

Palintest

Water Analysis Technologies



MULTIPARAMETER PHOTOMETERS

POOL AND SPA **WASTEWATER** DRINKING WATER PROCESS WATER SOIL

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.

A global company with a local approach

•USA •UK •China •Australia



Application areas



Drinking water

Test kits for water treatment and supply



Soil and irrigation

Test kits for optimising crop yields



Pool and spa

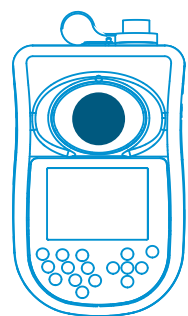
Kits for commercial and residential sectors



Process industries

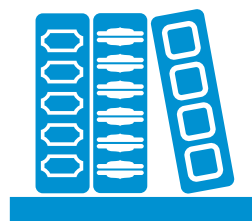
Test kits for industrial processes

Product range



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

Water testing library



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

Analysing critical water quality parameters

We offer a wide range of instruments covering all critical water quality parameters. Our multiparameter photometers are ideal for providing the critical information required for drinking water, wastewater, environmental and process applications.

Our multiparameter photometers utilise photometric and colormetric analysis; providing repeatable and reliable results for over 100 tests.

Key benefits of Palintest photometers:

Stable and repeatable calibration

No need for frequent re-calibration.

Low detection limits

Measure even the slightest concentrations for key water quality parameters.

Visible analysis

The colour may be visible to the naked eye but a photometer removes the subjectivity and provides a much more accurate reading.

Photometer feature key



Tablet icon

This instrument is compatible with tablet reagents.



Tubetest icon

This instrument is compatible with liquid tubetests reagents.



Liquid icon

This instrument is compatible with liquid reagents.



USB icon

This instrument includes a data transfer function via USB.



Bluetooth icon

This instrument includes a data transfer function via Bluetooth.



Applications

1. Raw water abstraction

Drinking water originates from a variety of sources; fresh water extracted from rivers and lakes, seawater treated using desalination or a natural wells and springs used for local supply.

2. Drinking Water Treatment

Drinking water treatment ensures the raw water abstracted is suitable for human consumption. This can involve flocculation and clarification, filtration and disinfection. Once the water adequately is disinfected, the water can be distributed and may be further tested at the point of use.

3. Domestic Wastewater Treatment

The treatment of domestic wastewater aims to reduce organic material so it is suitable for discharge back into the environment. Removing organics along with reducing nutrients are the primary goals of domestic wastewater treatment.

4. Industrial Wastewater Effluent

Industrial wastewater has the same aim as domestic wastewater treatment but can have unique additional contaminants. Water discharged into the environment must be monitored for impact on oxygen demand to protect aquatic life.

5 Managing Processes involving Water

Processes such as food & beverage production and energy generation require water as an essential part of the process. Testing throughout the process ensures maximum efficiency and yield.

Choose your Multiparameter photometer



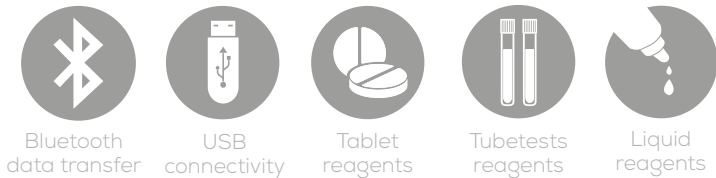
Features	Photometer 7100	Photometer 7500 Bluetooth®
Battery Power	•	•
Number of Methods	> 100	> 100
Sample ID	•	•
Frequently Used Test List/Hot Keys	•	•
Multiple Date Formats	•	•
Automatic Method Set-Up	•	•
Timer	•	•
Automatic Read After Development Timer	•	•
Date/Time	•	•
Backlight with User Control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

Photometer 7500

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



- The Photometer 7500 includes over 100 tests with the capability to add your own tests to the instrument.
- Features include:**
- Effortlessly store your data and transfer them to the Palintest Aqua Pal App with Bluetooth® connectivity
 - Downloadable data log with 500 results (including time and date of test)
 - Develop your own tests - load them via the USB port into your photometer with a simple software tool



Technical Specification

Instrument Type	Dual light source photometer offering direct-reading of pre-programmed test calibrations, Absorbance and Transmittance.
Peak 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, German, Italian, Turkish and Mandarin (Chinese).
Size (W x L x H) and weight	150 x 250 x 70mm, 975g
IP Rating	IP67
Power Supply	3 x 1.5v 'AA' batteries (typically 40 hours), mains power delivered by 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. Each data set includes date, time, Sample ID, Operator ID, method number, method name, result, units
Sample Tubes	Automatic centering for cylindrical sample tubes from 13 – 20mm OD

