese	0 - 0.03 mg/L Mn	CKH 1173	CKD 1173	AK 173
Manganese HR	0 - 5 mg/L Mn	CKH 1174	CKD 1174	AK 174
Molybdate HR	0 - 100 mg/L MoO_4	CKH 1175	CKD 1175	AK 175
Nitrate	0 - 15 mg/L N	CKH 1163	CKD 1163	AK 163
Nitrite	0 - 0.4 mg/L N	CKH 1109	CKD 1109	AK 109
Ozone	0 - 1.0 mg/L O_3	CKH 1056	CKD 1056	AK 056
Phosphate LR	0 - 4 mg/L PO_4	CKH 1177	CKD 1177	AK 177

Parameter	Measurement Range	Kit Part Code (30 tests)	Comparator Disc	Reagents (pk 250)
Phosphate HR	0 - 100 mg/L PO_4	CKH 1114	CKD 1114	AK 114
Silica	0 - 4 mg/L SiO_2	CKH 1181	CKD 1181	AK 181
Sulphide	0 - 0.5 mg/L S	CKH 1168	CKD 1168	AK 168
Zinc	0 - 4 mg/L Zn	CKH 1148	CKD 1148	AK 148
pH Bromocresol Purple	pH 5.2 - 6.8	CKH 1128	CKD 1128	AK 128
pH Bromothymol Blue	pH 6.0 - 7.6	CKH 1129	CKD 1129	AK 129
pH Phenol Red	pH 6.8 - 8.4	CKH 1131	CKD 1131	AK 131
pH Thymol Blue	pH 8.0 - 9.6	CKH 1135	CKD 1135	AK 135
Universal pH	pH 4 - 11	CKH 1006	CKD 1006	AK 136

Dual-Parameter Kits	Measurement Range	Part Code
Free & Total Chlorine, Phenol Red	0 - 5 mg/L Cl_2 and pH 6.8 - 8.4	CKH 2001
Free & Total Chlorine, Phenol Red	0 - 2 mg/L Cl_2 and pH 6.8 - 8.4	CKH 2002
Free & Total Chlorine, Phenol Red	0 - 1 mg/L Cl_2 and pH 6.8 - 8.4	CKH 2003
Bromine, pH Phenol Red	0 - 8 mg/L Br_2 and pH 6.8 - 8.4	CKH 2005
Free & Total Chlorine, Chlorine HR	0 - 5 and 0 - 250 mg/L Cl_2	CKH 2006
Free & Total Chlorine, Dual Range	0 - 1 and 0 - 5 mg/L Cl_2	CKH 2007
Hydrogen Peroxide, Dual Range	0 - 1 and 0 - 100 mg/L H_2O_2	CKH 2104
Copper and pH Phenol Red	0 - 5 mg/L Cu and pH 6.8 - 8.4	CKH 2186

Contour Comparator Accessories

PT 521/5	Comparator Cuvettes, 10ml square comparator cuvettes, pack of 5
PT 512	Dilution Tube, Graduated tube for sample dilution. Graduations at x2, x3, x4, x5, x10
PT 663	Cuvette Brush, for cleaning cuvettes, length 120mm
PT 502	Crush/Stirring Rods. Pack of 10.

Drop Count Kits

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:

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

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
Sulphite	0 - 150+ mg/L	DC565
Sulphite	0 - 600+ mg/L	DC566
Tannin	0 - 300+ mg/L	DC575

Ordering Information

1 Select a Kit
Choose either PT202 or PT204 (below)

2 Select Reagents
Choose reagent packs from the table (left)

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

PT204
Delux Drop Count Kit
Delux Drop Count Kit includes two sample vessels, dilution vessel, De-ion pack, four square test tubes, 20ml syringe, Luer filter assembly and filters, crush/stir rod and full instructions. Contains no reagents.

