



# **DR1900 Portable Spectrophotometer**

**Product #:** ZAR Price: Available **DR1900-01H** Contact Hach

## Lab methods in the palm of your hand

The DR1900 is perfect for use in the field because it is the lightest and most compact portable spectrophotometer. It also can perform that largest number of tests of any portable instrument. Underneath the rugged exterior, the DR1900 has the largest number--over 220--of the most commonly tested preprogrammed methods already built in. You can also use the easy-to-use interface to create your own methods. Also, it is flexible because you can use the widest range of vial sizes of any other spectrophotometer.

Portability - Easy to hold, and operate, the compact DR1900 is a valuable tool for your field technicians. This is lightest and smallest spec on the market.

Accuracy - 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.

Ruggedness - The DR1900 is built for rugged conditions. Built as a hand-held spec the DR1900 has a large, clear screen and a simple user interface that makes testing easier than ever in even the most demanding conditions.

Upgrade from your DR2800 or order a new DR1900 today!

Please note: TNT plus vial test evaluation is possible, but it does not have the barcode identification & 10-fold measurement and outlier elimination options available.

#### **Carry Anywhere**

The lightest, most compact portable spectrophotometer available easily goes where you need to go.

#### Test What You Need

Analyze your water with more preprogrammed methods than any other portable spectrophotometer, or easily create your own methods to suit your unique needs.

#### **Ensure Accuracy in the Field**

Wavelength range of 340 to 800 nm provides accuracy typically seen only in laboratory instruments.

#### **Make Testing Easier**

Simple, easy-to-use interface plus the widest range of vial sizes makes testing flexible.

#### **Take Into Field Environments**

Rugged construction keeps the elements out, which means you can test in the most demanding conditions.

### **Specifications**

Battery Life:

15 days (typical) @ 5 readings a day / 5 day week without backlight\*

Battery requirements:4, AA size alkali cellsCuvette Compatibility 2:10 nm square / 1 inch square andD nm square / 1 inch square and3 nm / 1 inch roundData Logger:500 measured values (Result, Date, Time, Sample ID, User ID acc. to GLP)Datector:500 measured values (Result, Date, Time, Sample ID, User ID acc. to GLP)Dimensions (H x W x D):98 nm x 178 nm x 267 nmDisplay:Graphical display 240 x 160 pixel (LCD, by, backlit)Display:167Enclosure rating:167Environmental Conditions: Relative10 - 40 °CFurviornmental Conditions: Temperature10 - 40 °CIterface:USB typeIMineID (Subter) (Su
I a m / 16 mm / 1 inch roundData Logger:500 measured values (Result, Date, Time, Sample ID, User ID acc. to GLP)Detector:Silicon photodiodeDimensions (H x W x D):98 mm x 178 mm x 267 mmDisplay:Graphical display 240 x 160 pixel (LCD, b/w, backlit)Enclosure rating:IP67Environmental Conditions: Relative Humidity:Max. 80 % relative humidity (non-condensing)Environmental Conditions: Temperature10 - 40 °CInterface:USB type Mini IP67 (with optional Module)
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Mains Connection 2:110 - 240 V / 50/60 Hz (* optional Module required. May not be available in all regions)
Mains Connection 3:4x NiMH rechargeable Battery (* optional Module required. May not be available in all region)
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: $\pm 0.003$ 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 Module?: No
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)
Reproducibility: $\pm$ 0.005 Abs (0 - 1 A)
Sample Cell Compatibility: 13 / 16 mm and 1 inch round adapter, 10 x 10 mm 1 inch square and 10x10mm
Source Lamp: Xenon Flash
Storage conditions: -30 to 60 °C (-22 to 140 °F), max. 80 % relative humidity (non-condensing)
Stray Light: $< 0.5 \%$ T at 340 nm with NaNO <sub>2</sub>
Temperature Range: 0 - 50 °C (32 - 122 °F)
User Interface Languages: English, French, German, Italian, Spanish, Portuguese, Bulgarian, Chinese, Czech, Danish, Dutch, Finnish, Greek, Hungarian, Japanese, Korean, Polish, Romanian, Russian, Slovenian, Swedish, Turkish
User programs: 50
Warranty: 12 months
Wavelength Accuracy:± 2 nm (range 340 - 800nm)
Wavelength Calibration: Automatic
Wavelength Range: 340 - 800 nm

Wavelength Reproducibility:	± 0.1 nm
Wavelength Selection:	Automatic
Weight:	1.5 kg
What's included?:	Includes: portable spectrophotometer, printed basic instrument manual, dust cover, 1-in. square matched glass sample cells, AA alkaline batteries 4/pk, and a four-type adapter set.

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