

Photometers, WTW

Photo-Lab® series

Precise thanks to the high-quality lens system and fast thanks to barcode test recognition with automatic cuvette detection system. These instruments require little maintenance thanks to their exceptional photometric stability and wear-free design.

Extensive on-board AQS/IQK guarantees reliable results during measurement and documentation. Values can be read off as concentration, extinction or transmission.

More than 200 programmed methods with all essential settings for test sets are available for downloading and updating at any time from the Internet. Users are thus provided with both a high-quality and economical solution for everything from routine measurements to laboratory analysis. All photometers feature date and time and come with an RS 232 interface. 2 years warranty.

	photoLab® S6	photoLab® S12	photoLab® Spektral
Applications	Routine measurements in waste and drinking water, battery version optional	Routine measurements in waste and drinking water, comprehensive laboratory tests, battery version optional	Routine measurements in waste and drinking water, professional unit VIS range for comprehensive laboratory use
Wavelengths	6 wavelengths: 340, 445, 525, 550, 605, 690 nm	12 wavelengths: 40, 340, 445, 500, 525, 550, 565, 605, 620, 665, 690, 820 nm	330 to 850 nm freely adjustable
Own methods	no	50	99
Cuvettes	Round 16 mm	Round 16 mm; rectangular 10, 20, 50 mm	Round 16 mm; rectangular 10, 20, 50 mm
Extinction range	0.3 to 3.2	0.3 to 3.2	0.3 to 3.2
Measured value memory	500	500	1000



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Article	Order No.
① Photometer PhotoLab S 6 for routine measurements with the convenient cuvette tests	80 81 32013

Article	Order No.
② Photometer PhotoLab S12 • round and rectangular cuvettes for measuring also low concentrations and for using the more economical reagent tests • 50 own method places for convenient measuring of own analyses • kinetics function • economical allround photometer in each laboratory through 12 wavelengths	80 81 32024

Article	Order No.
③ Photometer PhotoLab Spectral The spectral photometer for the VIS range with high-grade ZEISS lens system combined with photoarrays achieves an accuracy of < 1nm. With all the advantages of S6/S12 plus measurement of absorption spectrums and simplified input of own methods through teaching in calibration data.	80 81 32028



④ pHotoFlex, mobile photometer with pH

pHotoFlex

The pHotoFlex handheld photometer features sophisticated technology for field use, with an optional LabStation for simple evaluation and operation in the laboratory. Handy and well arranged, it can also be used for pH determination. A large illuminated graphic display guides the user through all functions. A laboratory station with battery and charging function is available as an accessory for the the basic battery-operated model (4 AA batteries). Routine data measurement and evaluation can then be performed even more conveniently with an external scanner and evaluation software.

pHotoFlex Turb

Same as pHotoFlex, plus turbidity measurement from 0 to 1100 NTU / FNU.

Photometer functions

- 6 wavelengths: 436, 517, 557, 594, 610, 690 nm, LEDs with filter, accuracy < 2nm
- Extinction range: 0 – 2 E
- 2 cuvette sizes for a large range of concentration: 28 mm, 16 mm; variable cuvette height from 91 to 104 mm for the 16 mm cuvette
- Up to 200 method-related data for a large number of test sets, extendible over the Internet
- Data memory for 1000 measurements
- 100 own methods
- Coloring measurement according to EN ISO 7887 (exactly 436 nm, 517 nm, 610 nm)

pH functions

- pH meter with temperature compensation and 3-point calibration
- pH -2.00 to 16.00 (+/- 0.01), temperature: -5.0 to 100.0 C°
- Automatic buffer recognition: TEC / NIST

Turbidity functions

- IR LED according to DIN 27027/ISO 7027
- Measuring range: 0-1100 NTU / FNU
- Resolution: 0-9.99 NTU: 0.01; 10-99 NTU: 0.1; 100-1100 NT: 1.0
- 3-point calibration with standards (0.02 – 10 – 1000 NTU)

Article	Order No.
pHotoFlex pocket photometer, incl. batteries (4 AA)	80 81 51100
pHotoFlex Turb pocket photometer, incl. batteries (4 AA)	80 81 51110

Accessories

Article	Order No.
pHotoFlex rechargeable battery	80 81 51300
Rechargeable battery + mains plug for all pHotoFlex models	
LabStation	80 81 51301
Laboratory station with pHotoFlex software for all pHotoFlex models, incl. rechargeable battery and mains cable, laboratory interface cable (9-pole)	
• simplified operation for routine measurements	
• more functionality (barcode support)	
• better input and output of data through pHotoFlex software	
Interface cable AK540/B	80 81 52842
Unit/PC (6-pole) via RS232 with 9/25 pin adapter	
Interface cable Labor	80 81 52758
Unit/PC (9-pole) via RS232 with 9/25 pin adapter	