Tablet Count Kits

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	0 – 500 mg/L $CaCO_3$	AS096
Hardness LR	0 – 50 mg/L $CaCO_3$	AS097
Hardness Yes/No	4, 8, 20 mg/L $CaCO_3$	AS101
Nitrite	0 - 1500 mg/L $NaNO_2$	AS111
Sulphite LR	0 - 50 mg/L Na_2SO_3	AS144
Sulphite HR	0 - 500 mg/L Na_2SO_3	AS145
Sulphate	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

Over 50 years' of experience in providing water testing instruments, kits and chemical reagents for drinking water, wastewater and process water applications

Palintest

Water Analysis Technologies

Wagtech portable water quality laboratories

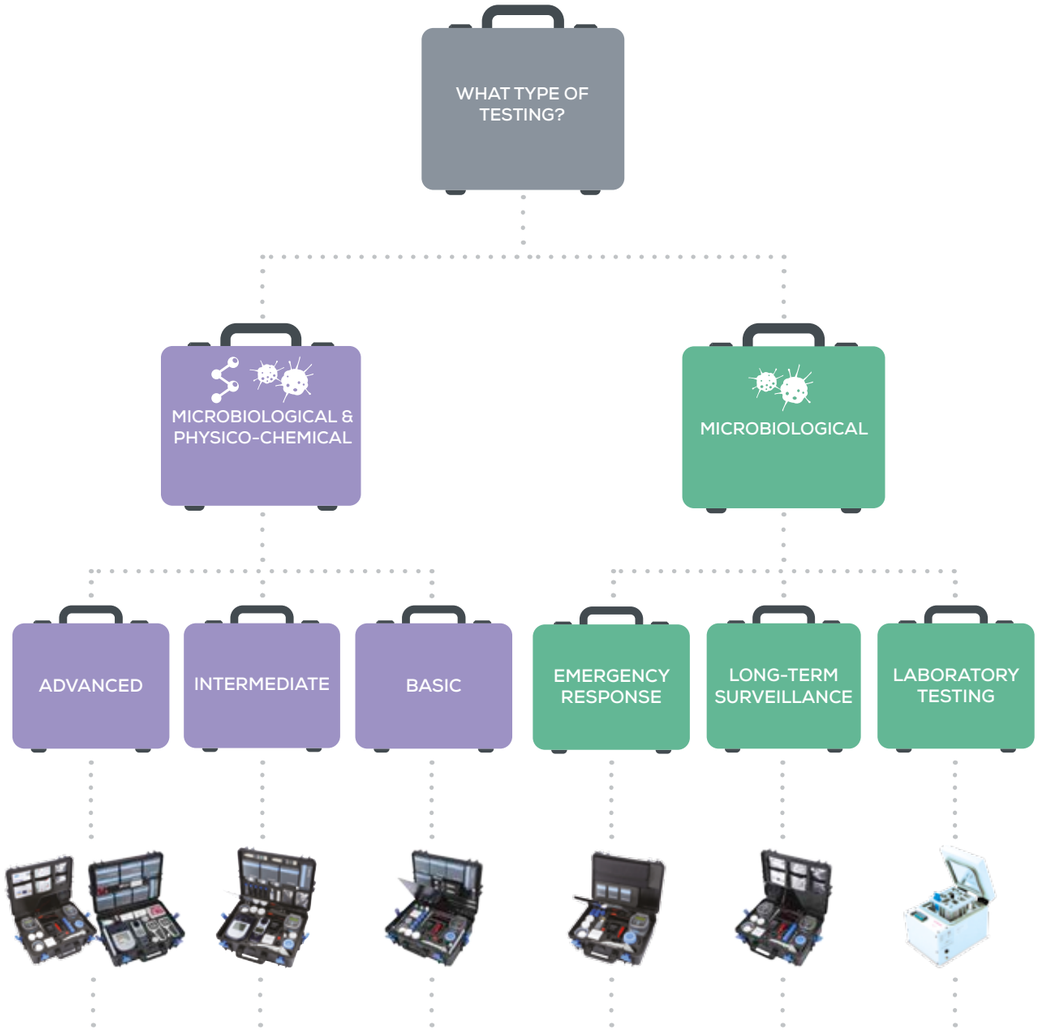
A Palintest Brand

The Wagtech brand 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 enable operators to determine the safety of drinking water sources on-site, working in remote locations away from laboratories.

