

**INFORMATION**  
LABORATORY ANALYSIS  
SPECTROPHOTOMETER  
DR 2800



## **A new dimension in flexibility**

**DR 2800 Spectrophotometer for water analysis**



UNITED FOR WATER QUALITY

# Incomparable flexibility – systematic water analysis with DR 2800

Wastewater, drinking water and process water—the HACH LANGE system stands for optimal water analysis. A unique selection of perfectly harmonised components guarantees individually accurate solutions. Its rugged design and intuitive handling make the DR 2800 the ideal spectrophotometer for economical, efficient and routine analysis.



Simple and highly precise: automatic test identification and a 10 fold measuring system performs an outline elimination of any abnormal results

Time-saving and innovative: evaluation in the open cell compartment

Intuitive operation: touchscreen with easy to understand menu

Fast and practical: transfer of stored measurement data and updates with a USB stick



Robust in the field: the DR 2800 is waterproof and, with its efficient battery, very suitable for portable use. Ideal with the portable water laboratory



Standard-comparable and reliable: innovative Cuvette tests with the simplest of handling

PERMACHEM powder pillows

# Competence in water analysis

## Photometer

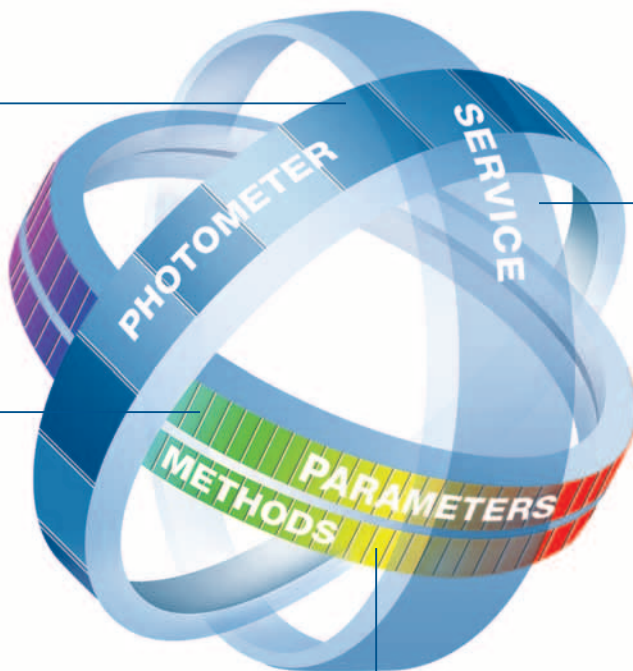
DR 2800—the specialist for water analysis in the laboratory and in the field.

- More than 200 preprogrammed tests
- Automatic test identification
- 50 user methods
- Waterproof (IP 41)

## Parameters

All key parameters from Ammonium to Zinc:

- Sum parameters—COD/BOD/TOC
  - Nutrients
  - Metals
  - Disinfectants
  - Surfactants and many more
  - Including sample preparation
  - Including quality assurance
- For wastewater, drinking water and process water



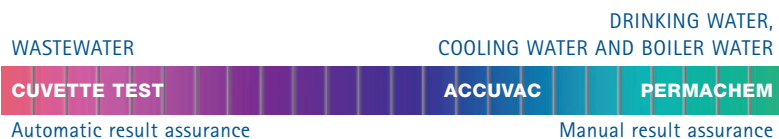
## THE HACH LANGE SYSTEM FOR WATER ANALYSIS

### Services

- On-site support by the Technical Customer Service
- Own service technician and maintenance contracts with warranty extension
- Legal compliance and environmental protection through collection of used reagents
- Comprehensive web site with downloads and shop
- Regular customer information by post and email

### All methods in one instrument

From fast screening tests to standard-comparable analysis:



50-mm cells

ACCUVAC

1-inch cells

Uniquely flexible: DR 2800 and the proven reagents from HACH LANGE with a wide variety of methods and parameters

### Especially robust in the laboratory and in the field

The reliable optical system of the compact DR 2800 ensures precise results. Each wavelength is individually selectable, 50 user methods and up to 500 measured values can be accommodated in the data storage. Thanks to the variety of cell sizes, a wide range of measured parameters can be covered, from trace analysis to high concentrations in electroplating baths. Easily understandable menus and the large touchscreen minimise familiarisation and prevent errors from occurring.

### The ultimate in simplicity—Cuvette tests with laser identification

Just insert the cuvette—everything else is automatic. A laser identifies the cuvette from its barcode. The DR 2800 calls up the correct test data. As the cuvette rotates, it is measured 10 times and any readings that are distorted by soiling on the cuvette are automatically eliminated. The measurement result is shown immediately in mg/l. All without even having to push a button!

# Technical data

<b>DR 2800 Spectrophotometer</b>	<b>Model no. LPV422</b>
<b>Applications</b>	Municipal and industrial wastewater, drinking water, surface water, water treatment, process water, production control
<b>Readout modes</b>	Absorbance ( $\pm 3 E$ ), Transmittance (%), Concentration
<b>Wavelength range</b>	340 – 900 nm (tungsten lamp)
<b>Reference beam technology</b>	To compensate for ageing of the lamp and power fluctuations
<b>Integrated Barcode Reading System (IBR)</b>	For automatic identification of LANGE Cuvette Tests, with 10 measurements during one rotation and outlier elimination
<b>Cells</b>	Cell holder for LANGE Cuvette Tests with IBR system Cell holder for 10-mm, 50-mm and 1-inch rectangular cells and 1-inch round cells
<b>Display</b>	High-resolution LCD (320x240 pixel), switchable backlighting, touchscreen
<b>Data storage</b>	Up to 500 measured values 50 user methods More than 200 preprogrammed HACH and LANGE method
<b>Ports</b>	USB port for PC, printer, USB stick Optional: Software for direct data transfer to PC
<b>Protection class</b>	IP 41
<b>Power requirement</b>	100 – 120V; 200 – 240V; 50/60Hz; automatic switching; including plugs for all European power networks
<b>Battery (optional)</b>	Lithium battery for up to 40 h of operation
<b>Ambient temperature</b>	10 – 40 °C, 0 – 90 % rel. humidity
<b>Dimensions (W x H x D)</b>	22 x 13.7 x 33.2 cm
<b>Weight</b>	4 kg (without battery)

Subject to change.



Nitrate TOC TNb Ammonium  
Hardness COD Phosphate Surfactants  
Organic acids Metals Chlorine  
And many more

**HACH LANGE – the specialists for water analysis**