Palintest pool & spa

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A **Halma** company

www.palintest.com

Pool & Spa

Water Analysis Technologies

Our Purpose

We exist to safeguard water for everyone, every day.

Palintest
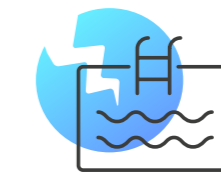Water Analysis Technologies

Palintest products help to deliver:

Swimmer safety
Safeguard pool users through effective disinfection and water balance control

Pool integrity
Regular pool testing helps maintain your pool and protects the pool infrastructure

Water balance
Maintain optimum water balance to avoid corrosion or scaling

Cost efficiency
Optimise your pool treatment plan

Backed by over 100 years of research, our equipment has been optimised to make testing simple and easy.

Our technology delivers reliable results, to drive confidence in water quality management, so we can all enjoy swimming pools and spas safely.

Lumiso Photometers

The Lumiso Pooltest family of photometers set a new standard for photometry in water testing. Covering a single parameter through to multi parameter testing, Lumiso Pooltest photometers are a robust all-round solution for pool and spa testing needs, allowing users to perform reliable accurate testing anywhere, with little to no prior knowledge or training.

Features of the Lumiso family:

The Lumiso Optical Engine uses innovative photometric technology and is utilised across the full Lumiso Pooltest family, giving consistently accurate and reliable results across all models

Interchangeable accessories and reagents across the full Lumiso Pooltest family range simplifies inventory

Simple user interface requires little prior knowledge or training

Logs test results with date and time for compliance and auditing

USB connectivity enables data management with the Palintest Connect platform

Designed and manufactured in the UK

The Lumiso Pooltest family also benefits from a new kit design which includes a waterproof reagent box. The waterproof design protects from any water damage and minimises the overall amount of packaging used in the kits.

Which Lumiso instrument is right for me?

The Lumiso pooltest range includes four instruments, each designed to meet the needs of different testing environments and users.

Lumiso Pooltest 3

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

Lumiso Pooltest 4

Lumiso Pooltest 4 is ideal for testing spas and indoor pools, inclusive of tests for alkalinity, bromine, chlorine and pH.

Lumiso Pooltest 6

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

Lumiso Pooltest Expert

The Lumiso Pooltest Expert has been designed for a range of Pool and Spa customers from Pool Managers through to professional Engineers who need to test pool and spa water multiple times daily, quickly, and accurately across key and troubleshooting parameters.

Pool Photometer Comparison Table

Photometer	Lumiso Pooltest 3	Lumiso Pooltest 4	Lumiso Pooltest 6	Lumiso Pooltest Expert
PARAMETER				
Absorbance				•
Acid Demand				•
Alkalinity, Total		•	•	•
Aluminium				•
Ammonia (Tablet Indophenol)				•
Bromine, Free, Combined & Total		•	•	•
Bromine, Total		•	•	•
Bromine, Total (+ Cl_2, F,C & T)		•	•	•
Bromine, Total (Cl_2 present)		•	•	•
Calcium Hardness			•	•
Calcium Hardness (Salt Pools)			•	•
Chlorine Dioxide				•
Chlorine HR				•
Chlorine, F, C & T (Liquid)	•	•	•	•
Chlorine, F, C & T (Tablet)	•	•	•	•
Chlorine, Free	•	•	•	•
Chlorine, Free & Total (XF, XT)	•	•	•	•
Chlorine, Free (XF)	•	•	•	•
Chlorine, Total	•	•	•	•
Copper, Free				•
Copper, Free and Total				•
Cyanuric Acid	•		•	•

Photometer	Lumiso Pooltest 3	Lumiso Pooltest 4	Lumiso Pooltest 6	Lumiso Pooltest Expert
PARAMETER				
Hardness, Total				•
Hydrogen Peroxide HR				•
Iron MR				•
Langelier Water Balance Index				•
Nitrate				•
Ozone				•
pH–Phenol Red	•	•	•	•
Salt				•
Sulfate				•
Transmittance				•
Zinc				•
Zinc (copper present)				•

