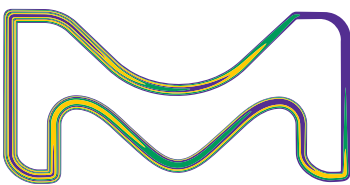


# spectrophotometers and test kits

Spectroquant® Prove plus for accurate  
and convenient water, beverage &  
environmental analysis



# Spectroquant® Prove plus

As your trusted analytical partner, we built the perfect tool for water analysis, one that unites the simplicity you want with the confidence you need, and the durability you expect. Spectroquant® Prove plus delivers all this and more. Its intuitive design and our comprehensive portfolio of Spectroquant® test kits make analysis smoother than ever and support you throughout your workflow.

## Long-life Lamp

### Extended durability and economy

The special xenon lamp in the Prove 300 plus and Prove 600 plus offers a lifetime of several years combined with the flexibility of UV/VIS analysis - even under intense use.

## Smart Screen

### Simple, seamless menu navigation

Have complete control at your fingertips with our interactive Smart Screen and intuitive icons.

- Instantly responsive display and fast processing
- Method and result lists for easy documentation and data access
- Touchscreen is resistant to most chemicals
- System menu in 29 built-in languages

## Custom Measurements

### Easy adjustments for every need

Several modifications can be made easily using the settings icon, for example:

- Simultaneous display of absorption and concentration values
- Turbidity correction
- Add the dilution factor for each sample

[SigmaAldrich.com/photometry](https://www.sigmaaldrich.com/photometry)

## Individualized Measuring Ranges

### Set your own individual ranges:

- Monitor results within specified limits
- Visualize expected ranges
- Simplify your trend analysis



## Data Exchange

### Fast and flexible connectivity

You have multiple ways to easily utilize your data:

- USB ports – to connect your printer, memory device, keyboard or barcode reader
- Ethernet port – “Prove Connect to LIMS” allows you to push your results directly to your LIMS or ELN (Cat.No. Y1100860001)

More information on

[SigmaAldrich.com/proveconnect](https://SigmaAldrich.com/proveconnect)

## Ready-to-use Chemistry

### Maximum flexibility

Every Prove plus model accepts 16 mm round cells as well as 10, 20 and 50 mm rectangular cells (cuvettes). For even greater sensitivity, the Prove 600 plus is compatible with 100 mm cells.



### Minimal effort

The Prove plus cell test port offers direct insertion of our ready-to-use round cell tests without opening any lids. The Live ID barcode identifies the correct method instantaneously.

Even for reagent tests measured in rectangular cells our innovative AutoSelector provides Live ID barcode recognition. Depending on the cell size, the measuring range is automatically selected - no adaptors needed.



## Easy Cleaning

### Durable, removable components

The intelligent design makes it easy to keep your Spectroquant® Prove plus in top form – even if something is spilled into the sample compartment. Simply remove the cell holder, rinse it with water, wipe it clean, and it's ready for your next analysis.



## Compact

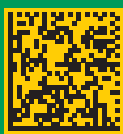
Dimensions: W 42 cm, D 28 cm, H 24 cm

# Accuracy and Precision made simple

## Live ID

### A new dimension in traceability

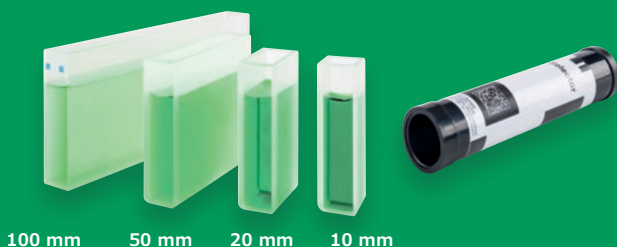
Live ID is an identification system for all our cell and reagent tests. Unlike other barcodes, it transfers “live” data—thanks to automatic calibration updates, meaning that your results will always be accurate and fully traceable. Live ID also saves time; just insert the test, and your Prove plus instrument reads the code, detects the method, and selects the right settings. Test-specific lot and expiry data are saved with each result for accurate records and streamlined audits.



- Method recognition
- Lot number
- Expiry date
- Calibration update

## Reagent Tests with AutoSelector

These economical kits contain highly stable reagent mixtures, and allow you to choose the cell format that suits your measuring range. An AutoSelector with a Live ID barcode is provided with each reagent test kit for correct measurements.



100 mm    50 mm    20 mm    10 mm



## Cell Tests

For maximum convenience, our cell tests include all the reagents you need for your analysis, so they are ready to use straight out of the box.

## Spectroquant® Test Kits

**Not just more choices.  
More confidence.**

Spectroquant® Prove plus is preprogrammed for over 150 Spectroquant® test kits and additional >150 methods, giving you swift, reliable results for the broadest range of applications.