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.

The kits are designed specifically for those working in emergency response, and those working to ascertain the safety of sources for remote communities in developing countries who cannot rely on, or do not have access to, safe piped water supplies.

Kit Selector



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 for thermotolerant or faecal coliforms and total coliforms
- Advanced physico-chemical analysis - includes the Photometer 7500, Compact Turbimeter, 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.

PTW10010 (M Case)

PTW10010 (C Case)

Technical Specification

Potalab 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 available in English, French, Spanish and Chinese
	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/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 211 mm, 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 Sulphate 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 250ml beaker, quick start prompt cards, full microbiological instruction manual, sterilisable integrated work surface.

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.

Compact Turbimeter, SDVB calibration standards, 4 Compact 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.

Convinient handheld meters

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

Potatech

Intermediate portable water quality laboratory

PTW10480

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, Compact Turbimeter and Pocket Sensors for pH and conductivity.

Technical Specification

Potatech 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 in English, French, Spanish and Chinese
	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/Total Chlorine, Fluoride, Nitrate, Nitrite, Turbidity, pH, and Conductivity. Additional parameters available
	Size & Weight	555 x 428 x 211 mm, 13 kg

Ordering Information

PTW10480	Wagtech Potatech, 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 Sulphate 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 250ml beaker, quick start prompt cards, 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. Compact Turbimeter, SDVB calibration standards, 4 Compact 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.

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.

Convinient pocket sensors

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

Potakit

Basic portable water quality laboratory

PTW10030

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

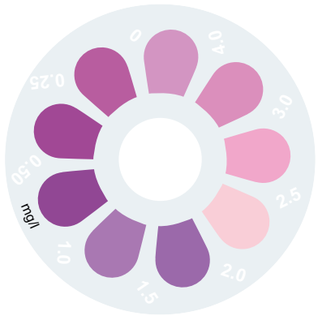
Potakit Incubator	**Test Protocols**	37°C and 44°C temperature selections, user selectable time profiles, automatic resuscitation period profile
	Temperature Stability	±0.1°C
	Temperature Control	Laser-trimmed thermistor pair with automatic temperature validation
	User Interface	On screen and audible prompts in English, French, Spanish and Chinese
	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 Chlorine, Total Chlorine, Nitrate, Nitrite, Turbidity, pH, Conductivity. Additional parameters available.
	Size & Weight	555 x 428 x 211 mm, 13 kg

Ordering Information

PTW10030	Wagtech Potakit, 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 Sulphate 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 250ml 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.
PTW10030XA	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.

Convinient pocket sensors

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

Potatest

Rapid response water quality laboratory

PTW10005

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.

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 in English, French, Spanish and Chinese
	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/Total/Combined Chlorine, Turbidity, pH Additional parameters available.
	Size & Weight	464 x 366 x 176 mm, 9 kg

Ordering Information

PTW10005 Wagtech Potatest, comprising:

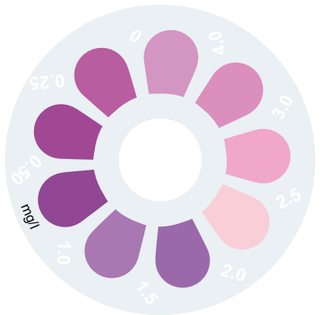
Wagtech Incubator with standard test protocols and audible prompts, petri dish racks, high performance Lead Acid battery with capacity for at least 5 cycles per charge, mains charger with international adaptors, vehicle socket battery power lead, crocodile clip power leads.

Membrane Filtration assembly, bronze disc, pistol grip vacuum pump with no-kink silicone tubing, 5 Media Measuring Devices (MMDs), 38.1g Membrane Lauryl Sulphate 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 250ml 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.

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.

