

## photoLab® 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. The methods include all common parameters for analysis of sewage and drinking water, also for sea water and for pisciculture and fish farming, for food and beverage industries. 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.

|                       | <b>photoLab® S6</b>                                                        | <b>photoLab® S12</b>                                                                                       |
|-----------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Applications          | Routine measurements in waste and drinking water, battery version optional | Routine measurements in waste and drinking water, comprehensive laboratory tests, battery version optional |
| Wavelengths           | 6 wavelengths: 340, 445, 525, 550, 605, 690 nm                             | 12 wavelengths: 340, 410, 445, 500, 525, 550, 565, 605, 620, 665, 690, 820 nm                              |
| Own methods           | no                                                                         | 50                                                                                                         |
| Cuvettes              | Round 16 mm                                                                | Round 16 mm; rectangular 10, 20, 50 mm                                                                     |
| Extinction range      | 0.3 to 3.2                                                                 | 0.3 to 3.2                                                                                                 |
| Measured value memory | 500                                                                        | 500                                                                                                        |



| Article                                                                                        | Order No.          |
|------------------------------------------------------------------------------------------------|--------------------|
| ① <b>Photometer photoLab S 6</b><br>for routine measurements with the convenient cuvette tests | <b>80 81 32013</b> |

| Article                                                                                                                                                                                                                                                                                                                                                                                  | Order No.          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| ② <b>Photometer photoLab S12</b><br>• round and rectangular cuvettes for measuring also low concentrations and for using the more economical reagent tests with automatic cuvette and measuring range switchover<br>• 50 own method places for convenient measuring of own analyses<br>• kinetics function<br>• economical allround photometer in each laboratory through 12 wavelengths | <b>80 81 32024</b> |



## Spectrophotometers photoLab® 7000 series

**photoLab® 7100 VIS** und **photoLab® 7600 UV-VIS** for combined routine and spectral analysis including pioneering reagent-free optical COD, nitrate and nitrite measurement (UV):

- Proven and fast: Routine analysis like waste and drinking water, aquaculture, food & beverage, environmental monitoring and production
- Pioneering + cost saving: reagent-free OptRF measurement for COD, nitrate and nitrite in sewage plant outlets and some surface waters
- Universal for industrial, research and educational use
- User-friendly structured menus and clear guidance on brilliant display
- Lab quality in the field: 4.5 kg light weight, with car battery and field case option

## Routine Analysis

- More than 250 programs for commercial test kits, standard parameters, direct readings of coloration, SAK, etc.
- Barcode recognition for tests in vials and rectangular cells
- Automatic cell recognition for 16, 10, 20 und 50 mm without adapter, automatic measurement range selection
- User-defined programs being easy to program and fast selected
- Up to three parallel timers

## Spectral and universal analysis from 190 to 1100 nm

- Scans in various nm-steps, 700 – 2000 nm/min
- Kinetics and multi-wavelength readings including special methods and ADMI color measurement
- User profiles and calculation programs storable
- Extensive programming tools for multistep functions with user guidance, e.g. enzymatic testing
- photoLab® color: Optional PC-Software for color measurement from CIE to Yellowness

## AQA

- Multi-level user-friendly AQA functions with administration tools and comprehensive checking aids for meter and reagents.

## Data Management

- Measurement data, PDF documents, spectra and kinetics data, with data filter for pre-selected data management
- photoLab® Data spectral: PC-Software for data management
- External barcode reading option for uncoded test kits and sample ID



|                                            |                                                                     |                                               |
|--------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------|
| Wavelength range:                          | <b>photoLab® 7100 VIS</b><br>320 – 1100 nm                          | <b>photoLab® 7600 UV-VIS</b><br>190 – 1100 nm |
| Optics:                                    | Monochromator with grating and step motor / reference beam          |                                               |
| Lamp:                                      | Wolfram-Halogen                                                     | Xenon flashlamp                               |
| Bandwidth:                                 | 4 nm                                                                |                                               |
| Wavelength accuracy/<br>reproduceability:  | ± 1 nm /<br>< 0.5 nm                                                |                                               |
| Photometric accuracy/<br>reproduceability: | - 0.003 E for E < 0.600;<br>0.5% of values for 0.600 < E < 2.000    |                                               |
| Interface/Update:                          | 1 USB-A, 1 USB-B, 1 Ethernet /<br>Update via Internet and USB-Stick |                                               |
| Temperature range:                         | operation: +10°C to +35°C, storage: -25°C to +65°C                  |                                               |
| Weight:                                    | approx. 4.5 kg                                                      |                                               |
| Dimensions WxHxD:                          | 404 x 197 x 314                                                     |                                               |

| Article                                       | Order No.          |
|-----------------------------------------------|--------------------|
| <b>photoLab® 7100 VIS, 320 – 1100 nm</b>      | <b>10 81 22523</b> |
| ③ <b>photoLab® 7600 UV-VIS, 190 – 1100 nm</b> | <b>10 81 22524</b> |
| ④ <b>photoLab® color + Data spectral</b>      | <b>10 81 22563</b> |
| PC-Software for photoLab® 7000 series         |                    |

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