Kit contents

	PTBH 7500 Photometer 7500 Bluetooth Standard Kit	PTBR 7500 Photometer 7500 Bluetooth Benchtop Kit	PTBW 7500 Photometer 7500 Bluetooth Engineers Kit
Photometer 7500 Bluetooth	•	•	•
Sample Tube	8	10	8
Sample Tube Rack		•	•
Lint Free Polishing Cloth	•	•	•
Absorbent Cloth	•	•	•
20 mL Syringe			•
10 mL Syringe	•	•	•
Dilution Tube	•	•	2
Sample Tube Brush	•	•	•
Crush/Stir Rod	•	•	•
USB Lead	•	•	
Waterproof USB Lead			•
USB Power Adaptor		•	•
De-ion Pack			•
Multiparameter (pH, EC, TDS, Salinity) Pocket Sensor			•
pH and Conductivity Calibration Solutions			•
Check Standard Set			•
Hard Carry Case	•		
Transport Carton		•	
IP67 Carry Case			•

Ordering Information

PTBW 7500	Photometer 7500 Bluetooth Engineers Kit
PTBH 7500	Photometer 7500 Bluetooth Standard Kit
PTBR 7500	Photometer 7500 Bluetooth Benchtop Kit



Photometer 7100

Whether for drinking water, wastewater, effluent, process water or environmental analysis, the Photometer 7100 provides the complete range of test parameters in a waterproof instrument



Simple to use, robust in construction and designed for on-site analysis. The Photometer 7100 provides quick and dependable results, which enables decisions on water quality to be made with confidence.

Features include:

- 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 methods
- Waterproof to IP67, protecting the instrument from water damage

Available as benchtop kit with all necessary accessories, or in a carry case for portable use with additional spaces for carrying reagents.



Tablet reagents



Liquid 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, German, Italian, Turkish and Mandarin (Chinese).
Size (W x L x H) and weight	150 x 250 x 70mm, 975g
IP Rating	IP67
Power Supply	3 x 1.5v 'AA' batteries (typically 40 hours)
Sample Tubes	Automatic centering for cylindrical sample tubes from 13 – 20mm OD

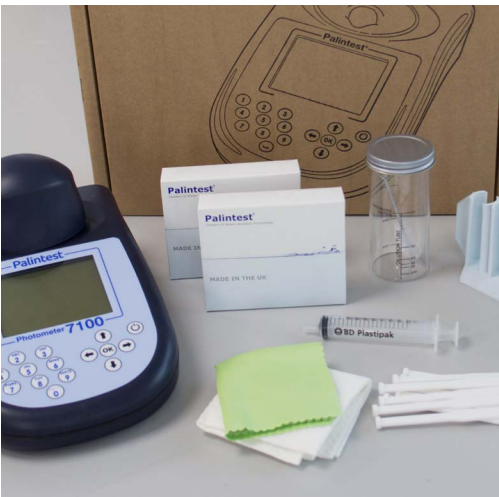
Kit contents



Photometer 7100 Instrument	•	•
Sample Tubes	10	8
Sample Tube Rack	•	•
10 mL Syringe	•	•
Dilution Tube	•	•
Sample Tube Brush	•	•
Crush/Stir Rod	•	•
Hard Carry Case		•
Transport Carton	•	

Ordering Information

PTH 7100	Photometer 7100 Standard Kit
PTR 7100	Photometer 7100 Benchtop Kit



Photometer Reagents

Photometer tablet reagents are available in two general pack sizes, the Starter Pack (PM code) and the Replacement Pack (AP code).

Name	Range	Starter Pack (50 tests)	Replacement Pack (250 tests)
M – Alkalinty (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 (Calcol)	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 and Total (DPD 1 and DPD 3)	0 – 5 mg/L Cl ₂	PM 031	AP 031
Chlorine – Free, Combined and Total, extended range (DPD XF and DPD 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



Name	Range	Starter Pack (50 tests)	Replacement Pack (250 tests)
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 and 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 ₂ H ₂	PM 103 (30 tests)	AP 103 (150 tests)
Hydrogen Peroxide LR	0 – 2 mg/L H ₂ O ₂	PM 104	AP 104
Hydrogen Peroxide HR	0 – 100 mg/L H ₂ O 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 – 500 mg/L CaCO ₃	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 (Nitratetest)	0 – 20 mg/L N	PM 163	AP 163 (200 tests)
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 ₆ H ₅ OH	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 ₂ SO ₃	PM 266	AP 266
Zinc	0 – 4 mg/L Zn	PM 148	AP 148