PTW10020

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 in English, French, Spanish and Chinese
	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 211 mm, 12 kg

Ordering Information

PTW10020

Wagtech Potatest 2, 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 Sulphate 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 250ml beaker, quick start prompt cards, full microbiological instruction manual, sterilisable integrated work surface.

Microbiological Incubator

Incubate 20 samples simultaneously. Store and transfer data.

Configure a portable laboratory

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

Potaflex

Microbiological water quality laboratory

PTW10050

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 supplied with Wagtech kits that work with MLSB media, or pre-prepared NutriDiscs that require less preparation and offer a wide range of bacteria to be enumerated.

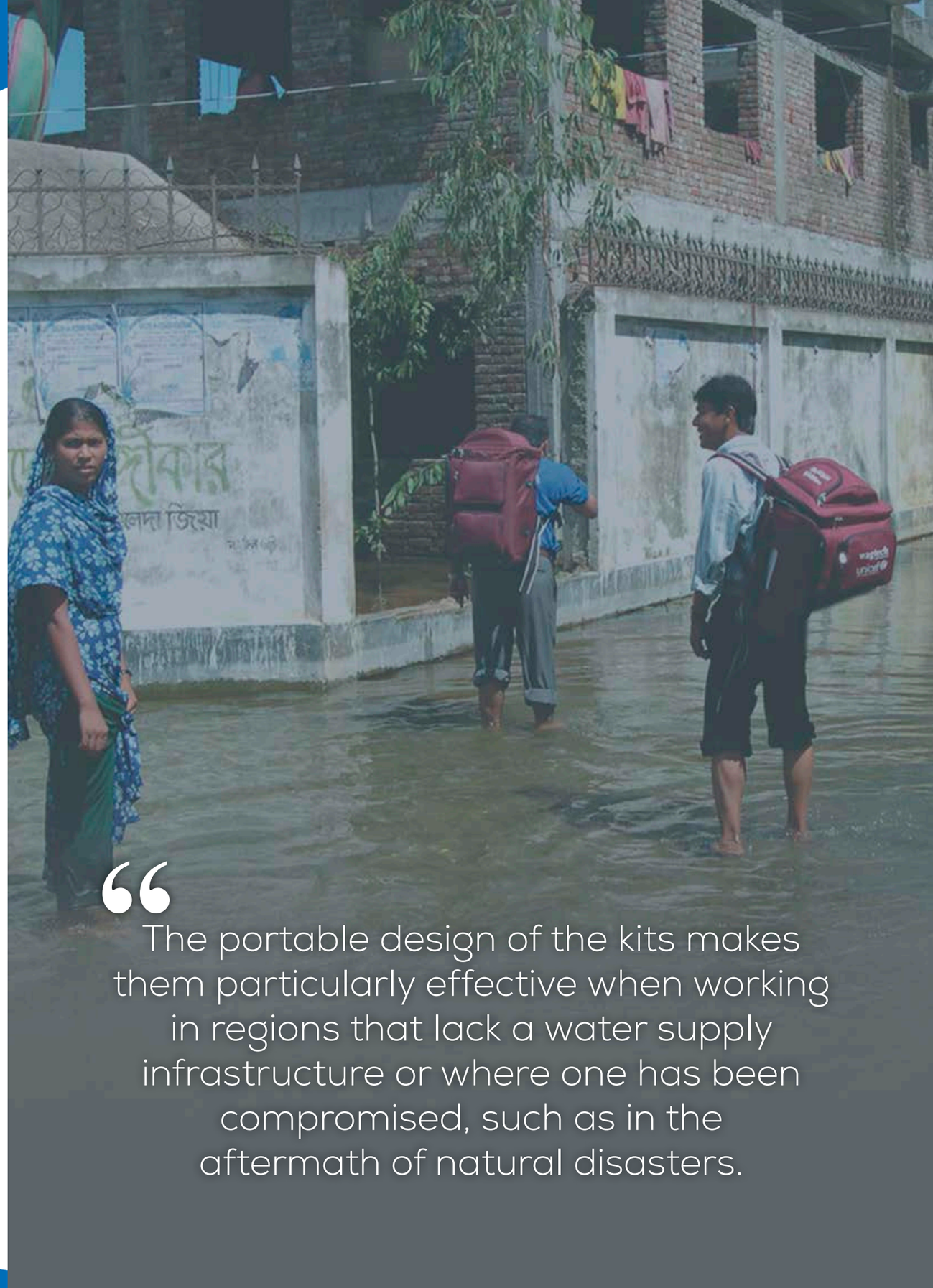
- Flexible media options – the Flexi-Rack System (FRS) supports petri dishes, NutriDiscs and dipslides.
- Comprehensive kit components – includes Membrane Filtration hardware, Coliform Starter Pack and accessories.

