

Palintest

Water Analysis Technologies



ELECTROCHEMICAL METER RANGE

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

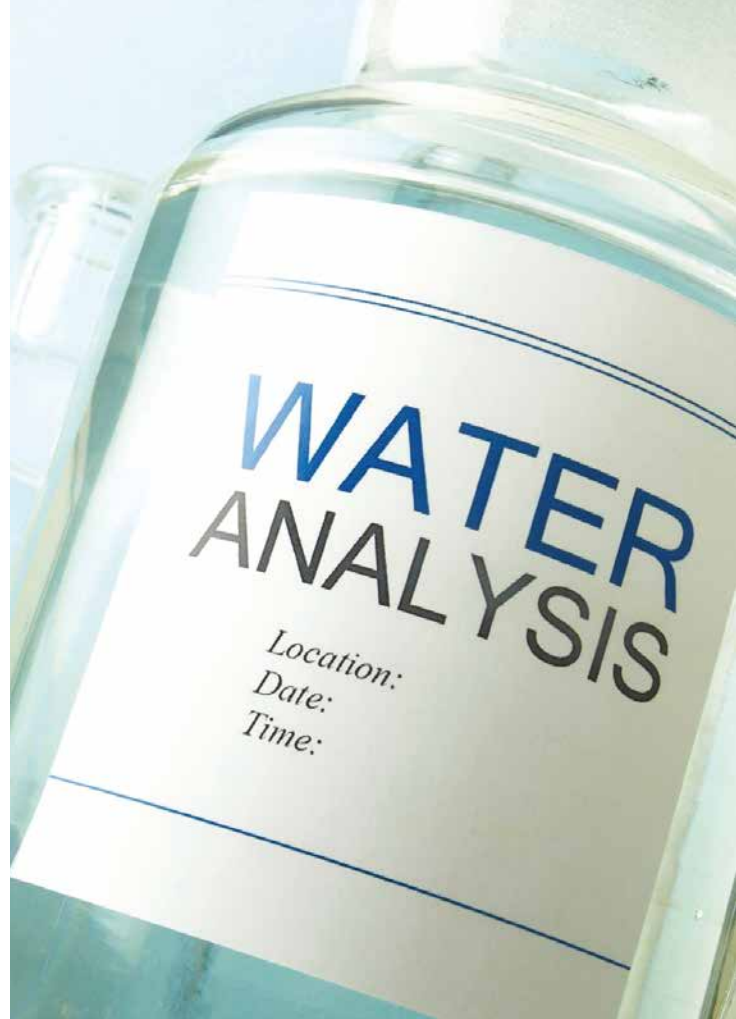
Who we are

Palintest aim to be the best global provider of water and environmental analysis equipment that enable critical water quality decisions to be made with confidence

Palintest develops, manufactures and supports a comprehensive range of advanced water and environmental testing equipment. From our United Kingdom headquarters we export to over 100 countries across the globe. Our products are used in a wide variety of applications to protect the environment and safeguard public health.

Part of the successful Halma plc. since 1983, our roots begin in the 1870s with the Wilkinson & Simpson Ltd. manufacturing facility and include Dr Thomas Palin's development of the DPD method, the standard approach for disinfection control worldwide.

Palintest today has a worldwide workforce with branch offices in China, Australia, USA and the Middle East. For your local Palintest contact see the back cover of this brochure or visit www.palintest.com.



A HALMA COMPANY

Contents

The range is categorised by parameter type, within which there exists a range of instruments from basic pocket sensors, through to advanced handheld models.

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pH Pocket Sensor

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



Features include:

- 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

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	
Dimensions	16.5 x 3.8 x 3.8 cm	
Weight	90 g	

Ordering Information

PT 155	pH Pocket Sensor
PT 155PH	Replacement pH sensor

Micro 600 Handheld 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.



Features

- 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

Specification

	pH	mV	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		
Dimensions	15.7 x 8.5 x 4.2 cm		
Weight	255 g		

Ordering Information

PT 1200	Micro 600 pH handheld meter
PT 110/1B	Replacement pH electrode
PT 110/3B	ORP electrode
PT 140/4	Replacement temperature probe

Micro 800 Handheld pH meter

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



Features

- 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 or RS232
- Time and date stamps on results and calibration for GLP

Specification

	pH	mV	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 or RS232		
Real-Time Clock	Time and date stamp on calibration and stored data		
Power	2 x AA batteries		
Dimensions	20 x 8.3 x 5.7 cm		
Weight	500 g		

Ordering Information

PT 1330	Micro 800 pH handheld meter
PT 1330PH	Replacement double junction pH electrode
PT 1330ATC	Replacement temperature electrode
PT 1330ORP	ORP electrode

Conductivity and TDS Pocket Sensors

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



Features

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

Specification

	Conductivity Sensor PT 157	TDS Sensor PT 153T
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	
Dimensions	16.5 x 3.8 cm	
Weight	90 g	

Ordering Information

PT 157	Conductivity Pocket Sensor
PT 157CON	Replacement conductivity sensor
PT 153T	TDS Pocket Sensor
PT 153TDS	Replacement TDS sensor

Micro 600 Handheld Conductivity and TDS meters

The Micro 600 Handheld Conductivity and TDS Meters enable users to have confidence in their results with intelligent software and high specification probes.