Liquid Reagents

Description	Range	Part Code (30 tests)
Dissolved Oxygen 0.8	0 – 0.8 mg/L O ₂	PL 553
Dissolved Oxygen 0.8	0 – 2.0 mg/L O ₂	PL 503
Dissolved Oxygen 2.0	0 – 20 mg/L O ₂	PL 513
Chlorine - Free (equivalent to DPD 1)	0 – 5 mg/L Cl ₂	AT 015 (1200 tests)
Chlorine - Total (equivalent to DPD 3) Must be used in conjunction with AT 015	0 – 5 mg/L Cl ₂	AT 035 (1200 tests)
Chlorine – Free and Total (equivalent to DPD 1 & DPD 3)	0 – 5 mg/L Cl ₂	AT 016 (1000 tests)

Tubetests

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



For wastewater parameters such as Chemical Oxygen Demand (COD), nutrients and Heavy Metals the Tubetests range provides the complete solution.

Features include:

- 16mm OD 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

Available in packs of 25 tests, the Tubetests range of reagents supports the activities of any effluent monitoring laboratory. Add any multiparameter photometer to your heater block and reagents for a complete wastewater analysis system.

Tubetests Reagents

Mercury Free for Low Chloride Samples	Range	Part Code
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	Range	Part Code
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	Range	Part Code
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	Part Code
COD Standard Solution, 125 mL	80 mg/L	PL 470
COD Standard Solution, 125 mL	250 mg/L	PL 472
COD Standard Solution, 125 mL	800 mg/L	PL 474
COD Standard Solution, 125 mL	10000 mg/L	PL 476
Nutrients	Range	Part Code
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
Ammonia 12N/50N, Indophenol Method	0 – 12 mg/L N	PL 400
	0 – 50 mg/L N	
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	Range	Part Code
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	PL 442
	0 – 35 mg/L Zn	

Photometer Calibration Check Standards

Check that your instrument is within range with Palintest Check Standards. Photometers can be validated in the field using the unique Neutral Density Filter Check Standards.

- Validate the performance of your photometer and guarantee the quality of your results
- Traceable to National Physical Laboratory (NPL) standards for a full audit trail
- Specific sets and tolerances for individual photometer models
- Indefinitely stable, check standards are not affected by temperature



PT 804 Photometer 7500/Photometer 7100 Check Standards
Certified Check Standard Set, supplied in protective case in sealed vials. Includes three standards and blank.

See www.palintest.com for the full range of spares and accessories

Aqua Pal App



- Available for iOS and Android, the Aqua Pal app provides seamless data management for the Photometer 7500 Bluetooth instrument and manual data upload from any other testing device
- Track data by sample ID, operator ID and create site specific reporting and control profiles for individual customers
- Text alerts and notifications when results are outside of defined limits

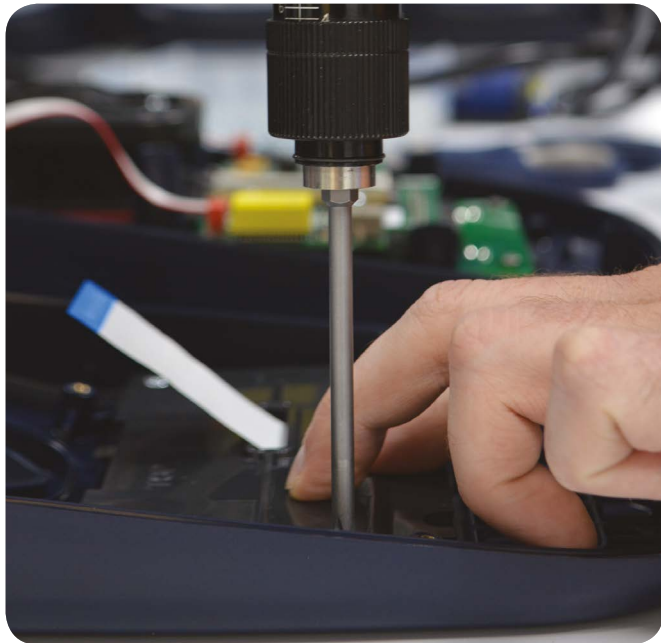
Servicing and Maintenance

**2
Year
Warranty**

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

Regular calibration and service will keep your instrument operating at the peak of performance.

06232 Photometer 7500 Bluetooth/ Photometer 7100 Instrument Service and Calibration
For Photometer 7500 Bluetooth and Photometer 7100. Includes multipoint recalibration using traceable standards, inspection and test with issue of new calibration certificate.



Stay in touch @Palintest



Palintest

Water Analysis Technologies

A HALMA COMPANY



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