Accessories pH

Article	Order No.
pH combination electrode SenTix 41	61 81 21635
pH combination electrode SenTix 41-3	61 81 21636
pH buffer TPL4	61 81 21800
pH buffer TPL7	61 81 28802



⑤ Reagents for Photo-Lab and photoFlex

Article	Model	Measuring range	Order No.	PU pc/Pack
Al aluminium RT ¹⁾	14825	0.020–1.20 mg/l Al	80 81 25425	300
NH ⁴ ammonium RT ¹⁾	14752	0.010–3.00 mg/l NH ⁴ -N	80 81 25426	500
NH ⁴ ammonium KT	A5	0.20–8.00 mg/l NH ⁴ -N	80 81 25323	25
Pb lead RT ¹⁾	09717	0.010–5.00 mg/l Pb	80 81 25034	50
Cadmium RT ²⁾	01745	0.002–0.500 mg/l Cd	80 81 25051	55
Cadmium KT	14834	0.025–1.000 mg/l Cd	80 81 25314	25
Chlorine KT free	00595	0.03–6.00 mg/l Cl ₂	80 81 25419	200
Chlorine KT free + total	00597	0.03–6.00 mg/l Cl ₂	80 81 25420	200
Chlorine dioxide RT ²⁾	00608	0.020–10.00 mg/l ClO ₂	80 81 25017	150
Chromate KT	14552	0.05–2.00 mg/l Cr	80 81 25341	25
Cyanide KT	14561	0.010–0.500 mg/l CN	80 81 25344	25
Cyanide RT ²⁾	09701	0.002–0.500 mg/l CN	80 81 25492	100
COD KT	C1	15–160 mg/l COD	80 81 25302	25
COD KT	C2	100–1500 mg/l CSB	80 81 25308	25
Iron KT ¹⁾	14761/1	0.005–5.00 mg/l Fe	80 81 25435	1000
Iron KT ¹⁾	14761/2	0.005–5.00 mg/l Fe	80 81 25439	250
Fluoride RT ²⁾	14598	0.10–20.0 mg/l F	80 81 25048	100
Total hardness KT	00961	0.7–30.1 °d	80 81 25039	25
Copper RT ¹⁾	14767	0.02–6.00 mg/l Cu	80 81 25441	250
Magnesium KT	00815	5.0–75.0 mg/l Mg	80 81 25043	25
Manganese KT	00816	0.01–10.0 mg/l Mn	80 81 25035	25
Manganese RT ¹⁾	14770	0.10–5.00 mg/l Mn	80 81 25442	500
N total KT	14537	0.5–15.0 mg/l N _{total}	80 81 25358	25
Nitrate KT	14542	0.5–18.0 mg/l NO ₃ -N	80 81 25410	25
Nitrate RT ²⁾	14773	0.2–20.0 mg/l NO ₃ -N	80 81 25444	100
Nitrite RT ¹⁾	14776/1	0.005–1.000 mg/l NO ₂ -N	80 81 25445	1000
Nitrite RT ¹⁾	14776/2	0.005–1.000 mg/l NO ₂ -N	80 81 25440	335
Nitrite KT	N4	0.010–0.600 mg/l NO ₂ -N	80 81 25343	25
Ozone RT ¹⁾	00607/1	0.010–4.00 mg/l O ₃	80 81 25016	200
Ozone RT ¹⁾	00607/2	0.010–4.00 mg/l O ₃	80 81 25054	1200
Phosphate RT ²⁾	14842	0.5–30.0 mg/l PO ₄ -P	80 81 25447	400
Phosphate RT ¹⁾	14848	0.01–5.00 mg/l PO ₄ -P	80 81 25446	420
Phosphate KT	P4	0.05–1.50 mg/l PO ₄ -P	80 81 25366	25
(P _{total})		0.05–1.50 mg/l P _{ges}		
Phosphate KT	P5	0.3–15.0 mg/l PO ₄ -P	80 81 25368	25
		0.3–15.0 mg/l P _{ges}		
Sulfate KT	14548	5–250 mg/l SO ₄	80 81 25414	25
Zinc KT	14832	0.05–2.50 mg/l Zn	80 81 25451	90

Other tests on request, method data can be updated from the Internet.

¹⁾ not for photoLab S6

²⁾ only for photoLab S12/Spektral