Lumiso Pooltest 3

Tests for:

Chlorine (Free, Combined & Total)

Cyanuric Acid

pH Phenol Red

Technical Specification

Instrument Type	Dual light source colorimeter offering direct-reading of pre-programmed test calibrations
Peak Wavelengths	530 nm, 575 nm
Accuracy	± 1.0% T
Display	226 x 138 pixel LCD with backlight
User Interface	Language–free interface, on screen visual icons
Size (W x L x H) and Weight	163 mm x 70 mm x 45 mm, 275 g
IP Rating	IP67
Power Supply	3 x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Last 10 results. Blank value held in memory until power off or new blank recorded

Kit Contents

Item	Lumiso Pooltest 3 LMP003
Lumiso Pooltest 4 instrument	1
Instructions	1
Test tubes	5
Test tube brush	1
Lint free cloth	1
10 mL syringe	1
Dilution tube	1
Crush/stir rods	4
USB lead	1
Initial reagent pack	1
Hard carry case	1

Reagents included in kit

Type of reagent	Tests
Free Chlorine DPD 1	50
Total Chlorine DPD 3	50
DPD XF Chlorine	30
DPD XT Chlorine	30
Phenol Red	50
Alkalinity	10

Lumiso Pooltest 4

Tests for:

Bromine

Chlorine (Free, Combined & Total)

pH Phenol Red

Total Alkalinity

FEATURES INCLUDE:

Ideal for testing spas and indoor pools

Logs test results with date and time

USB connectivity enables data management

On-board memory for up to 50 data sets

Lightweight kit design

Easy to operate

Quick to deliver results

Tag records with labels

IP67 Waterproofing

Technical Specification

Instrument Type	Dual light source colorimeter offering direct-reading of pre-programmed test calibrations
Peak Wavelengths	530 nm, 575 nm
Accuracy	± 1.0% T
Display	226 x 138 pixel LCD with backlight
User Interface	Language–fre, on-screen visual icons
Size (W x L x H) and Weight	163 mm x 70 mm x 45 mm, 275 g
IP Rating	IP67
Power Supply	3 x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Up to 50 data sets

Kit Contents

Item	Lumiso Pooltest 4 LMP004
Lumiso Pooltest 4 instrument	1
Instructions	1
Test tubes	5
Test tube brush	1
Lint free cloth	1
10 mL syringe	1
Dilution tube	1
Crush/stir rods	4
USB lead	1
Initial reagent pack	1
Hard carry case	1

Combine with a TDS meter for complete compliance to HGS:282 UK Spa Regulations

Reagents included in kit

Type of reagent	Tests
Free Chlorine DPD 1	50
Total Chlorine DPD 3	50
DPD XF Chlorine	30
DPD XT Chlorine	30
Phenol Red	50
Alkalinity	10

For the full list of reagents see page 18

Lumiso Pooltest 6

Tests for:

Bromine

Calcium Hardness

Chlorine (Free, Combined & Total)

Cyanuric Acid

pH Phenol Red

Total Alkalinity

FEATURES INCLUDE:

Ideal for Service Engineers and Pool Managers

Enables a complete water balance calculation

Expert colorimetric analysis

Logs test results with date and time

USB connectivity enables data management

On-board memory for up to 50 data sets

Lightweight kit design

Tag records with labels

IP67 Waterproofing

Technical Specification

Instrument Type	Dual light source colorimeter offering direct-reading of pre-programmed test calibrations
Peak Wavelengths	530 nm, 575 nm
Accuracy	± 1.0% T
Display	226 x 138 pixel LCD with backlight
User Interface	Language–free, on screen visual icons
Size (W x L x H) and Weight	163 mm x 70 mm x 45 mm, 275 g
IP Rating	IP67
Power Supply	3 x AA 1.5V Batteries
Connectivity	USB for data download and software updates
Memory Capacity	Up to 50 data sets

