



pH/MV/°C METER, BENCH, PHENOMENAL® pH 1100L

This user friendly instrument, with articulated electrode stand and IP 43-rated housing, provides high resolution and accuracy for precise measurements. Complete with USB output for connection to a computer. GLP compliant.

- Large LCD graphic display with continuous LED backlight showing both pH/mV and temperature value simultaneously
- Data logging function selectable between 1 min and 1 h; memory capacity of 5000 data sets
- Automatic power shutoff: Adjustable from 10 min to 24 h
- Automatic buffer recognition of DIN and NIST buffers (1,68/4,00/6,86/9,18/12,54)
- Three additional technical buffers at 25 °C (4,00/7,00/10,00) in memory
- Advanced self-test and diagnostics (electrode efficiency diagnostic, drift control); calibration symbol shows when recalibration is required
- Low energy consumption. Choice of mains supply or 4x AA batteries for over 1000 operating hours
- Low battery indicator

Ready to use pH 1100L kit includes instrument, glass pH electrode with built-in 221 temperature sensor, 1 metre cable and articulated stand, two buffers (4,00/7,00), plastic beaker and instruction manual (22 languages) on CD ROM.

The life science kit pH 1100LB includes the LS 221 Biotech electrode with 1 metre cable instead of the 221 electrode.

Model	pH 1100L	pH 1100LB
pH range	-2,000...+20,000	
pH resolution	0,1/0,01/0,001 (selectable)	
pH accuracy	±0,1/±0,01/±0,005	
pH calibration	Up to 5 points	
Automatic buffer recognition	BDH Prolabo® TITRINORM® buffers at 25 °C: 4,00/6,98/9,94 NIST/DIN 19266 (1,68/4,00/6,86/9,18/12,54) Technical buffers at 25 °C: 4,00/7,00/10,00	
mV range	±1200,0/±2500	
mV resolution	0,1/1 (selectable)	
mV accuracy	±0,3/±1	
Temperature range (°C)	Auto: -5,0...+105,0; manual: -25...+130	
Temperature resolution (°C)	0,1/1	
Temperature accuracy (°C)	±0,2	
Temperature compensation	Auto/manual	
Data logging capacity	5000 data sets	
Data logging - log function	Selectable between 1 min and 1 h (selectable intervals: 1 s, 5 s, 10 s, 30 s, 1 min, 5 min, 10 min, 15 min, 30 min, 60 min)	
Display	LCD graphic display with LED backlight	
Connections	BNC for pH/banana for temperature	
Outputs	USB connection (slave, bidirectional)	
Power supply	Mains or 4x AA batteries	
Compliance	IP 43/GLP	

Description	Pk	Cat. No.
Bench pH/mV/°C meter pH 1100L, pHenomenal®, with 221 general purpose electrode	1 SET	662-1657
Bench pH/mV/°C meter pH 1100LB, pHenomenal®, with LS 221 electrode for biotech applications	1 SET	662-1861

Description	Material	Electrolyte	ØxL (mm)	Diaphr.	Connection	pH value	pH accuracy	pH buffer type	Pk	Cat. No.
pH electrode, pHenomenal®										
pHenomenal® 221 pH electrode, with temperature sensor	Glass	Refillable	12x120	Ceramic	BNC, 1 m cable				1	662-1161
pHenomenal® LS 221 (Tris) pH electrode, with temperature sensor	Glass	KCl 3 mol/l, refillable	12x120	Platinum	BNC, 1 m cable				1	662-1247
Accessories										
pHenomenal® electrode storage tube									1	662-1167
pHenomenal® storage/measuring vessel									1	662-1248
pHenomenal® compact survival kit (incl. electrode storage tube, 4 slots for storage of pH buffer, cleaning solution, etc. and 1 slot for a dropper bottle)									1	662-1166
pHenomenal® communication kit (CD-ROM, USB cable, manual), software is compatible with Windows 7, 8, 10 and XP									1	662-1225
pHenomenal® electrode stand, holds up to 4 electrodes + 1 temperature sensor									1	662-1169
Potassium chloride 3 mol/l (3 N) in aqueous solution AVS TITRINORM									100 ml	83605.180
Electrode cleaning solutions										
Electrode cleaning solution pepsin/hydrochloric acid for removal of proteins									100 ml	83603.180
Buffer solutions in bottles										
						4,00	±0,02	Phthalate	100 ml	32095.184
						7,00	±0,02	Phosphate	100 ml	32096.187
						10,00	±0,02	Carbonate	100 ml	32040.185