



JENWAY

pH Meters

The Jenway pH meters range from basic and waterproof portable units, right through to advanced combined pH and conductivity laboratory meters. All models, except the 3505 which is specifically designed for use in education have automatic standard recognition to ensure the accuracy of the results. Redox and ion concentration modes are available on some of the models.

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pH Meters

pH Only Meters

	350	370	3150	3205	3505	3510	3520
Portable	✓	✓	✓	✓	-	-	-
Waterproof	-	-	✓	✓	-	-	-
pH range	-2 to 16	-2 to 16	-2 to 16	-2 to 16	-2 to 16	-2 to 20	-2 to 20
mV	-	✓	✓	✓	✓	✓	✓
Redox	-	✓	✓	✓	✓	✓	✓
Ion	-	✓	-	✓	-	-	-
ATC	-	✓	✓	✓	-	✓	✓
No. calibration	1 or 2	1 or 2	1 or 2	1 or 2	-	1, 2 or 3	1, 2 or 3 points
Automatic buffer recognition	✓	✓	✓	✓	-	✓	✓
Results stored	32	32	100	100	-	32	500
GLP compliant	-	-	-	✓	-	-	✓

pH and Conductivity Combined Meters

	430	3540
Portable	✓	-
Waterproof	-	-
pH range	0 to 14	-2 to 20
mV	-	✓
Redox	-	✓
Ion	-	-
ATC	✓	✓
No. calibration points	1 or 2	1, 2 or 3
Automatic buffer recognition	✓	✓
No. results stored	-	500
GLP compliant	-	✓
Conductivity range	0 to 199.9mS	0.01µS to 1.999S



350

350 Enterprise pH Meter

- Simultaneous pH and temperature display
- Storage of up to 32 results
- Automatic or manual calibration 500 hours battery life
- Application specific electrodes and consumables

The 350 is a general purpose portable pH meter offering 1 or 2 point pH calibration and automatic buffer recognition with manual override. It simultaneously displays both the temperature compensated pH readings and the manually set temperature.

Technical Specification

pH

Range	-2.00 to 16.00
Resolution	0.01
Accuracy	±0.02
Manual temperature range	0 to 100°C
Automatic buffer recognition	4.00, 7.00, 9.22, 10.00 (with manual override)
Calibration	User selectable 1 or 2 point
Connector	BNC
Power	2 AA batteries
Battery life	500 hours typical
Size (l x w x d)	175 x 75 x 35mm
Weight	250g

Ordering Information

Part Code	Description
350 201	350 pH meter supplied with epoxy bodied combination electrode (924 001), pH buffer sachets and batteries (fitted)
350 271	350 pH meter supplied with epoxy bodied combination electrode (924 001), pH buffer sachets, batteries (fitted) and free carry case

370 Enterprise Portable pH/mV Meter

- pH, absolute and relative mV ranges
- Automatic or manual calibration
- Automatic or manual temperature compensation
- Simultaneous pH and temperature reading
- Storage of up to 32 results

The 370 hand held pH/mV meter offers simple, yet professional performance with 1 or 2 point calibration and automatic buffer recognition with manual override. The unit simultaneously displays temperature compensated pH readings or electrode potential and temperature.

A comprehensive range of application specific electrodes and consumables are available for use with the 370 meter.

Technical Specification

pH

Range	-2.00 to 16.00
Resolution	0.01
Accuracy	±0.02
Automatic buffer recognition	4.00, 7.00, 9.22, 10.00 (with manual override)
Calibration	User selectable 1 or 2 point

mV (absolute or relative)

Range	±1999mV
Resolution	1mV
Accuracy	±1mV

Temperature

Range	-10 to +105°C
Resolution	0.1°C
Accuracy	±0.5°C
ATC /Manual range	0 to 100°C
Connector	BNC
Power	2 AA batteries
Battery life	500 hours typical
Size (l x w x d)	175 x 75 x 35mm
Weight	250g



370

Ordering Information

Part Code	Description
370 201	370 pH/mV meter supplied with epoxy bodied combination electrode (924 001), ATC probe (027 500), pH buffer sachets and batteries (fitted)
370 271	370 pH/mV meter supplied with epoxy bodied combination electrode (924 001), ATC probe (027 500), pH buffer sachets, batteries (fitted) and free carry case



3150

3150 Premier Portable pH/mV/ Temperature Meter

- Waterproof portable meter
- Automatic temperature compensation
- Storage of up to 100 results
- Automatic buffer recognition
- mV and redox modes
- Comprehensive range of electrodes and consumables

The 3150 pH meter is designed to resist the harshest of field, laboratory and industrial environments. The instrument is fully menu driven via a sealed membrane keypad, with all results being displayed simultaneously on the large display.