Kit Contents

Item	Lumiso Pooltest 6 LMP006
Lumiso Pooltest 6 instrument	1
Instructions	1
Test tubes	5
Test tube brush	1
Lint free cloth	1
10 mL syringe	1
Dilution tube	1
Crush/stir rods	4
USB lead	1
Initial reagent pack	1
Hard carry case	1

For the full list of reagents see page 18

Reagents included in kit

Type of reagent	Tests
Free Chlorine DPD 1	50
Total Chlorine DPD 3	50
DPD XF Chlorine	30
DPD XT Chlorine	30
pH Phenol Red	50
Cyanuric Acid	10
Alkalinity	10
Calcium Hardness	10

Lumiso Pooltest Expert

Tests for:

Absorbance
Acid Demand
Alkalinity, Total
Aluminium
Ammonia (Tablet Indophenol)
Bromine, Total
Bromine, Total (Cl$_2$ present)
Calcium Hardness
Calcium Hardness (Salt Pools)
Chlorine and Chloramines
Chlorine Dioxide
Chlorine HR
Chlorine, Free
Chlorine, Free & Total (XF, XT)
Chlorine, Free (XF)
Chlorine, Total
Copper, Free
Copper, Free and Total
Cyanuric Acid
Hardness, Total
Hydrogen Peroxide HR
Iron MR
Langelier Water Balance Index
Nitrate
Ozone
Ozone (Cl$_2$ or Br$_2$ present)
Persulfate
Phosphate LR
pH-Phenol Red
Salt
Sulfate
Transmittance

FEATURES INCLUDE:

Designed and manufactured in the UK

Recycled material case

IP67 Waterproofing

Multi parameter for troubleshooting

Quick and accurate testing

Large touch screen interface

Simple to follow on screen instructions

Data traceability for audit compliance

Easy results retrieval with Palintest Connect

Professional level results in-situ

Technical Specification

Instrument Type	Multiparameter Photometer
Wavelengths	530 nm, 575 nm, 620 nm
Peak Wavelengths	±2 nm
Accuracy	+/-1%T
Display	Full Colour TFT – 16:9 ratio screen, resolution 800 x 480 px
User Interface	PCAP touch panel
Size W x L x H (mm)	211 x 195 x 52
Weight (kg)	0.85
IP Rating & Standards	IP67
Power Supply	6 x AA 1.5V Batteries or Standalone USB
Connectivity	Via Windows App (USB) or Mobile App (QR Code)
Memory Capacity	Access to 1,000 results via device's screen
Battery Life	5,000 tests on one charge
Certifications	EN61326, EN61010, IP67 and EN60068-2-78

Kit Contents

Item	All kits
Lumiso Pooltest Expert Instrument	1
Dilution Tube	1
Syringe, Luer Slip, 10mL	1
Polishing Cloth	1
Test Tube Brush, 12cm	1
USB lead	1
Quick Start Guide	1
Absorbent Cloth	1
Crush/Stir Rod	10
Cap for 15mL Vial	10
15mL Snap Cap Vial	10
Lumiso Benchtop Case	1
Reusable Reagent Box	1

