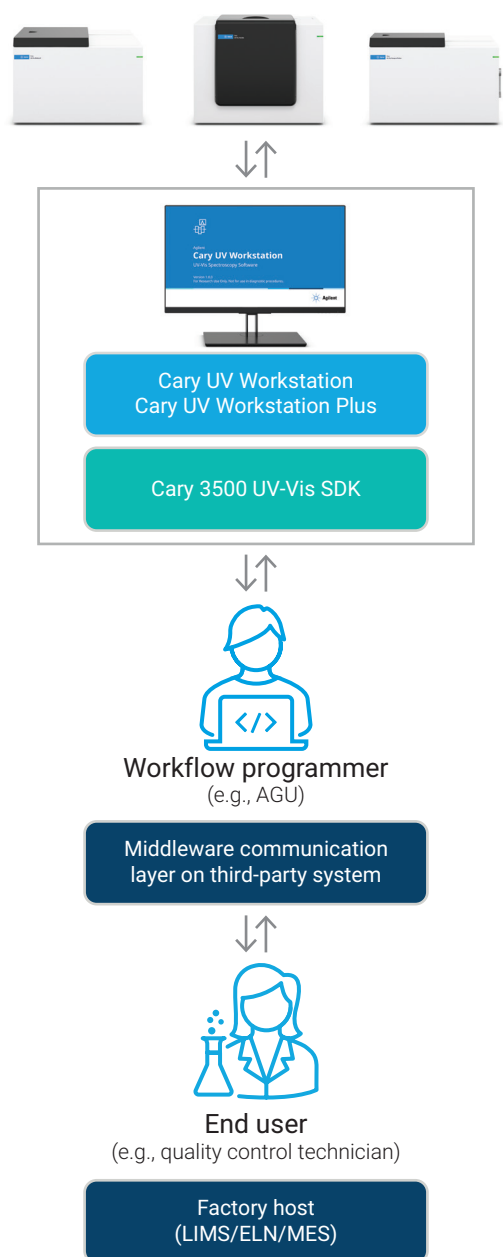




# Agilent Cary 3500 UV-Vis Software Development Kit

A tool kit for automated instrument control and data flow



## What is the Cary 3500 UV-Vis software development kit?

The Agilent Cary 3500 UV-Vis software development kit (SDK) is a tool kit for developers to create custom automation solutions and integrate instrument control into their own workflows.

The Cary 3500 UV-Vis SDK enables developers to run instrument operations and collect data independently to Agilent Cary UV Workstation software, offering flexibility for tailored automation and integration into broader systems.

## How do the Cary 3500 UV-Vis SDK, middleware, and factory host work together?

The Cary 3500 integration architecture creates a consistent, reliable, and scalable way to connect instruments to factory automation systems. Each layer plays a distinct role:

- **Instrument:** Generates raw data according to the predefined method in the Cary 3500 UV-Vis SDK (e.g., acquire absorbance spectrum, measure peak at 250 nm).
- **Cary UV Workstation software:** Manages essential instrument functions, such as IQ/OQ, calibration, and self-tests.
- **Cary 3500 UV-Vis SDK:** Provides programmatic control for automated workflows, enabling instrument acquisition using defined parameters, access to instrument status, and retrieval of spectral data and metadata for downstream processing. Includes a web interface for operational monitoring and supports modern communication protocols such as REST and HTTPS.
- **Middleware (e.g., Sm@rtline Data Cockpit from AGU):** Acts as the connectivity and standardization hub, ensuring compliant data routing between instruments and higher-level systems.
- **Factory host:** Receives structured data for long-term storage, applies QC decision logic, triggers reporting, and finalizes product quality outcomes.

## Sm@rtLine Data Cockpit middleware from AGU

Sm@rtLine Data Cockpit (SDC) is a middleware that connects laboratory instrument with higher-level systems and at the same time automates manual processes with bidirectional data flow. The middleware provides the following:

- Flexible data exchange, supporting exports in XML, PDF, and JSON, as well as integration via REST, OPC UA, or SQL
- Matches sample IDs, evaluates result flags, and aggregates data from all connected analyzers for delivery to higher-level systems (LIMS/ELN/MES)
- Maintains its own audit trail, supports role-based access, and integrates with Active Directory for user management.
- Ensures full data integrity—data cannot be changed or deleted—and provides end-to-end traceability from raw measurements to enterprise systems.
- Offers IQ/OQ templates for general features and each connected analyzer or system interface.
- Can be customer facing with a comprehensive UI when required, and can also operate independently without a higher-level system.