The pH sensor of the 3150 incorporates a precision temperature element configured to give accurate temperature compensation, as well as a direct readout of temperature in °C or °F.

Through the use of data logging protocols the 3150 automatically stores up to 100 results in its memory ensuring all results are saved, even in the event of battery failure.

Technical Specification

pH

Range	-2.00 to 16.00
Resolution	0.01
Accuracy	±0.02
Automatic buffer recognition	4, 7 and 10.05 (with manual override)
Calibration	User selectable 1 or 2 point

mV

Range	±1999
Resolution	1mV
Accuracy	±1mV

Temperature

Range	-10 to 105°C
Resolution	0.1°C
Accuracy	±0.5°C
ATC range	0 to 100°C
Connector	Waterproof
Power	3 AA batteries
Size (l x w x d)	200 x 80 x 60mm
Weight	370g

Ordering Information

Part Code	Description
538 001	3150 Premier pH meter supplied with pH/temperature probe (027 227), buffer sachets and batteries

3205 Premier Portable Ion/pH Meter

- Combined pH and ion portable, waterproof meter
- Ammonium, calcium, chloride, fluoride and nitrate ion measurements
- Up to 2 point pH and 5 point ion calibration
- Automatic buffer recognition
- Fully GLP compliant
- RS232 interface using optional cradle
- 6 language options

The 3205 portable ion meter is dedicated to the rapid, easy and reliable determinations of ammonium, calcium, chloride, fluoride and nitrate ions with concentrations displayed in mg/l, ppm, %, moles, activity or no units. When performing dedicated ion analysis appropriate ATC parameters will be automatically selected and when combined with the very stable electrode readings all calibrations can be performed in the laboratory prior to analysis in the field. Although customised for dedicated ion analysis the 3205 can also perform measurements of pH, mV and other, non-dedicated ion measurements.

Technical Specification

pH

Range	-2.00 to 16.00
Resolution	0.01
Accuracy	±0.02
Automatic buffer recognition	4, 7 and 10.05 (with manual override)
Calibration	User selectable 1 or 2 point

mV

Range	±1999
Resolution	1mV
Accuracy	±1mV

Temperature

Range	-10 to 105°C
Resolution	0.1°C
Accuracy	±0.5°C
ATC range	0 to 100°C

Ion	Multipoint calibration 1 to 5 points
Activity	1x10 ⁻⁹ to 9.99x10 ⁹ in integer or exponential format

Concentration units	activity, %, ppm, mg/l, moles, none
Dedicated ions	Ammonium, Calcium, Chloride, Fluoride and Nitrate

Clock	24 hour, hours/min/sec or day of month, month and year. Leap year corrected
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Outputs	RS232 via interface cradle
Connector	Waterproof
Power	3 AA batteries
Size (l x w x d)	200 x 80 x 60mm
Weight	370g



3205

Ordering Information

Part Code	Description
539 501	3205 pH and ion meter supplied with pH/temperature probe (027 227), buffer sachets, waterproof connector to S7 electrode lead (013 161), waterproof connector to BNC electrode lead and batteries



3505

3505 Bench pH Meter

- General purpose education laboratory pH meter
- Intuitive operation via rotary controls
- pH, temperature and mV mode for redox and electrode diagnosis
- Calibration controls locked during measurement
- Manual or automatic temperature compensation
- Large display
- Battery or mains operated

The 3505 is a simple to use laboratory pH, mV and temperature meter for use in general purpose and educational applications. It utilises rotary controls for mode selection and pH calibration. A novel design feature ensures that inadvertent movement of the calibration controls has no effect during sample measurement. The large display ensures that during demonstrations and when used by groups, all can easily see the clear LCD readout.

