QUALITY MEETS EFFICIENCY

DR6000 UV-VIS spectrophotometer

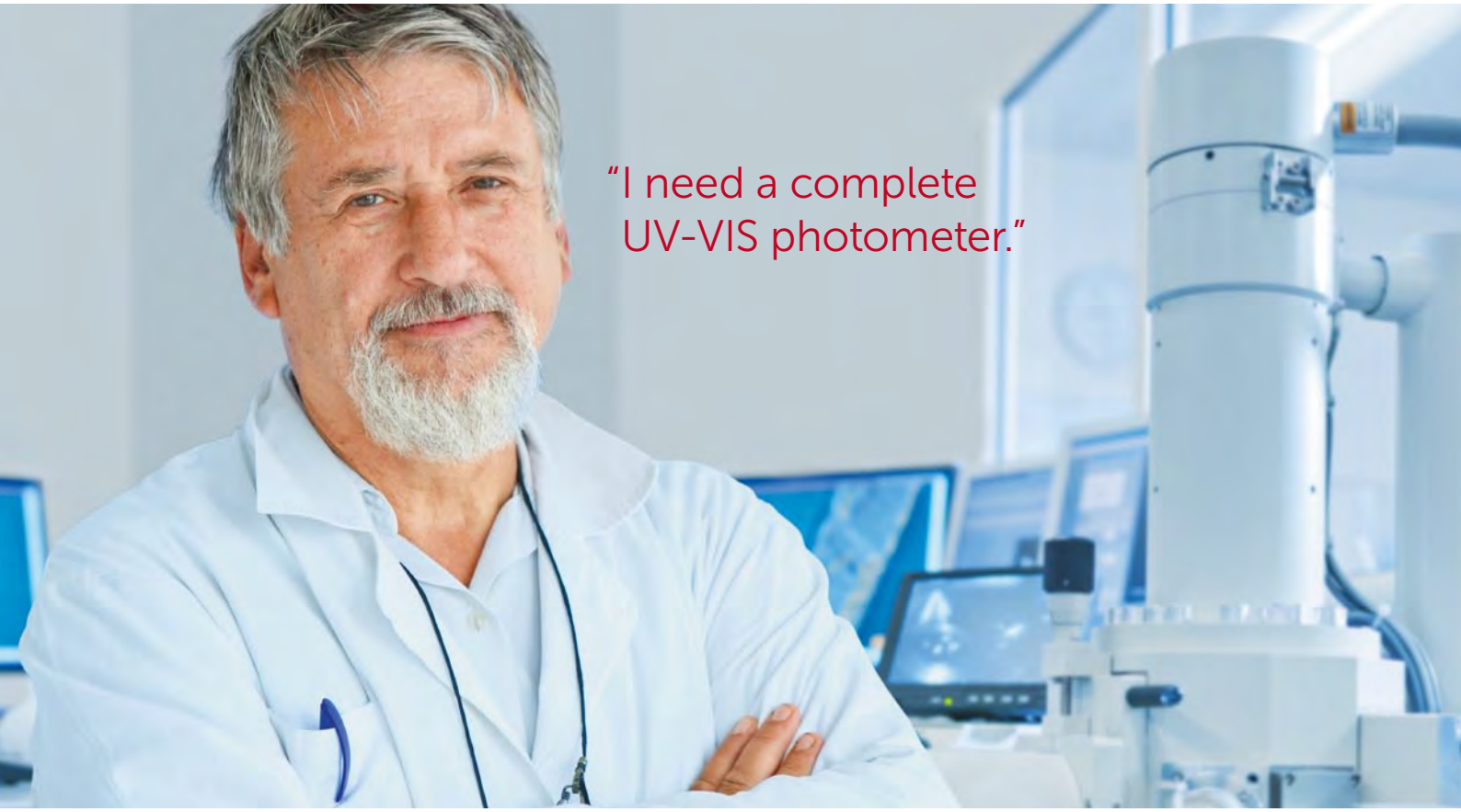


HACH®

Be Right™

Combining quality and cost-effectiveness

The new DR6000 UV-VIS spectrophotometer delivers top performance for both routine laboratory tasks and demanding photometry applications.



