

Photometers, WINLAB®

WinLab Data Line Photometer for water analysis

LED-photometer with:

- Big spectral range from 380 to 810 nm
- High, photometric precision
- Flexibly usable for many reagent types, e.g. HACH, Merck, M+N, Tintometer, CALDUR
- Method memory for 150 calibration curves
- Operation instruction for reagents can be read directly from the display
- Complete documentation per data logging
- Includes software for documentation
- Robust, tested new housing, waterproof
- Backlit display
- Display cover made of glass, scratch-free

With new spectral range

Due to 9 LED and filter combinations, such as:

380 – 430 – 470 – 500 – 520 – 560 – 610 – 700 – 810 nm, a wide spectral range is available.

Free reagent selection

For many manufacturer reagents, e.g. HACH, Merck, M+N, Tintometer, CALDUR. Calibration curves can be saved with the included software.

Method memory

With up to 150 calibration curves of different reagents.

Simple operation and much information from the display

The display informs you on every step on the right reagent dosage, each step can be read from the display!

High precision

The electro-optical accuracy within a wide range of extinctions from -0.500 to 2.000 lies at $\pm 1.5\%$.

Display

Back back-illumination and display cover made of scratch-proof mineral glass, the digit-size for the measurement display is 12 mm.

Furthermore, the display informs on date, time, measurement steps, article no. of the reagents used and of course all operational steps.

Data logging and interface

To save up to 1000 data records.

GLP-conform.

The following is documented per data record: date / time / wavelength / reagent used / measurement result / measurement number / location of measurement.

The serial wireless, waterproof IrDA-interface with USB adapter makes a trouble-free data transfer possible, also on-location!

Software

The software included in the scope of delivery offers many possibilities. This way, either calibration curves of the reagents can be selected, which are saved in the photometer memory, or brand-new, e.g. self-created curves! Theoretically, the photometer can work with only one calibration curve or with up to 150.

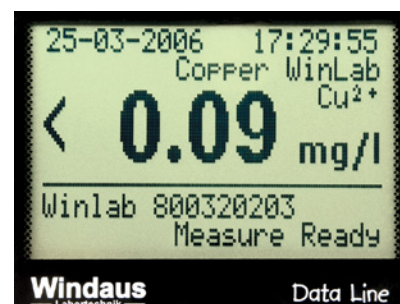
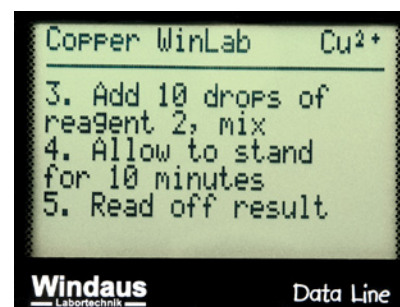
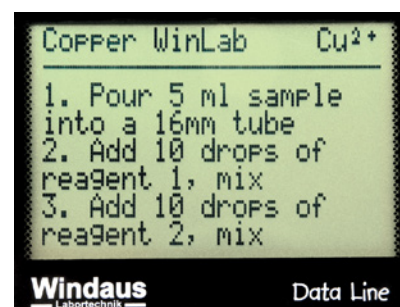
Housing

The photometer is mostly waterproof, especially in the cuvette duct! Here, the photometer is vastly protected against intruding liquids. The IrDA-interface is also waterproof!

Technical data:

Optics:	LED and filter
Wavelengths:	380 / 430 / 470 / 500 / 520 / 560 / 610 / 700 / 810 nm
Extinction range:	-0.500 to 3.000
Electro-optical accuracy:	in the range from -0.100 to 2.000 1.5% from
Photometric accuracy:	$\pm 3\%$ (to filter)
Language selection,	German / English / Spanish / French or two other languages,
operation text:	e.g. Polish or Italian
Memory:	for up to 150 calibration curves incl. operation texts
Interface:	IrDA, as infrared interface
Data record memory:	up to 1000 data records
Graphic display:	128 x 64 Pixel, 60 x 40 mm size of the reading field, Backlit, with scratch-proof mineral glass cover with calendar and time (automatic change to Daylight Savings Time)
Date/time:	
Power supply:	4 x batteries 1,5 V each (rechargeable by means of included charger)
Energy saving function:	automatic turn-off, according to selected turn-off time

WINLAB®



- | Article | Order No. |
|--|--------------------|
| ① WinLab standard plastic transport case | 80 03 02540 |
| includes: WinLab Data Line Photometer with batteries - charger, software, 10 round cuvettes 16 mm, 2× sample tubes for dilutions, funnel, cleaning brush for cuvette, cuvette rack made of rigid foamed plastic, 2× syringes, IrDA-USB-adaptor, cable 1 m long for USB interface | |

- | Article | Order No. |
|--|--------------------|
| ② WinLab photometer aluminium transport case | 80 03 02550 |
| includes: WinLab Data Line Photometer with battery charger, software, 10 round cuvettes 16 mm, 2 sample tubes for dilutions, funnel, cleaning brush for cuvette, cuvette rack for 25 cuvettes, 2× syringes, IrDA-USB-adaptor, cable 1 m long for USB interface | |

Accessories

Article	Order No.	PU pc/Pack
Cuvettes set	10 03 20405	10
consists of 10 cuvettes with screw-cap, Ø 16 mm		

Reagents - Testkits

CALDUR reagents Testkits using for WINLAB DATA Photometer

Article	Meas. range mg/l	Qty. measurements	Order No.
Aluminium	0.02 – 0.3	150	10 03 20404
Ammonium	0.1 – 10	100	10 03 20212
Chlorine (free)	0.05 – 1	150	10 03 20242
Chlorine LR (free+combined)	0.05 – 1	150	10 03 20252
Chlorine HR (free+combined)	0.1 – 2	150	10 03 20257
Chlorine/Chlorine Dioxide	0.05 – 10	140	10 03 20272
Iron LR	0.02 – 2	150	10 03 20312
Iron LRS	0.01 – 0.5	100	10 03 20309
Iron WINLAB	0.05 – 6	100	10 03 20206
Copper	0.05 – 2	100	10 03 20322
Copper WINLAB	0.1 – 12	100	10 03 20203
Manganese	0.05 – 2	100	10 03 20362
Molybdenum	2.5 – 100	120	10 03 20672
Nitrate	0.5 – 50	200	10 03 20342
Nitrite LR	0.02 – 1	200	10 03 20352
(ortho) Phosphate LR	0.1 – 5	200	10 03 20412
(ortho) Phosphate HR	2.5 – 100	100	10 03 20417
(ortho) Phosphate WINLAB	0.2 – 10	100	10 03 20205
Peroxide	1 – 100	150	10 03 20442
Oxygen	1 – 12	30	10 03 20512
Silicate	0.1 – 10	100	10 03 20522
Sulphate WINLAB	20 – 1000	100	10 03 20220
Sulphide	0.05 – 1	100	10 03 20542
Sulphide WINLAB	0.05 – 2	100	10 03 20221

Contact us to ask about use of other reagents by the manufacturers HACH, Merck or Tintometer.