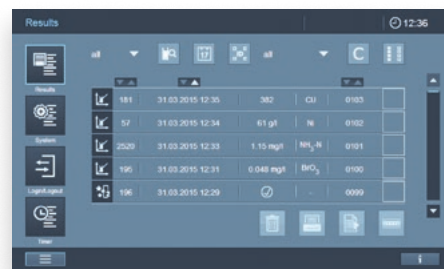
[SigmaAldrich.com/test-kits](https://www.sigmaldrich.com/test-kits)



## Data on Demand

### Customizable data for easy documentation

- Enjoy maximum flexibility in minimum steps
- Access all your results from a clear, concise list
- Select your desired filter option (by date, keyword, method, user, etc.)
- Export data in your preferred form – from brief overview to complete protocol



| Sample | Date       | Time  | Concentration | Unit | Method |
|--------|------------|-------|---------------|------|--------|
| 181    | 31.03.2015 | 12:35 | 382           | µg/L | 0103   |
| 57     | 31.03.2015 | 12:34 | 61            | µg/L | 0102   |
| 2529   | 31.03.2015 | 12:33 | 1.10          | mg/L | 0101   |
| 190    | 31.03.2015 | 12:31 | 0.048         | mg/L | 0100   |
| 190    | 31.03.2015 | 12:29 | -             | -    | 0099   |

## AQA Prime

### A new level of analytical standard

AQA Prime makes analytical quality assurance exceptionally reliable – and extremely easy.

- Clear overview of AQA status, information, updates, and options with one touch
- Select individual settings and measurements for each AQA
- Complete verification and documentation for all stages of quality control:

**AQA1** > Instrument check

**AQA2** > System check – now even easier because Spectroquant® Prove plus is preprogrammed for all Spectroquant® standards [SigmaAldrich.com/photometry](http://SigmaAldrich.com/photometry)



AQA1  
information



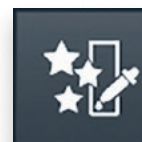
AQA2  
information



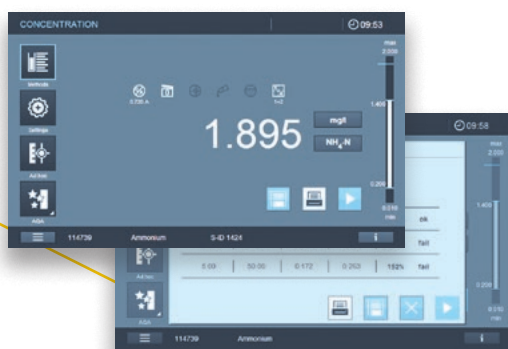
AQA1 activated



AQA2 activated



Pipette Check



## MatrixCheck

### Easily detect interferences

The MatrixCheck makes it even easier to spot interfering substances in your samples. After your measurement, simply press the Settings icon, and select MatrixCheck from the list. You will be clearly guided through the entire process.

## Preprogrammed Applications

### Free, additional methods to simplify your work

To further facilitate your analysis, Spectroquant® Prove plus offers free, preprogrammed application procedures, such as bromate in drinking water, sugar color and brewery methods.

[SigmaAldrich.com/wfa-applications](http://SigmaAldrich.com/wfa-applications)

## Robust Surfaces

### Built to endure lab chemicals

Spills and splashes happen no matter how careful you are. That's why the materials and design of Spectroquant® Prove plus are engineered to last and be resistant to most chemicals used in labs.

# Spectroquant® Prove plus

100 | 300 | 600

## Spectroquant® Prove 100 plus

Cat. No. 1.73026.0001



## Spectroquant® Prove 300 plus

Cat. No. 1.73027.0001



## Spectroquant® Prove 600 plus

Cat. No. 1.73028.0001



### For routine applications

The Prove 100 plus is the best choice for those who primarily use our broad range of Spectroquant® test kits, or only perform VIS measurements. High quality and great value for your daily analyses.

### For sensitive measurements

Thanks to its long-lasting xenon lamp, the Prove 300 plus is ideal for more intensive use. What's more, it is capable of both UV and VIS measurements, so you have greater flexibility for more intricate analyses.

### For complex analyses

Designed with high-end UV/VIS optics, and cuvettes of up to 100 mm, the Prove 600 plus packs great power into a compact size. Excellent resolution and sensitivity for complex kinetics or spectral measurements, or for use with test kits.