Technical Specification

pH

Range	-2.00 to +16.00
Resolution	0.01
Accuracy	±0.02

mV

Range	±1999mV
Resolution	1mV
Accuracy	±1mV

Temperature

Range	-10 to +105°C
Resolution	0.1°C
Accuracy	±0.5°C
ATC range	0 to 100°C
Connector	BNC
Power	9V PP3 battery as standard or optional 9V power supply
Size (l x w x d)	210 x 250 x 55mm
Weight	850g



3505

Ordering Information

Part Code	Description
350 501	3505 pH meter supplied with epoxy combination pH electrode (924 001), electrode stand and holder, ATC probe (027 500), BNC shorting plug, buffer sachets and battery

pH Meters

3510 Bench pH/mV Meter

- Simultaneous readout of pH and temperature
- pH resolution to 3 decimal places
- 1, 2 or 3 point calibration
- Automatic or manual buffer selection
- Storage of up to 32 results
- RS232 connection to printer or PC via DataWay

The 3510 is a versatile, simple to use pH, mV and temperature meter that is ideal for routine analysis. With up to three decimal place resolution and a choice of up to three calibration points the 3510 provides the user with added flexibility where future demands for enhanced performance may be required. A choice of pH calibration buffers to DIN, JIS and NIST standards can be used for automatic calibration, as well as manually entered buffer values.

Technical Specification

pH

Range	-2.000 to +19.999
Resolution	0.001/0.01 0.1
Accuracy	±0.003
Calibration	User selectable 1, 2 or 3 point
Automatic buffer recognition	Jenway (2.00, 4.00, 7.00, 9.20 and 10.00), DIN, NIST, JIS

mV

Range	±1999.9mV
Resolution	0.1/1mV
Accuracy	±0.2mV

Temperature

Range	-10 to 105°C
Resolution	0.1°C
Accuracy	±0.5°C
ATC and manual temperature compensation	0 to 100°C
Outputs	Analogue and RS232
Connector	BNC
Power	9V AC ±10% @ 50/60Hz
Size (l x w x h)	210 x 250 x 55mm
Weight	850g



3510



3510

Ordering Information

Part Code	Description
351 001	3510 pH/mV meter supplied with glass combination pH electrode (924 005), electrode stand and holder, ATC probe (027 500), BNC shorting plug, pH 4, 7 and 10 buffers and UK power supply



3520

3520 Bench pH/mV Meter

- Ideal for quality control and GLP applications
- Up to 3 decimal place resolution
- 1, 2 or 3 point pH calibration
- Automatic or manual buffer selection
- Multiple language options
- Storage of up to 500 results
- RS232 connection to printer or PC or infra red (IrDA) communication
- GLP compliant

The 3520 dynamic pH/mV meter offers research grade specifications with a comprehensive range of features and functions, making it suitable for the broadest range of research, general laboratory, QC and GLP based applications. The built in data logger can store, print or output readings based on a wide range of trigger options, making this model suitable for monitoring and controlling pH levels.

Technical Specification

pH

Range	-2.000 to +20.000
Resolution	0.001 / 0.01 / 0.1
Accuracy	±0.003
Calibration	User selectable 1, 2 or 3 point
Automatic buffer recognition	Jenway (2.00, 4.00, 7.00, 9.20 and 10.00), DIN, NIST, JIS

mV

Range	±1999.9mV
Resolution	0.1/1mV
Accuracy	±0.2mV

Temperature

Range	-10 to 105°C
Resolution	0.1°C
Accuracy	±0.5°C
ATC and manual temperature correction	0 to 100°C
Alarm points	-2.000 to 19.999pH
GLP	Calibration reminder interval (1 to 999hrs) Alarm outputs (open collector and audible). Security code protected data

Outputs	Analogue, RS232 and IrDA
Connector	BNC
Power	9V AC ±10% @ 50/60Hz
Size (l x w x h)	210 x 250 x 55mm
Weight	850g

Ordering Information

Part Code	Description
352 001	3520 pH/mV meter supplied with glass combination pH electrode (924 005), electrode stand and holder, ATC probe (027 500), BNC shorting plug, pH 4, 7 and 10 buffer sachets and UK power supply

430 Enterprise Conductivity/pH Meter

- Simultaneous display of pH, conductivity and temperature
- Automatic or manual calibration
- Power on self check routine
- Calibration diagnostics

The easy to use 430 is designed to readily withstand the rigours of field work, while reliably measuring pH and conductivity. The unit allows the simultaneous readout of pH, conductivity or TDS and temperature with switched ranges for both conductivity and TDS measurements.

