



Product overview

for SIMATIC S7-1500 Software Controller



SIMATIC S7-1500 Software Controller

The most independent controller in automation – the perfect choice for PC-based automation

SIMATIC S7-1500 Software Controller makes the benefits of the SIMATIC S7-1500 Advanced Controller available on SIMATIC industrial PCs and offers the best performance and operator friendliness.

The Software Controller is used when very high precision and speed as well as PC-based automation is required.

<https://www.siemens.com/software-controller>

Highlights

The efficient engineering with the TIA Portal engineering framework reduces the time-to-market.

- Complete configuration in the TIA Portal, no Windows/Linux settings necessary for the Software Controller.
- Integrated and diverse diagnostics like with S7-1500 Advanced Controller reduce commissioning times and minimize downtimes in production.

Its independence from the operating system ensures the availability of the controller during operation.

- The Software Controller works fully independently of the operating system, which means the controller continues to work during a restart, during updates and even in the event of an operating system failure.
- For a quick start of the production, the controller is started up independent of the operating system.
- Integrated web server for remote access to the controller even in the event of operating system failure.

The integration of PC applications requires neither high-level language skills nor special development tools.

- High-level language codes such as C, C++, C#, VB (Windows) or C++/Python (Linux) with real-time capability can be integrated into the controller program by means of function blocks.
- Openness for user-specific applications: In Windows as operating system with ODK as real-time interface and in Linux as operating system with Realtime Information Backbone (RIB) as real-time interface for Linux native applications and Docker containers.
- Ready-to-use blocks for the connection of PC applications, such as databases.

Safety Integrated ensures lower engineering and wiring workload as well as a reduction in types and parts.

- Maximum integration: one controller, one network and one engineering system for standard and fail-safe automation.

Security Integrated protects intellectual property and investments.

- Know-how protection, copy protection and access protection prevent blocks from being opened and duplicated by unauthorized persons.
- Greater protection against manipulation and cyber attacks through authentication.

SIMATIC S7-1500 Software Controller as DVD version

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Article number



SIMATIC Software Controller CPU 1507S	6ES7672-7AC02-0YA0
SIMATIC Failsafe SW Ctrl CPU 1507S F	6ES7672-7FC02-0YA0
SIMATIC Software Controller CPU 1508S	6ES7672-8AC02-0YA0
SIMATIC Failsafe SW Ctrl CPU 1508S F	6ES7672-8FC02-0YA0
SIMATIC Software Controller CPU 1508S T	6ES7672-8TC02-0YA0
SIMATIC Software Controller CPU 1508S TF	6ES7672-8UC02-0YA0

SIMATIC S7-1500 Software Controller as download version

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Article number



SIMATIC Software Controller CPU 1507S DL	6ES7672-7AC02-0YG0
SIMATIC Failsafe SW Ctrl CPU 1507S F DL	6ES7672-7FC02-0YG0
SIMATIC Software Controller CPU 1508S DL	6ES7672-8AC02-0YG0
SIMATIC Failsafe SW Ctrl CPU 1508S F DL	6ES7672-8FC02-0YG0
SIMATIC SW-Controller CPU 1508S T DL	6ES7672-8TC02-0YG0
SIMATIC SW-Controller CPU 1508S TF DL	6ES7672-8UC02-0YG0

 : Safety-related component

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