### Specifications

|                          |                                                                                                  | Prove 100 plus | Prove 300 plus | Prove 600 plus |
|--------------------------|--------------------------------------------------------------------------------------------------|----------------|----------------|----------------|
| Measuring technology     | Spectrophotometer with reference beam technology                                                 | ■              | ■              | ■              |
| Wavelength range         | Vis (320 – 1,100 nm)                                                                             | ■              | ■              | ■              |
|                          | UV (190 – 320 nm)                                                                                |                | ■              | ■              |
| Lamp type                | Tungsten halogen lamp                                                                            | ■              |                |                |
|                          | Xenon flash lamp                                                                                 |                | ■              | ■              |
| Ambient light protection | Measurement with open shaft possible due to proprietary solution (patent pending)                | ■              | ■              | ■              |
| Spectral bandwidth       | 4 nm                                                                                             | ■              | ■              |                |
|                          | 1.8 nm                                                                                           |                |                | ■              |
| Smart Screen Display     | P-cap glass touchscreen                                                                          | ■              | ■              | ■              |
| Live ID System           | 2-D Barcode recognition for cell and reagent tests                                               | ■              | ■              | ■              |
|                          | Barcode contains parameter, lot #, expiry date and calibration data stored with each measurement | ■              | ■              | ■              |
| Cell size                | 16 mm round cells, 10, 20 and 50 mm rectangular cells with automatic recognition                 | ■              | ■              | ■              |
|                          | 100 mm rectangular cells with automatic recognition                                              |                |                | ■              |

### Specifications

|                          |                                                                                                                                        | Prove 100 plus | Prove 300 plus | Prove 600 plus |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|
| Cell holder              | Removable for easy cleaning                                                                                                            | ■              | ■              | ■              |
| Methods                  | Programmed methods of all Spectroquant® cell and reagent tests, 99 user-defined methods, 20 profiles for kinetics and absorbance scans | ■              | ■              | ■              |
| Applications             | Free preprogrammed applications: Bromate, Brewery packages (MEBAK/EBC methods), Sugar Color, Oil (DOBI, olive oil)                     | ■              | ■              | ■              |
| AQA Prime                | Individual settings for all methods in AQA 1 (instrument check) and AQA 2 mode (system check) and pipette check                        | ■              | ■              | ■              |
| Sample matrix check      | Instrument-supported MatrixCheck for each method                                                                                       | ■              | ■              | ■              |
| Software updates         | Free method updates on the MilliporeSigma website                                                                                      | ■              | ■              | ■              |
| Languages                | Navigation in 29 built-in languages                                                                                                    | ■              | ■              | ■              |
| Communication interfaces | USB: 2 x USB-A (for printer, USB memory devices, keyboard or barcode reader), 1 x USB-B; Ethernet: LAN connection                      | ■              | ■              | ■              |

# Application fields



## Wastewater



The Prove 100 plus is the perfect choice for routine VIS measurements. The Spectroquant® portfolio offers a broad selection of COD and other test kits in multiple measuring ranges.



## Drinking water & beverages



The analysis of drinking water and beverages typically involves reagent tests since they offer lower detection limits for parameters such as iron and manganese. The Prove 300 is ideal here, as it allows also UV/VIS analyses, and is preprogrammed with free applications, like bromate and brewery methods.



## Process water



Even low levels of impurities in process water can lead to damage, downtime, and expensive repairs. To help you avoid these, we have developed the most sensitive silicate test with the lowest measuring ranges in the market. For even greater sensitivity, use the 100 mm cell in the Prove 600 plus.

# Application notes

Our photometric application notes demonstrate a broad range of methods to support your production and analysis. Whether you need to determine COD in wastewater, the level of nitrate in soils or the concentration of bromate in your drinking water - over 200 application notes support your sample preparation and analysis.

Get the right application for all your analytical needs from [SigmaAldrich.com/wfa-applications](https://www.sigmaaldrich.com/wfa-applications).

## Compliance, always ensured.

We understand the importance of reliable instruments, and the complexities of documentation. That's why we offer a comprehensive service plan that takes care of both.

### All Spectroquant® service plans offer the following features:

- **Performance check** with reference materials — certificate included
- **Factory-recommended maintenance** to prevent breakdowns
- **Telephone support hotline** connects you to our technical experts
- **Free software upgrades** to keep your instrument up-to-date
- **Reagent delivery program** for convenient, punctual supply of our high-quality test kits

Contact us for your personalized Spectroquant® service plan today: [SigmaAldrich.com/prove](https://www.sigmaaldrich.com/prove)

# Supelco®

Analytical Products

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Frankfurter Strasse 250  
64293 Darmstadt, Germany

**[SigmaAldrich.com/photometry](https://SigmaAldrich.com/photometry)**

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#### **To place an order or receive technical assistance**

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Technical Service: **[SigmaAldrich.com/techservice](https://SigmaAldrich.com/techservice)**

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