



### Applications

- Pre-programmed with all HACH LANGE analysis methods, for the analysis of waste water, drinking water and cooling/boiler water
- Absorbance and transmission
- Concentration for linear and non-linear calibration curves

## DR 3900 VIS Spectral Photometer with RFID\* technology

### Traceability starts with sampling

Reduce errors. Use RFID\* technology and trace your samples back to the sample location. All important information, such as the sample location, sample taker, date and time are saved on an RFID\* tag on the sample bottle. And you can transfer this data to the laboratory in seconds using RFID\* in the DR 3900.

### IBR+ increases the reliability of your measurement values

Lot number and expiry date information is now included on the 2D barcode, this additional information is transferred to the instrument and documented with the measurement value.

### Rapid data updates

Programming of methods into a spectrophotometer has never been so easy. Simply hold the cuvette test box in front of the DR 3900 RFID\* module, wait for the signal tone and it's done. Measurement begins straight away with accurate evaluation data for an accurate result.

### Quality assurance made easy with AQA+

QA procedures can now be easily defined and documented within the instrument without additional software. Current batch certificates (for the purpose of GMP/GLP results documentation) can be found on the RFID\* tag on the cuvette box. Thanks to this RFID\* technology, all batch-specific information can be retrieved immediately on the DR 3900 and printed out.

### Alignment of laboratory and process analysis

You can compare your process result with the laboratory reference value in the photometer via the LINK2SC connection between the SC controller and the DR 3900. Data can be exchanged via Ethernet bi-directionally, eg, matrix corrections from process probes can be sent directly from the laboratory.

### Data transfer is simple via USB or Ethernet

Transfer your measurement data easily via a USB stick or an Ethernet connection. The same applies for software updates. The DR 3900 can install the most up-to-date device software from our website via Ethernet, so your photometer always has the latest update.



**LANGE** 

## DR 3900 VIS spectral photometer with RFID\* technology

Specifications	
Display mode	Transmission (%), absorbance and concentration, scan
Light source	Halogen lamp
Beam projection	Spectral reference beam technology
Wavelength range	320 to 1100 nm
Wavelength accuracy	±1.5 nm (Wavelength range from 340 to 900 nm)
Wavelength reproducibility	±0.1 nm
Wavelength resolution	1 nm
Wavelength calibration and selection	Automatic
Spectral bandwidth	5 nm
Photometric measurement range	±3.0 Abs (wavelength range from 340 to 900 nm)
Photometric accuracy	5 mAbs at 0.0 to 0.5 Abs, 1% at 0.5 to 2.0 Abs
Photometric linearity	<0.5% to 2 Abs, 1% at >2 Abs with neutral glass at 546 nm
Scattered light	0.1% at 340 nm with NaNO <sub>2</sub>
Display	7" TFT WVGA colour touchscreen (800 × 480 pixels)
Data storage	2000 measurement data (result, date, time, sample ID, user ID)
Preprogrammable methods	>220
User programme	100
Cuvette compatibility	13 mm round cell, 1 cm and 5 cm rectangular cell, 1-inch round cell, 1-inch rectangular cell
Dimensions (HxWxD)	151 mm × 350 mm × 255 mm
Weight	4200 g
Operating conditions	+10 to 40 °C, max. 80% relative humidity (non-condensing)
Storage conditions	-30 to 60 °C, max. 80% relative humidity (non-condensing)
Enclosure rating	IP30
Power supply	Table power supply, 110 to 240 V; 50/60 Hz
Interfaces	USB type A (2), USB type B, Ethernet, RFID* module
Warranty	2 years

### Order information and accessories

LPV440.99.00001	DR 3900 spectral photometer with RFID* technology
Product contents	Adapter "A" for 1" round and ACCUVAC/1 cm rectangular cells, basic handbook, CD with handbook and work processes in 5 languages (GB, D, F, I, E) in PDF format, EU power pack 100–240 V, 47–63 Hz, user RFID* tag
LQV156.99.10001	RFID* set to sample identification: 1 RFID* locator LOC 100, 2 user RFID* tags, 5 sample location RFID* tags, 15 sample RFID* tags in 5 colours
LQV157.99.10001	SIP 10 sipper module
LZV875	SIP 10 tube kit, Lagoprene + Tygon
LZV873	2 m Ethernet cable
LZV791	USB memory stick
5835900.00	PD 24 thermal printer

### Service options

TSE-MC-DR3900	One-off inspection, service on demand
TSE-BC-DR3900	Basic maintenance contract
TSE-CC-DR3900	Comfort maintenance contract, with 60 months extended warranty

\* RFID technology available in all EU countries plus e.g. Norway, Switzerland, Serbia, Macedonia, Turkey. For other countries please ask your local HACH LANGE contact person.

Specifications are subject to change without notice.