Reagents included in kit

UK / Rest of World Kit Order code: LMPXUK	USA Kit Order code: LMPXUS	Australia Kit Order code: LMPXAUS
DPD1 Free Chlorine Tablet 0-5 mg/L	DPD XF Chlorine Tablet 0 – 10 mg/L	DPD1 Free Chlorine Tablet 0-5 mg/L
DPD3 Total Chlorine Tablet 0-5 mg/L	DPD XT Cholrine Tablet 0 – 10 mg/L	DPD3 Total Chlorine Tablet 0-5 mg/L
DPD4 Total Chlorine Tablet 0-5 mg/L	Cyanuric Acid Tablet 0 - 200 mg/L	DPD4 Total Chlorine Tablet 0-5 mg/L
Cyanuric Acid Tablet 0 - 200 mg/L	pH, Phenol Red Tablet 6.8 - 8.4	DPD XF Chlorine Tablet 0 – 10 mg/L
pH, Phenol Red Tablet 6.8 - 8.4	Coppercol No 1 Tablet 0 -5 mg/L	DPD XT Chlorine Tablet 0 – 10 mg/L
Coppercol No 1 Tablet 0 -5 mg/L	Coppercol No 2 Tablet 0 -5 mg/L	Cyanuric Acid Tablet 0 - 200 mg/L
Coppercol No 2 Tablet 0 -5 mg/L	Alkalinity Total Tablet 0 - 500mg/L	pH, Phenol Red Tablet 6.8 - 8.4
Alkalinity Total Tablet 0 - 500mg/L	Calcium Hardness Tablet 0 - 500mg/L	Coppercol No 1 Tablet 0 -5 mg/L
Calcium Hardness Tablet 0 - 500mg/L	Iron MR No1 Tablet 0 -5 mg/L	Coppercol No 2 Tablet 0 -5 mg/L
Iron MR No1 Tablets 0 -5 mg/L	Iron MR No2 Tablet 0 -5 mg/L	Alkalinity Total Tablet 0 - 500mg/L
Iron MR No2 Tablets 0 -5 mg/L	Oxystop Tablet N/A	Calcium Hardness Tablet 0 - 500mg/L
	Phosphate LR, Phot, 0-4mg/L	Iron MR No1 Tablet 0 -5 mg/L
		Iron MR No2 Tablet 0 -5 mg/L

Photometer reagents

Photometer reagents

Name	Part code (AP) 250 Tablets	Part code (PM) 50 Tablets	Part Code AT (Liquid)	Range
Absorbance				0-2.3 Abs
Acid Demand	AP188	PM188		0-9 mmol/L
Alkalinity, Total	AP188	PM188		0-500 mg/L
Aluminium	AP166	PM166		0-0.5 mg/L
Ammonia (Tablet Indophenol)	AP152	PM152		0-1 mg/L
Bromine, Free, Combined & Total	AP060	PM060		0-10 mg/L
Bromine, Total	AP060	PM060		0-10 mg/L
Bromine, Total (+ Cl_2, F,C & T)	AP060	PM060		0-10 MG/L
Bromine, Total (Cl_2 present)	AP060	PM060		0-10 mg/L
Calcium Hardness	AP252	PM252		0-500 mg/L
Calcium Hardness (Salt Pools)	AP252	PM252		0-500 mg/L
Chlorine Dioxide	AP052	PM052		0-10 mg/L
Chlorine HR	AP162	PM162		0-250 mg/L
Chlorine, F, C & T (Liquid)			AT015 / AT035	0-5 mg/L
Chlorine, F, C & T (Tablet)	AP031	PM031		0-5 mg/L
Chlorine, Free	AP011	PM011		0-5 mg/L
Chlorine, Free & Total (XF, XT)	AP033	PM033		0-10 mg/L

Name	Part code (AP) 50 Tablets	Part code (PM) 250 Tablets	Part Code AT (Liquid)	Range
Chlorine, Free (XF)	AP013	PM013		0-10 mg/L
Chlorine, Total	AP041	PM041		0-5 MG/L
Copper, Free	AP187			0-5 mg/L
Copper, Free and Total	AP186	PM186		0-5 mg/L
Cyanuric Acid	AP087	PM087		0-200 mg/L
Hardness, Total	AP254	PM254		0-500 mg/L
Hydrogen Peroxide HR	AP105	PM105		0-100 mg/L
Iron MR	AP292	PM292		0-5 mg/L
Langelier Water Balance Index	N/A	N/A		
Nitrate	AP163	PM163		0-1 mg/L
Ozone	AP056	PM056		0-2 mg/L
pH-Phenol Red	AP130	PM130		6.8 - 8.4
Salt	AP268	PM268		0-10000 mg/L
Sulfate	AP154	PM154		0-200 mg/L
Transmittance				0-100 %T

