Be Right™

Comparison: DR2800 vs DR3900 Spectrophotometers

Future-proof your investment with added benefits

If you are using the older DR2800 spectrophotometers, chances are that you are happy with it as it still delivers accurate and reliable results. Unfortunately it is not possible to repair them anymore, and you risk not being able to perform your analysis should your photometer break. Replacing the DR2800 with DR3900 is therefore a good preventive investment in the future and will give you a wealth of new benefits.

Even easier to use!

Thanks to its large colour touch screen and step-by-step guidance during measurements or troubleshooting, using the DR3900 is incredibly easy and safe. There is no need for paper documents as the operating modes and batch certificates are displayed directly on the screen. Of course, the DR3900 automatically recognizes the test in use, but it will also warn you if the reagents expiry date has passed: no more risk of error. With the LOC100 RFID set, the sample and user IDs are transferred without contact (RFID) to the DR3900 before measurement by simply approaching the sample vial. No more risk of transcription errors.

Even more accurate measurements!

The DR3900 performs a 10-point measurement by rotating the LCK vial. This unique Hach technology guarantees unrivalled measurement quality. At the end of the measurement, the DR3900 will show you visually where your result is in relation to the measurement range of the test used. The DR3900 can also inform you of possible interferences that could affect the result. The TrueCal feature further improves measurement accuracy and repeatability by automatically using the calibration curve specific to the reagent lot being used.

More traceability to meet your quality requirements!

You can display the measurement history and trend curve on the screen. Now you can store up to 2,000 results that also include reagent characteristics such as lot number and expiration date. Exporting and securing your data has never been easier, either to a USB stick, PC, printer or to your network. Advanced functions (control cards, dilutions, ...) allow you to efficiently manage quality controls without the need for external software. The DR3900 is also compatible with our Claros solution which allows you to access the results on all your connected Hach devices, wherever you are and from any device (PC, phone, tablet...).

Chat in real time with your instruments online!

If you have online Hach analysers connected to your network, with or without wires, you can view measurements and history curves in real time on your DR3900's screen. Thanks to the Link2sc function, you can also calibrate your probes remotely by performing the analyses in parallel in the laboratory and sending the result to the online controller for adjustment.

Make sure you always have the most up-to-date version of your instrument!

Did a new analysis method evolve? The DR3900 will let you know immediately. Just approach the new reagent box to the device and the RFID contactless reading will automatically update the method. Is a new version of the DR3900 embedded software available? Update your DR3900 directly if it is connected to your network or via a USB key after downloading the update from our website.

DR2800 vs DR3900 Technical Specifications

	 DR2800	 DR3900
Basic Funcitonality		
Bandwidth	< 8nm	5nm
Wavelength Scanning	✗	✓
IBR barcode measurements w. 10 x cuvette rotation for measurement quality	✓	✓
Vial/Pathlength Recognition	✗	✓
Storage Capacity (# data points)	500	2000
Camera for Barcode and Company Logo Detection. Eliminates risk of handling errors	✗	✓
Quality Control		
Advanced Analytical Quality Assurance (AQA) Features. No need for separate software	✗	✓
IBR+: Lot number and expiration date are included in the bar code and stored with the measurements	✗	✓
CoA+: See Certificate of Analysis on the photometer screen via the chemistry box RFID	✗	✓*
IntelliCheck: user defined limits for results. Automatic Trend & Ratios – Analysis and Alerts – To identify incorrect results or outliers	✗	✓
SampleID – seamless sample tracking. Full traceability from sampling site to documentation	✗	✓*
Truecal: Cuvette tests including calibration data for each individual lot. Increasing accuracy and repeatability	✗	✓
Monitoring of C:N:P ratio: automatic visualisation if there is a change in the nutrient ratio, e.g. due to heavy rainfall, sludge discharge etc.	✗	✓
User Interface / Use Model		
Large 7” colour display w. crisp contrast for better readability and new tool bar for easier use	✗	✓
RFID technology: Simply move the text box or sample bottle close to the front of the instrument: - For a touchless and easy update of chemistry method from reagent box - To enter sample and user ID to the photometer without handwriting (need LOC100 locator)	✗	✓*
Step by step help guide on screen to solve any issues	✗	✓
Visualised measuring range by bar graph	✗	✓
Connectivity & Software Updates		
USB ports	2	3
RJ 45 LAN port for network configuration - To store data on any computer in the network or feed data into LIMS w/o additional software	✗	✓
- For an easy update of instrument software via direct web access	✗	✓
Bidirectional link to process equipment – LINK2SC Bidirectional data transfer from process sensors to lab instruments and back to perform e.g. matrix corrections	✗	✓
Claros enabled – seamlessly connect and manage instruments, data and processes anywhere, anytime	✗	✓

*RFID option needed