Technical Specification

pH

Range	0.00 to 14.00 (1 or 2 point calibration)
Resolution	0.01
Accuracy	±0.02
Automatic buffer recognition	4.00, 7.00, 9.22, 10.00

Conductivity

Ranges	5 auto-selected from 0 to 199.9mS
Resolution	0.01µS to 0.1mS
Accuracy	±0.5% ±2 digits
Cell constant	0.01 to 19.99
Automatic standard recognition	10µS, 84µS, 1413µS, 12.88mS (with manual override)

TDS

Range	5 auto-selected from 0 to 199.9g/l
Resolution	0.01mg/l to 0.1g/l
Accuracy	±0.5% ±2 digits
EC ratio (TDS)	0.50 to 0.80

Temperature

Range	-9.9 to 99.9°C
Resolution	0.1°C
Accuracy	±0.5°C
ATC and manual	0 to 99.9°C
Temperature coefficient	0.00 to 4.00%/°C
Reference temperature	18, 20 or 25°C
Connector	mini-DIN
Power	2 AA batteries
Size (l x w x d)	175 x 75 x 35mm
Weight	250g

Ordering Information

Part Code	Description
430 201	430 conductivity/pH meter supplied with combined pH/conductivity probe (430 231), buffer sachets and batteries (fitted)
430 271	430 conductivity/pH meter supplied with combined pH/conductivity probe (430 231), buffer sachets, batteries (fitted) and free carry case



430



3540

3540 Bench Combined Conductivity/pH Meter

- Simultaneous display of pH and conductivity
- 2 independent channels to prevent interference between probes
- Additional modes for resistivity, salinity, TDS and mV
- Data logger with auto save/print options
- Storage of up to 500 readings (250 for each mode)

The 3540 is ideal for use in all laboratories where pH and conductivity analyses are required. The setup menu gives quick and easy access to the whole range of instrument, pH and conductivity measurement options. Calibration of both channels is automatic, with the option to select 1, 2 or 3 calibration points. The pH channel can also display mV values if required.

Technical Specification

pH

Range	-2.000 to 20.000
Resolution	0.001/0.01/0.1
Accuracy	±0.003

mV

Range	±1999.9mV
Resolution	0.1mV
Accuracy	±0.2mV

Conductivity

Range	Auto-selected from 0.01µS to 1.999S
Resolution	0.01µS to 1mS
Accuracy	±0.5% ±2 digits

Temperature

Range	-10 to 105°C
Resolution	0.1°C
Accuracy	±0.5°C
ATC and manual	0 to 100°C
Temperature coefficient	0.00 to 4.00%/°C
Reference temperature	18, 20 or 25°C
GLP	Calibration reminder interval, operator and sample ID and security coded setup
Outputs	Analogue, RS232 and IrDA interface
Connectors	BNC (pH) and 7-pin DIN (conductivity)
Power	9V AC ±10% @ 50/60Hz
Size (l x w x d)	210 x 250 x 55mm
Weight	850g



3540

Ordering Information

Part Code	Description
354 001	3540 conductivity/pH meter supplied with glass combination pH electrode (924 005), glass conductivity probe (K=1, 027 013), electrode stand and holder, ATC probe (027 500), BNC shorting plug, pH buffers and UK power supply

pH Meters

	924 001 027 027 924 067	924 002	924 005 924 003	924 007	924 010	924 015	924 030	924 034	924 047 924 070	924 049	924 050 924 052	924 051	924 076	924 077	924 078	924 079	924 080
Agar												✓					
Alkalines (High)													✓			✓	✓
Beer	✓		✓	✓		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Blood products	★		✓	✓		✓	★		★	✓	★	✓	✓	★	✓	✓	✓
Bread/dough		✓			✓			✓				★					
Cement	★	★	✓	★	★	★		★	★	★		★	✓	★	✓	✓	★
Cosmetics	✓	★	✓	✓	★	★		★	★	✓	✓	✓	✓	✓	✓	✓	★
Dairy products	★	★	✓	✓	✓	★		✓		✓		✓	✓	★	✓	✓	★
Drinking water	★		★			★			★	★	✓			★	★	★	★
Education	✓	★	✓	★	★	✓	★	★	✓	★	✓	✓	✓	✓	✓	✓	✓
Fats/cream		★	★		✓	★		✓		★	★	★	★	★	★	★	★
Field use	✓	✓	★		★				✓		✓	✓	★	✓	★	★	
Fish products	★	★	★	★	✓	★		✓		★	★	✓	★	★	★	★	★
High temperature																✓	✓
Jam/preserves														✓			★
Lab environmental				★							✓						
Lab flasks										✓					✓		
Low ionic			✓			★				★	✓		✓		✓	✓	
Meat/cheese		★			✓			✓				✓					
Micro samples				✓	★		★	★		★		★					
Paint				✓		✓				✓		✓					✓
Photographic													✓				✓
Soil	★	✓	★	★	✓	★		✓		★	★		★	★	★	★	★
Surface												✓					
Test tubes				★			✓			✓						★	
Tris Buffer							✓				✓						★
Viscous samples		★			★			★				✓		★			

