Lab methods in the palm of your hand

DR 1900 Portable Spectrophotometer

Order number: DR1900-02L

With over 220 pre-programmed HACH LANGE and HACH methods in a waterproof, shock tested design this spectrophotometer delivers lab quality results in a portable, field ready instrument.

- Carry anywhere due to a compact design
- Test what you need with hundreds of built-in methods
- Ensure accuracy in the field
- Make testing easier with a clear, easy-to-use interface
- Test in demanding environments - water and dust-proof design

The spectrophotometer excels in the field because it is designed to go where you need to go. Your field testing takes you to potentially dusty and wet conditions where other equipment simply will not last. Built with the field in mind the instrument has a large easy-to-ready screen and a simple user interface that makes testing easier than ever, even in the harshest conditions. Underneath the rugged exterior, the spectrophotometer has over 220 of the most commonly tested water methods already built in. If you want, use the easy-to-use interface to create your own methods to test what is important to you. Tests are performed with a wavelength range of 340 to 800 nm which make this a field instrument you can use to find results typically only seen in laboratory instruments.

Please note: LCK cuvette test evaluation possible, but without barcode reading & 10 fold measurement feature.

Technical Specifications

Battery life	15 days (typical) @ 5 readings a day / 5 day week without backlight* * Backlight usage will decrease battery life.
Battery requirements	4 AA size batteries
Cuvette compatibility	13 mm and 1 inch round 10 x 10 mm 1 inch square adapter for round vials and 10 x 10 mm
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Data storage	500 measured values (Result, Date, Time, Sample ID, User ID acc. to

GLP)

Detector	Silicon photodiode
Dimensions Metric (H x W X D)	98 mm x 178 mm x 267 mm
Display	Graphical display 240 x 160 pixel (LCD, b/w, backlit)
Enclosure waterproof rating	IP67
Environmental conditions: relative humidity	max. 80 % relative humidity (non-condensing)
Includes	Printed Basic Manual, CD with procedure manual (English) in pdf format. Set of vial adapter in carton box. Pkg of 4 AA Alkaline Battery. Dust Cover
Interface	USB type Mini IP67 (with optional Module)
Operating conditions	10 - 40 °C (50 - 104 °F), max. 80 % relative humidity (non-condensing)
Operating mode	Transmittance (%), Absorbance and Concentration
Optical system	Reference beam, spectral
Photometric accuracy	± 0.003 Abs @ 0.0 - 0.5 Abs
Photometric linearity	< 0.5 % (0.5 - 2.0 Abs)
Photometric measuring range	0 - 3 Abs (wavelength range 340 - 800 nm)
Power supply	110 - 240 V / 50/60 Hz (* optional Module required. May not be avaliable in all region)
Power supply	4x NiMH rechargeable Battery (* optional Module required. May not be avaliable in all region)
Power supply	4 x AA size Alkaline 4x NiMH rechargeable Battery* Power supply*: 110 - 240 V; 50/60 Hz (* optional Module required. May not be available in all regions)
Pre-programmed methods	> 220 (Please note: LCK cuvette test evaluation possible, but without barcode reading & 10 fold measurement feature.)
Reproducibility	± 0.005 Abs (0 - 1 A)
Source lamp	Xenon Flash
Spectral bandwidth	5 nm
Storage conditions	-30 - 60 °C (-30 - 140 °F), max. 80 % relative humidity (non-condensing)
Stray light	< 0.1 %T at 340 nm with $NaNO_2$
Temperature range	0 - 50 °C (32 - 122 °F)

User interface	English, French, German, Italian, Spanish, Portuguese, Bulgarian, Chinese, Czech, Danish, Dutch, Finnish, Greek, Hungarian, Japanese, Korean, Polish, Romanian, Russian, Slovenian, Swedish, Turkish
User programmes	50
Wavelength accuracy	± 2 nm (range 340 - 800nm)
Wavelength calibration	Automatic
Wavelength range	340 - 800 nm
Wavelength selection	Automatic
Weight	1.5 kg

Subject to change without notice.