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

Ordering Information

PTW10050	Wagtech Potaflex, comprising: Potaflex Incubator with adjustable temperature control, mains charger with international adaptors, external battery connectors. Flexi-Rack System (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 Sulphate 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.



“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.

Wagtech Accessories & Consumables

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
Aluninium petri dishes Set of 20 dishes, 47 mm diameter.	PTW10420
Abosrbent 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 membane filters, absorbent pads, membrane lauryl sulphate broth (38.1g).	PTW10450
Membrane lauryl sulphate broth 500g (MLSB) powder for field preparation of nutrient media. Supplied in sealed pack with tamper seal.	PTW10452
Membrane lauryl sulphate 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

NutriDiscs
Pre-prepared microbiological media.

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-Sulphite 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

Speciality Kits

Designed specifically to meet the requirements of defined applications and parameters, these kits provide tailored solutions to common portable water testing challenges.

Microbiology

Colitag

Colitag is a pre-dispensed, dry blended reagent formulation containing salts, nitrogen and carbon sources and specific indicator/nutrients for rapid confirmation of total coliforms and E.coli. Positive samples are detected by a visible colour change.

Simply fill a sterile tube to the level, mix and then incubate at 35 °C. The formation of a yellow colour in 24 hours or less indicates the presence of total coliforms. Positive tubes are then checked for the presence of E.coli by looking for fluorescence under UV light.

Ordering Information	Part Code
Colitag 100 ml vials, pack of 100	**CT200**
Colitag 100 ml vials, pack of 20	**CT220**
Incubator - Multi-Voltage	CT109
Incubator - 240v	CT111
Incubator Thermometer	PT680
Lamp U/V Portable	CT102
Sterile Graduated Containers (10)	CT104
Sterile Graduated Containers (100)	CT105
Disposable Gloves, polythene (10 Gloves)	PT675

Dipslides

Simple detection of bacteria, yeasts and moulds for cooling water circuits, institutional hygiene and other applications where microbiological control is important. Available for either total colony (TTC) or total colony plus yeasts and moulds (TTC/M), Palintest Dipslides are designed for reliable generation of microbiological data.

Dipslides comprise a simple agar slide contained in a plastic test tube. The lighter colour medium comprises nutrient agar for total aerobic count of bacteria (plate count). The medium contains TTC dye which stains most colonies red for easy enumeration.

The darker coloured medium comprises malt agar from the growth of yeasts and moulds. Yeast appears as low round white or grey discs, mould appears as furry colonies. After incubation, the slide surfaces are simply compared against the appropriate chart to obtain the bacteria, yeast or mould count.

The range of detection for bacteria and yeasts is 103 - 107 CFU/ml for fluids or 5 - 250 CFU/cm2 for surfaces. The range of detection for moulds is 102 - 104 CFU/ml for fluids and 0.4 - 4 CFU/cm2 for surfaces.

Ordering Information	Part Code
Dipslides TTC	PT711
Dipslides TTC/M	PT710

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 3-stage filter system, 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 systemNo reagents and no glassware – ideal for food processing applications.
- 3-stage filter system increases sensitivity, removes interference from sulphide and protects the operator.
- Comprehensive field kit containing all required accessories and consumable.