- ✓ Electrode recommended for this sample type
- ★ Electrode would be satisfactory for use with this sample type If the box is left blank this indicates that the electrode is not suitable for this application

pH Meters

Combination pH Electrodes

924 001



924 002



924 003



924 005



924 007



924 010



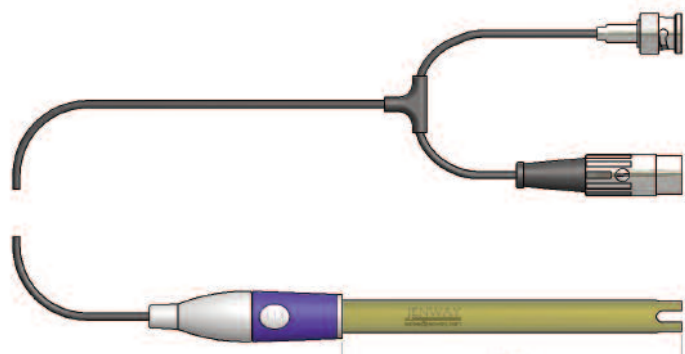
924 015



924 030



924 047



Ordering Information

Part Code	Description
924 001	General purpose, epoxy bodied for standard measurements of general solutions (max. temperature 60°C)
924 067	Replacement pH electrode with S7 connector (430, max. temperature 60°C)
924 002	12mm stem spear type, glass bodied for measurement of soil and slurry samples
924 003	Redox (platinum), glass bodied for redox measurements
924 005	General purpose, glass bodied for standard measurements of general solutions
924 007	4.5mm semi-micro, 90mm reach, glass bodied for small volume liquid samples
924 010	Spear type, 6mm stem, glass bodied for small volume soil and slurry samples
924 078	350mm reach probe, glass bodied for measurement in flasks
924 015	Glass electrode, pH only requires separate reference electrode
924 047	3 in 1 pH/temperature, epoxy bodied (bench laboratory meters only, max. temperature 100°C)
924 070	3 in 1 combination pH/temperature, epoxy bodied (370, max. temperature 100°C)

Application Specific Electrodes

Ordering Information

Part Code	Description
924 049	Life science, 6mm micro, 150mm reach, glass bodied for test tubes and small sample volumes (max. temperature 100°C)
924 030	Tris buffer, semi-micro with 90mm reach, glass bodied for pH measurements in biological buffers, blood and protein samples (max. temperature 50°C)
924 050	Environmental, glass bodied, suitable for low ionic strength solutions and purified water (max. temperature 50°C)
924 068	Environmental pH electrode with S7 connector (430, max. temperature 50°C)
924 051	Food, epoxy bodied, flat membrane, ideal for measurements of food extracts and agar plates (max. temperature 60°C)
924 069	Food pH electrode with S7 connector (430, max. temperature 60°C)
924 077	Jam electrode, epoxy bodied, ideal for measurements of jam and preserves
924 034	Spear knife probe, epoxy based for the measurement of solid samples
924 035	Replacement electrode for spear knife probe
924 076	Difficult applications, glass bodied for measurement of oils, biofuels and non-aqueous samples
924 079	High temperature probe, glass bodied for measurements up to 110°C
924 080	Laboratory electrode, glass bodied for measurement of aggressive chemical solutions

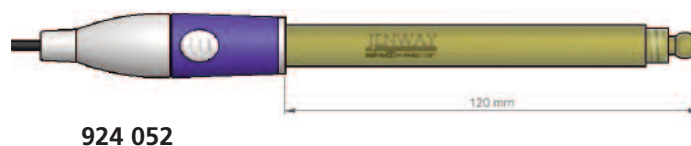
Maximum temperature 80°C, unless otherwise stated

pH Meters

Waterproof Versions (Premier models)

Ordering Information

Part Code	Description
027 227	Waterproof, general purpose, epoxy-bodied with ATC (max. temperature 100°C)
924 052	Waterproof environmental with ATC (max. temperature 50°C)
924 053	Waterproof 12mm stem spear type, glass bodied with ATC
924 054	Waterproof redox (platinum), glass bodied for redox measurements with ATC
924 055	Waterproof Tris buffer, glass bodied for pH measurements in biological buffers, blood and protein samples with ATC (max. temperature 50°C)
924 056	Waterproof food pH electrode with ATC (max. temperature 60°C)
538 014	Adapter lead with waterproof connector to BNC electrode connector



pH Performance Electrodes

- Quickly reach equilibrium
- Significantly reduced response times
- Far greater reproducibility
- Significantly reduced long-term drift

The advanced Jenway Performance pH electrodes are the electrodes of choice for advanced applications where faster response times and greater reproducibility are required.