The new fourth generation DR6000 is engineered and manufactured in Germany to deliver exceptional analytical accuracy. The Czerny-Turner monochromator design reduces aberrations and guarantees a spectral bandwidth of <2 nm. The output coupler mirror optimally aligns the measurement beam.

Four sequential band-pass filters reduce internal scattered light to <0.05% and allow the detection of measurement signals in the range of ±3 Abs. The reference beam technology compensates for signal fluctuations in the instrument. Two low-noise silicon detectors ensure high selectivity and basic stability of the measurement signal.



Quality

+

Efficiency

Improved laboratory efficiency

The new DR6000 UV-VIS spectrophotometer unites reliable results with efficiency. The intuitive menu navigation with the 7" colour touchscreen allows you to enter and calibrate your own methods in just a few simple steps.
To help you save time, the instrument is preprogrammed with 240 methods including TOC, surfactants and nutrient parameters.

Application packages, e.g. for enzymology and colorimetry, open up further application opportunities to you, including drinking water and brewery analysis. By combining fast scans and simple LIMS integration, the DR6000 enables laboratories to work at peak efficiency.



"For me, quality and cost-effectiveness must be right."

Reliable results from the cuvette

Ready-to-use reagents from Hach guarantee quality and are officially recognised as an equivalent alternative to the standard method.

Independent round robin tests show that the results of cuvette tests are comparable with those of standard methods. Due to this Hach ISO-COD test carries the ISO seal.

Your benefit: comparability of results

The ready-to-use, high-precision pre-dosed cuvette tests guarantee the most reliable results. The coordinated system of reagents and the DR6000 photometer considerably reduces the number of working steps. The integrated masking of matrix interference guarantees a broad application spectrum. The DR6000 detects the cuvettes immediately upon insertion and automatically calls up the corresponding calibration curve. One further plus of the cuvette tests is the RFID identification which documents the shelf life of the cuvettes and ensures the traceability of your analyses.

Your benefit: dependable and reliable results





"Is there an equivalent alternative to my standard analysis?"