Features

- 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

Specification

	Micro 600 Conductivity Meter PT 1220	Micro 600 TDS Meter PT 1210
Range	0 to 19.99 $\mu\text{S}/\text{cm}$ 20.0 to 199.9 $\mu\text{S}/\text{cm}$ 200 to 1999 $\mu\text{S}/\text{cm}$ 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	$\pm 1\%$ full scale + 1 LSD	
Temperature Range	0 to 80 °C	
Temperature Resolution	0.1 °C	
Temperature Accuracy	± 0.5 °C	
Number of Calibration Points	Up to 5 maximum (1 per range)	
Power	4 x AAA batteries	
Dimensions	15.7 x 8.5 x 4.2 cm	
Weight	255 g	

Ordering Information

PT 1210	Micro 600 TDS handheld meter
PT 1220	Micro 600 Conductivity handheld meter
PT 142/1	Replacement TDS/Conductivity probe

Micro 800 Handheld Conductivity/TDS meter

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.



Features

- 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

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 & RS232		
Real-Time Clock		Time and date stamp on calibration and stored data		
Power		2x AA batteries		
Dimensions		20 x 8.3 x 5.7		
Weight		500 g		

Ordering Information

PT 1340	Micro 800 Conductivity/TDS handheld meter
PT 1340CON	Replacement probe for Micro 800 Conductivity/TDS meter

Micro 600 Handheld DO meter

The Micro 600 Handheld DO meter combines Galvanic DO and temperature measurement. The advanced technology of this meter make it the ideal choice where a laboratory specification instrument is required for both benchtop and field use.



Features

- 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
- Kitted in a carrying case along with all consumables and parts required for immediate operation

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		
Dimensions	15.7 x 8.5 x 4.3 cm		
Weight	255 g		

Ordering Information

PT 1240	Micro 600 DO handheld meter
PT 148/3	Replacement Galvanic DO probe

Micro 800 Handheld DO meter

The most advanced DO Meter in the range, the Micro 800 features optical luminescence technology combining accurate results with maintenance free operation.



Features

- 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
- Accurate measurement even in samples with no flow rate thanks to an advanced optical system

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	±10 m			
Power	5x AA batteries			
Dimensions	18 x 9 x 4 cm			
Weight	450 g			

Ordering Information

PT 1303	Micro 800 Optical DO Meter and Probe, supplied in a hard case
PT 1320	Replacement Optical DO Probe for Micro 800
PT 1381	Link Software for Micro 800
PT 1465	Replacement Optical DO Cap Set for Micro 800
PT 1484	USB Cable for Micro 800

Multiparameter Meters

The Palintest Multiparameter Pocket Sensor is the ideal solution for accurate testing in a compact and portable device. The Sensor allows for carrying out tests on multiple parameters in one sample, and it's suitable for applications where testing isn't as frequent but accurate readings are still required.



Features

- 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

Specification

	pH	Conductivity	TDS	Salinity	Temperature
Range	0 to 14.00 pH	0 to 199.9 μ S/cm 200 to 1999 μ S/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 μ S/cm 1 μ S/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	\pm 0.01 pH	\pm 1 % full scale	\pm 1 % full scale	\pm 1 % full scale	\pm 0.5 °C
Calibration	Up to 5 (Auto)	3 Auto, 3 Manual	Up to 3 points (Manual)	Up to 3 points (Manual)	
Power	4x A76 micro alkaline batteries				
Dimensions	16.5 x 3.8 cm				
Weight	90 g				

Ordering Information

PT 162	Multiparameter Pocket Sensor
PT 162M	Replacement multiparameter sensor

Micro 800 Multiparameter Meter

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).



Features

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

Specification

	pH	mV	Conductivity	TDS	Temperature
Range	-2.00 to 16.00 pH	±2000	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	0.1 °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				
Dimensions	20 x 8.3 x 5.7 cm				
Weight	500 g				

Ordering Information

PT 1350	Micro 800 Multiparameter Meter
PT 1330PH	Replacement pH electrode
PT 1340CON	Replacement Conductivity/TDS electrode

Macro 900 Multiparameter Meter

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.



Features

- Constructed from anodised 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