Only Palintest reagents are compatible with Palintest photometers

Photometer Check Standards, accessories and support

LMC001

Validate the performance of your instrument with Palintest Check Standards

Quick and easy method

Traceable to national standards

Supplied with a certificate

Ordering Information

Pooltest 3, 4 & 6 NDF Check Standards	
LMC001	Neutral Density Filter (NDF) check standard set, supplied in a protective case. Includes two standards and a blank.

Lumiso Pooltest Expert NDF Check Standards	
LMCPTX	Neutral Density Filter (NDF) check standard set, supplied in a protective case. Includes one standard and a blank.

Accessories

Description	Code
Pack of 5 glass test tubes	PT555
Rack for 8 x Lumiso test tubes	PT545
Pack of 10 crush / stirring rods	PT502
Syringe 10 mL	PT369
Sample tube brush, length 120 mm	PT663
Sample container 100/50/10 mL plastic tube	PT510
Palintest dilution tube, x2, x3, x4, x5, x10, plastic	PT512
Wash bottle, 250ml	PT516
Wash bottle (for deionised water)	PT518
Sample container, 50/10 ml plastic bottle	PT519
Sample container, 20/10 ml plastic tube	PT526
Polishing Cloth	PT399
Test Tube Brush, 12cm	PT663
USB lead*	PT749

*Lumiso Pooltest Expert specific accessory

Technical Support

At Palintest we pride ourselves on the technical support that we provide to our customers.

We have used our expertise built up over 100 years to develop an extensive library of information which helps to support your needs.

For more information visit our website or contact our team on sales@palintest.com

Servicing

Ensure your photometer remains in optimal condition with an instrument service. To get the best out of your photometer, Palintest recommends an annual service.

What is included in a Palintest service?

• Thorough evaluation and inspection of your instrument

• Comprehensive clean of the test chamber and optical bench

• Recalibration of your instrument

• Update of the latest software to optimise the performance of your instrument

Contact sales@palintest.com for further information on servicing.

Product Registration and Warranty

Each of our photometers come with a two year warranty.

To register and receive updates about your instrument, please visit: www.palintest.com/en/product-registration

Contour Comparator Kits

Single and dual parameter kits for cost effective pool, spa and hot tub testing

Single and dual parameter test kits

Unique petal disks for easy colour differentiation

Tablet methods for visual colour development

Single Parameter Contour Comparator Kits

Kits includes: Contour Comparator, Contour disk with instructions, 3 cuvettes, cuvette brush, crush/ stir rod, reagents for 30 tests, supplied in a hard case

Product	Code
Comparator Kit, Free and Total Chlorine, 0-5 mg/L	CKH1001
Comparator Kit, Free and Total Chlorine, 0-2 mg/L	CKH1002
Comparator Kit, Free and Total Chlorine, 0-1 mg/L	CKH1003
Comparator Kit, Bromine, 0-8 mg/L	CKH1005
Comparator Kit, Alkalinity, 0-250 mg/L	CKH1192
Comparator Kit, Chlorine HR, 0-250 mg/L	CKH162/250
Comparator Kit, Hydrogen Peroxide, 0-100 mg/L	CKH1105
Comparator Kit, Ozone, 0-1 mg/L	CKH1056
Comparator Kit, Phosphate, 0-4 mg/L	CKH1177
Comparator Kit, pH Phenol Red, pH 6.8-8.4	CKH1131

Dual Parameter Contour Comparator Kits

Kits includes: Contour Comparator, 2 Contour disks with instructions, 3 cuvettes, cuvette brush, crush/stir rod, reagents for 30 tests for each parameter, supplied in a hard case.