PT981

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
Power Supply	PP3 9V battery (included)

Ordering Information

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

Accessories

PT983	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 sulphide removal filters (x5).

VCDK Visual Arsenic 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.

PTH10605

Ordering Information

PT980
VCDK Visual Arsenic Test Kit
Palintest VCDK Visual Arsenic Test Kit , hard case. Includes: tri-filter arsenic trap, 100ml reaction vessel, destruction filter (x4), detection filter holder (x4), hydrogen sulphide filter (x4), reagents for 200 tests, visual comparison chart, forceps, dilution tube, cuvette brush, and instructions.

Accessories

PT983	Arsenic Refil Pack. Includes: 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 sulphide removal filters (x5).

PT983

Disinfection

Instachlor

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)		
		for 1 mg/L	for 2.5 mg/L	for 5 mg/L
WT406	Instachlor - PR 5	5	2	1
WT415	Instachlor - PR 40	50	20	10
WT424	Instachlor - PR 150	150	60	30
WT442	Instachlor - PR 1000	1000	400	200
WT446	Instachlor - PR 1000	1000	400	200
WT448	Instachlor - PR 3000	3000	1200	600

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	1.5	0.15
WT442	Instachlor - PR 1000	1000	100	10	1
WT446	Instachlor - PR 1000	1000	100	10	1
WT448	Instachlor - PR 3000	3000	300	30	3

Ordering Information

Code	Description	NaDCC	Available chlorine content	Nominal tablet weight	Tablet diameter
WT406	Instachlor - PR 5	8.5 mg	5.1 mg	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	1.08 g	16 mm
WT442	Instachlor - PR 1000	1.7g	1g	3.25g	18 mm
WT446	Instachlor - PR 1000	1.7g	1g	3.25g	18 mm
WT448	Instachlor - PR 3000	5g	3g	9.7g	25 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. Steadichlor 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
WT406	5 mm
WT415	10 mm

Wastewater Test Kit

A portable test kit comprising simple-to-use hand-held instrumentation, ideal for ensuring compliance of effluent discharges and for spot monitoring applications. Designed to aid operational monitoring, the kit can also be customised by selecting from over 100 additional Palintest parameters for use with the Photometer 7500:

- Customisable photometer for in-situ and rapid measurements of phosphate, nitrate, nitrite and ammonia, using Palintest test methods
- Waterproof and robust electrochemical meters for measuring critical water quality parameters including pH, conductivity and dissolved oxygen
- All supplied in a hard carrying case suitable for field use, with space for up to four additional photometer reagent packs.

PTH8100

Technical Specification

Photometer 7500:

Test Methods		Over 100 parameters and methods available
	User-Interface	On-screen prompts available in English, French, Spanish, Italian and German
	Test Cuvettes	Automatic centering for cylindrical cuvettes from 12 – 20mm OD
Micro 800 Specification		
	Test Range	pH -2 – 16, conductivity 0 – 199 mS (auto-ranging) TDS 0 – 199.9 ppt (auto-ranging) Temperature 0 – 100°C
	Accuracy	pH ± 0.01, conductivity ± 1% (full scale) +1 LSD, TDS ± 1% (full scale) +1 LSD, temperature ± 0.3°C
Micro 600 Specification		
	Test Range	0 – 19.99 mg/L (0 - 100% saturation)
	Accuracy	Accuracy ± 1.5% (full scale)

Ordering Information

PTH8100
Wastewater Test Kit.
Supplied in a hard carrying case comprising: 7500 Photometer, Micro 800 pH/EC meter, Micro 600 DO meter, all the accessories required including USB lead, glass cuvettes (x5), sample container, 10ml syringe, test tube brush, crush rods, calibration solutions for pH, conductivity and dissolved oxygen, and reagents for 50 tests each of nitrate, nitrite, phosphate and ammonia tests (with spaces available for additional packs to be included).

Sewage Effluent Test Kit

SP304

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.

Tests covered by the kit:

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.

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.

Ordering Information

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

Palintest

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