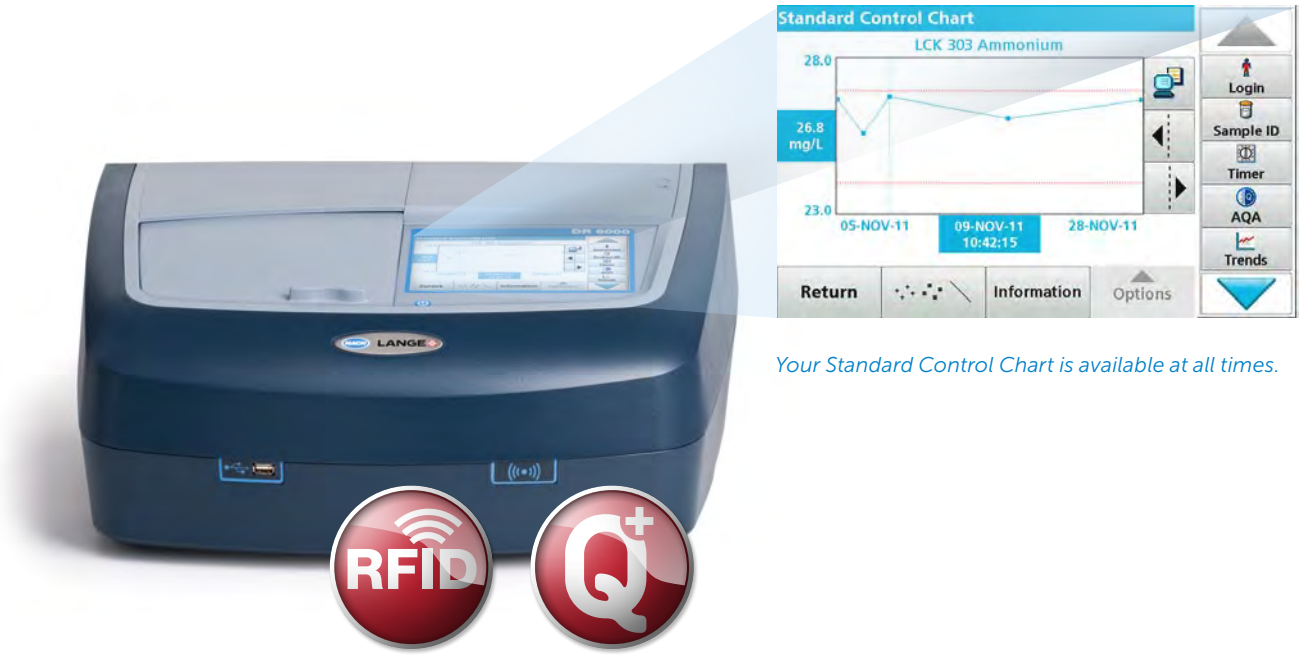


Transparent working processes in every situation

The DR6000 is fully automated. Nevertheless, it allows you to monitor all steps of the processes – even with the use of cuvette tests. With the DR6000, you can access the calibration data, the batch number, the measurement process and the raw data at any time. All data can be called up with one key press for verification on the large display.

For quality assurance RFID identification is used to read and transfer batch certificates, quality data and target values for standards.

Your benefit: transparency in the process



Your Standard Control Chart is available at all times.

Finally time for what is important

The DR6000 is efficient, simple to use and helps you save time for all standard and application specific analyses.



The optimised data management and simple operation of the DR6000 save valuable time. For data processing the DR6000 has three USB ports and an Ethernet interface for fast data retrieval and real-time data transfer. The DR6000 is LIMS-compatible (Laboratory Information Management System).

In addition the intuitive user navigation via icons and plaintext prompts on the large display reduces training requirements to a minimum and makes the DR6000 easy to operate for your team.

Your benefit: optimised data management



"Only when everything fits are the measurement values also correct."

Systematic quality and efficiency

Only a perfect interaction guarantees the highest efficiency and accuracy – starting with the individual components of the DR6000 up to the interaction with you and your laboratory equipment. Hach delivers to you a perfectly coordinated system – as a developer, manufacturer, and sales and service partner.



Cuvette test in standard-comparable quality



Addista standards, spiking and round robin test solutions



Test filter set for internal quality control



LT200 thermostat for digestions





Sipper module for serial analysis

Application software, e.g. for drinking water and breweries



Carousel holder, e.g. for enzymology

DR6000 UV-VIS technical data

Display mode	Transmission (%), absorbance, concentration
Optics	Deuterium lamp (UV), halogen lamp (VIS), Czerny-Turner monochromator, silicon photodiode detector
Wavelength range	190–1100 nm
Wavelength accuracy	±1 nm (200–900 nm)
Wavelength reproducibility	<0.1 nm
Wavelength resolution	0.1 nm
Scan speed	900 nm/min (in 1-nm increments)
Spectral bandwidth	2 nm (1.5–2.9 nm at 656 nm, 1 nm at the D2 line)
Photometric measurement range	±3 Abs (200–900 nm)
Photometric accuracy	5 mAbs at 0.0–0.5 Abs, <1% at 0.5–2.0 Abs at 546 nm
Photometric linearity	<0.5% to 2 Abs, ≤1% at >2 Abs with neutral glass at 546 nm
Scattered light	KI solution at 220 nm <3.3 Abs / <0.05%
Photometric drift	±0.0034 Abs
Long-term stability	Zero point at 546 nm for 10 hours ≤0.0034 Abs
Measurement technology	Reference beam technology for compensation of lamp ageing and mains fluctuations
Modules	Adapter for rectangular cells (10 mm, 20 mm, 50 mm, 1 inch) and round cells (1 inch); carousel holder for seven rectangular cells (10 mm), e. g. for enzymology; sipper module for pour-through cells
Test recognition	IBR+ barcode reading system for automatic recognition of 2D barcode cuvette tests
Data storage	5000 measurement values, 50 scans, 50 time intervals
User programmes	200
Dimensions / weight	215 × 500 × 460 mm (H × W × D) / 11 kg
Interfaces	2 × USB type A, 1 × USB type B, 1 × Ethernet

Subject to change without notice.

DOC032.52.20118.Aug15

HACH®
Be Right™