	924 904	924 905
Beer	✓	✓
Blood products	✓	✓
Cement	★	✓
Cosmetics	✓	✓
Dairy products	✓	✓
Education	★	✓
Fats/cream		★
Field use		★
Fish products	★	★
High accuracy laboratories	✓	✓
Low ionic		✓
Micro samples		✓
Paint		
Soil	★	★
Test tubes		★
Tris Buffer	✓	✓

- ✓ Electrode recommended for this sample type
 ★ Electrode would be satisfactory for use with this sample type If the box is left blank this indicates that the electrode is not suitable for this application

Ordering Information

Part Code	Description
924 904	4.5mm semi-micro, 90mm reach, glass bodied for small volume liquid samples, Tris buffers and use in high accuracy laboratories (max. temperature 100°C)
924 905	General purpose, glass bodied for measurements in general solutions, Tris buffers and use in high accuracy laboratories (max. temperature 100°C)



Maximum temperature 80°C, unless otherwise stated

pH Meter Accessories

Temperature and Reference Electrodes

Ordering Information

Part Code	Description
027 500	ATC/temperature probe (370, 3505, 3510, 3520 and 3540)
027 502	Teflon-coated ATC probe for use with aggressive/corrosive samples (370, 3505, 3510, 3520 and 3540)
924 016	Single junction, calomel, glass bodied reference electrode (max. temperature 50°C)
924 017	Double junction, AgCl, glass bodied reference electrode (max. temperature 50°C)
924 036	Single junction, AgCl, glass bodied reference electrode (max. temperature 100°C)

Ordering Information

Part Code	Description
399 241	Enterprise Kit: 370 pH, 470 Conductivity/TDS and 970 DO ₂ meters in a customised carry case. Supplied with epoxy combination pH electrode (924 001), ATC probe (027 500), conductivity cell with ATC, K=1 (027 298), DO ₂ probe (970 231) buffer sachets, spare membranes, KCl fill solution, zero powder and batteries (fitted)

Buffers and Solutions

Ordering Information

Part Code	Description
025 037	pH 4 buffer (red, 500ml)
025 038	pH 7 buffer (yellow, 500ml)
025 039	pH 10 buffer (blue, 500ml)
025 162	pH 9.22 buffer (500ml)
025 163	pH 2 buffer (500ml)
025 179	pH 4 buffer sachets (pack of 10)
025 180	pH 7 buffer sachets (pack of 10)
025 181	pH 10 buffer sachets (pack of 10)
025 192	pH electrode storage solution (250ml)
025 196	pH electrode fill solution 3M KCl, AgCl saturated (100ml)
025 160	3M KCl pH fill solution
025 161	pH electrode cleaning solution
025 157	Redox standard (200mV) (500ml)
025 158	Redox standard (365mV) (500ml)
025 159	Redox standard (465mV) (500ml)

pH Meters

Printers and PC Software

Ordering Information

Part Code	Description
543 001	40 column serial printer with interface cable, paper roll (060 287), ribbon (060 288) and UK power adapter (requires interface cradle) (3205)
542 001	Interface cradle supplied with interface cable kit (542 009)
060 287	Roll of paper for 40 column printer
060 288	Ribbon for 40 column printer
037 701	Thermal printer with IrDA, complete with roll of paper (037 702), universal power adapter and interface cable for non-IrDA instruments
037 702	Roll of paper for thermal printer
050 501	DataWay PC Software: includes CD-ROM and interface cable
037 501	RS232 to USB converter for use with computers without serial ports
037 801	9 way serial cable for connection to PC



Miscellaneous

Ordering Information

Part Code	Description
033 267	Carry case (350)
033 268	Carry case (370 and 430)
033 162	Carry case (3150 and 3205)
060 406	Dust cover for bench units
021 008	Battery (3505)
021 007	Battery (350, 370 and 430)