Product	Code
Free + Total Chlorine/ Phenol Red 0-5 mg/l Cl_2/ pH 6.8-8.4	CKH2001
Free + Total Chlorine/ Phenol Red 0-2 mg/l Cl_2/ pH 6.8-8.4	CKH2002
Free + Total Chlorine/ Phenol Red 0-1 mg/L Cl_2/ pH 6.8-8.4	CKH2003
Bromine/ Phenol Red 0-8 mg/L Br_2/ pH 6.8- 8.4	CKH2005

Balanced Water Kits

Simple visual kits to maintain the water balance of your pool or spa and minimise running costs

Portable water balance testing

Assess likelihood of scaling or corrosion

Tablet method for visual colour development

Kit Contents

	SP 129	SP 129C
Standard Comparator		
Contour Comparator	•	•
Chlorine 0–5 mg/l disc	•	•
Bromine 0–8mg/l disc		
pH Phenol Red disc	•	•
4 Comparator Cuvettes	•	•
Cuvette Brush	•	•
Crush/Stir Rod	•	•
Dilution Tube	•	•
Sample Container (100 mL)		
Double Tube Assembly		•
Cyanuric Acid Reagents		•
Reagents Free and Total Chlorine/Bromine	•	•
Reagents pH Phenol Red	•	•
Tablet count reagents Alkalinity	•	•
Tablet count reagents Calcium Hardness	•	•
Instructions	•	•

Comparator Kit Reagents

Only Palintest comparator reagents are compatible with Palintest comparators

Comparator Kit Reagents

Name	Range	Replacement Pack (250 tests)
Calcium Hardness (Tablet count)	0–500 mg/L $CaCO_3$	AS077
Total Alkalinity (Tablet Count)	0–1200 mg/L $CaCO_3$	AS072

Pooltester Kits

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

Available in a range of key parameters

Quick colour development

Cost effective testing solution

Case made from 100% recycled plastic

Products

Product	Code
Chlorine/pH Pooltester	SPT610
Chlorine (0–5 mg/L)/pH/Alkalinity Pooltester	SPT612
Chlorine (0–3 mg/L)/pH/Alkalinity Pooltester	SPT614
Bromine/pH/Alk Pooltester	SPT616
Cyanuric Acid Pooltester	SPT620

Rapid Reagents for Pooltesters

Palintest Rapid tablets are designed to deliver the active reagent quickly without the need for crushing or handling

Replacement Reagents

Name	50 tests	100 tests	250 tests
Alkalinity (Alkavis)	AL192B		AK192
Cyanuric Acid	AL087B		AT087
pH (Phenol Red)	AL131B	AL131/100B	AT130
Chlorine / Bromine (DPD 1)	AL010B	AL010/100B	AT010
DPD 3			AT030
DPD 4			AT040

Pooltester Refill Packs

Name	Range
30 tests each of Free Chlorine and pH	AL003B
30 tests each of Free Chlorine, pH and Alkalinity	AL004B
20 tests each of Peroxtest and pH	AL623B

Only Palintest rapids are compatible with Palintest pooltesters

Pool Test Strips

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

Description	Code
Free Chlorine, pH and Alkalinity Pack of 50	PTJ634
Free Chlorine, Total Chlorine/Bromine, pH, Cyanuric Acid, Hardness and Alkalinity Pack of 50	PTJ637

Connect

Upload, view and manage your data easily with our cloud-based data management software.

Product Registration – register your Lumiso and receive the latest firmware update when you connect your instrument

Data Management – upload and view test results and create reports for monitoring over time

Remote supervision – create a collaboration group to share and monitor test results

Corrective actions - trigger email notifications to advise when test results don't meet target values

Compliance – automatically create an auditable data log when uploading your data

Training – access training materials with step-by-step instructions to help you get the most from your Lumiso