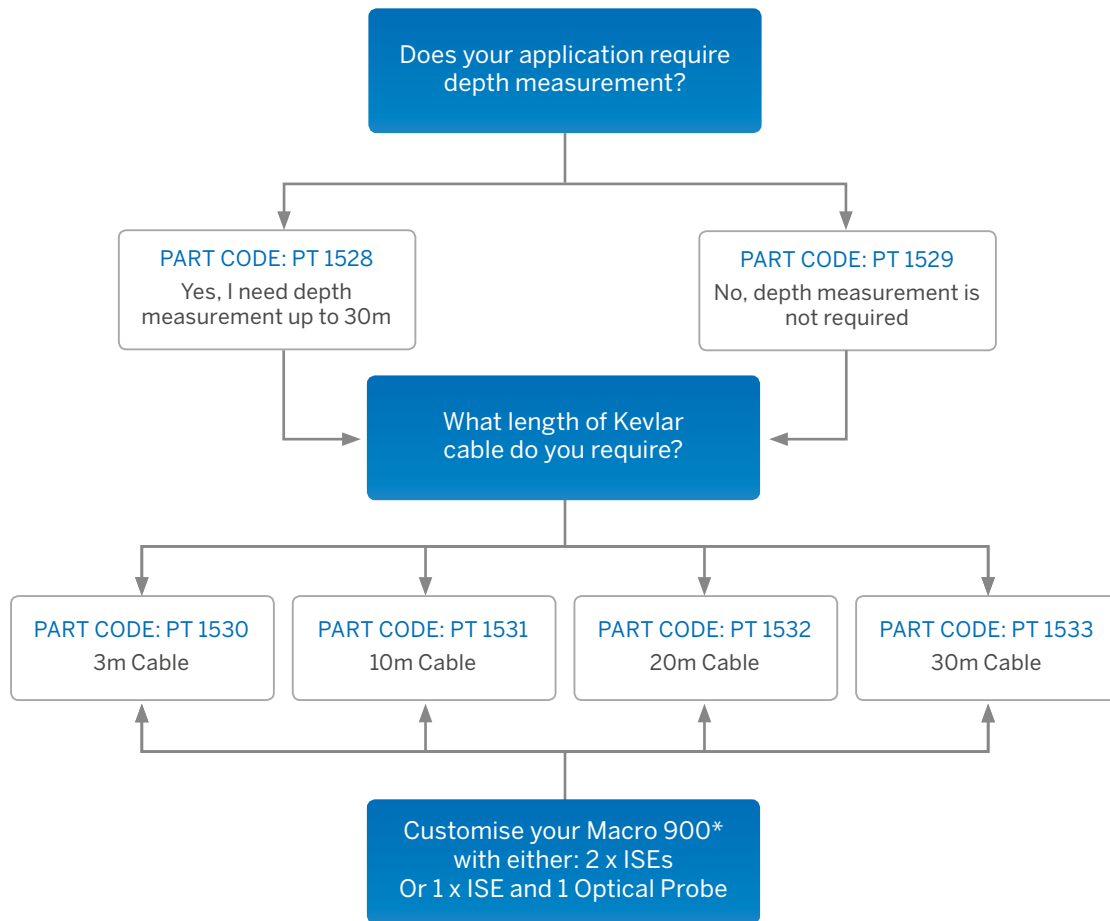
Specification

Optical Dissolved Oxygen	Range	0 to 500 % / 0-50.00 mg/l
	Resolution	0.1 % / 0.01 mg/l
	Accuracy	0 to 200%; ±1% of reading
Conductivity	Range	0 to 200 mS/cm (0 to 200,000 µS/cm)
	Resolution	0 to 9999 µS/cm 10.00 to 99.99 mS/cm 100.0 to 200.0 mS/cm
	Accuracy	±1% of reading or ±1 µS/cm (if greater)
Total Dissolved Solids	Range	0 to 100,000 mg/l
	Resolution	0 to 9999 mg/l 10.00 to 100.00 g/l
	Accuracy	±1% of reading or ±1 mg/l (if greater)
Resistivity	Range	5 Ωcm to 1 MΩcm
	Resolution	5 to 9999 Ωcm 10.0 to 1000.0 KΩcm
	Accuracy	±1% of reading or ±1 Ωcm (if greater)
Salinity	Range	0 to 70.00 ppt
	Resolution	0.01 ppt
	Accuracy	±1% of reading or ±0.1 unit of reading

Seawater Specific Gravity	Range	0 to 50 st
	Resolution	0.1 st
	Accuracy	±1.0 st
pH	Range	0 to 14 pH (±625 mV)
	Resolution	0.01 pH (±0.1 mV)
	Accuracy	±0.01 pH (±5 mV)
ORP	Range	±2000 mV
	Resolution	0.1 mV
	Accuracy	±5 mV
Temperature	Range	-5 °C to 50 °C
	Resolution	0.1 °C
	Accuracy	±0.5 °C
Depth	Range	0 to 30 m
	Resolution	0.01 m
	Accuracy	±0.1 m

Ordering information

PART CODE: PT 1401
Macro 900 meter and kit with standard parameters
 pH, ORP, Conductivity, Total Dissolved Solids (TDS), Salinity, Seawater Specific Gravity, Resistivity, Temperature, Dissolved Oxygen (DO)



ISEs	PART CODES
Ammonium/Ammonia	PT 1541
Nitrate	PT 1542
Chloride	PT 1543
Calcium	PT 1544
Fluoride	PT 1545

Optical Probes	PART CODES
Turbidity	PT 1551
Blue-Green Algae (fresh)	PT 1552
Blue-Green Algae (saline)	PT 1553
Rhodamine Water Tracer	PT 1554
Fluorescein Water Tracer	PT 1555
Chlorophyll	PT 1556
Refined Oil (Hydrocarbons)	PT 1557

* Probes can be easily be swapped in and out but only two probes can be fitted at any one time (and a maximum of one optical probe at a time)

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