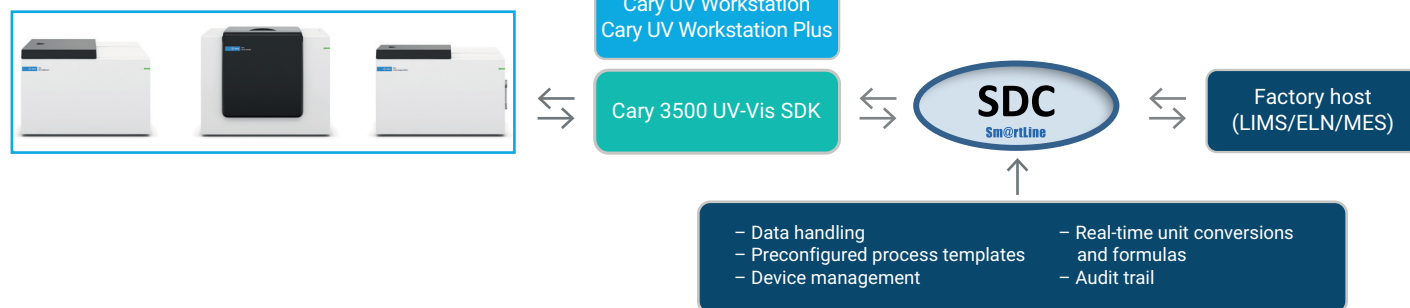
Find out more about the SDC at [www.agu.de/sdc](http://www.agu.de/sdc)

## Compatibility

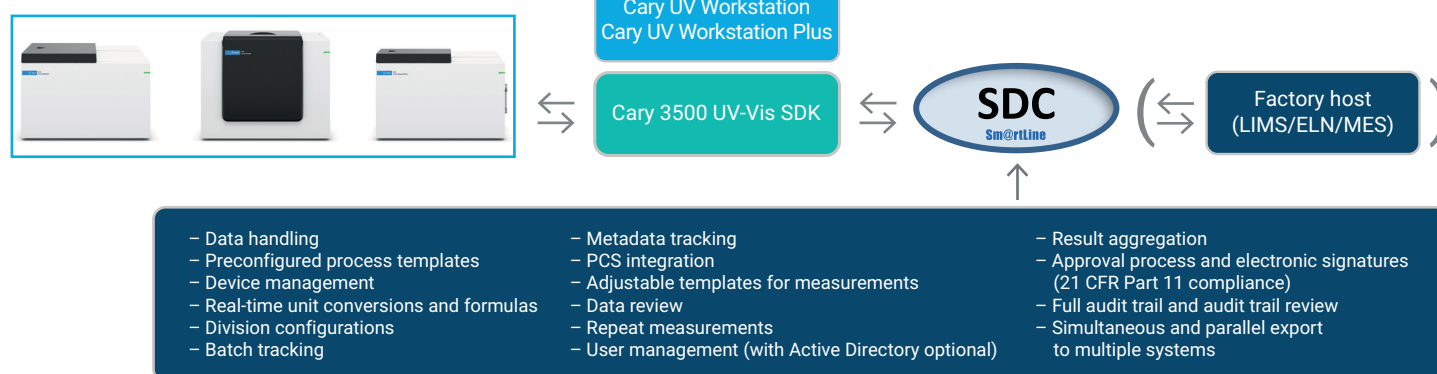
|                     |                                                                                                                                                                                                      |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Number      | M5794AA                                                                                                                                                                                              |
| Product Description | Cary 3500 UV-Vis SDK                                                                                                                                                                                 |
| Software            | Cary UV Workstation<br>Cary UV Workstation Plus                                                                                                                                                      |
| Hardware            | Cary 3500 UV-Vis engine<br>Cary Flexible UV-Vis module<br>Cary Compact module<br>Cary Multicell module<br>Cary Compact Peltier module<br>Cary Multicell Peltier module<br>Cary Sipper flow cell pump |

## Use-case examples using SDC

### Automated:



### SDC as graphical user interface:



[www.agilent.com/chem/cary3500uv-vis](http://www.agilent.com/chem/cary3500uv-vis)

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