SIMATIC WinCC
The open and intelligent SCADA system for maximum transparency
Against the background of increasing competitive pressure, continuous improvement of processes throughout the entire lifecycle of a machine or system – from planning and engineering, to operation and maintenance, down to expansion and modernization – has never been more important than today.

Siemens industry leading, innovative technologies focus on achieving Totally Integrated Automation for maximum productivity. TIA offers a wealth of advantages over the entire product life cycle. Our first-class, integrated automation products form the basis of TIA, along with clearly defined system properties that ensure optimum interaction of the products. With six distinguishing system characteristics -

- Integrated Engineering
- Industrial Communication
- Industrial Data Management
- Industrial Security
- Safety Integrated

TIA encompasses the entire lifecycle, resulting in increased efficiency and productivity.

SIMATIC represents a core element of Totally Integrated Automation. The world’s leading automation system comprises a multitude of standardized, flexible and scalable products – such as the SIMATIC WinCC SCADA system.
Process visualization with plant intelligence
Increased transparency for production

Our SCADA software offers maximum functionality and is characterized by a user-friendly interface. This configurable and scalable system facilitates openness between the office world and production – e.g. with the help of an integrated process database and plant intelligence for increased production transparency. The functional capabilities can be enhanced and expanded by means of numerous options and add-ons.

Efficient engineering
• Reduce your engineering time with reusable faceplates, bulk engineering, cross reference lists, online configuration and runtime simulation

Powerful, plant-wide long-time archive
• Integrated powerful archiving of WinCC data, scalable up to 80,000 archive tags (per server)
• Optional SIMATIC Process Historian as powerful, plant-wide long-time archive

Discrete data analysis
• Flexible online analysis and integrated statistical functions
• Integrated analysis with plant intelligence options – also via the web

Flexible alarm system
• Flexible alarm system for optimum plant overview in any user language

Integrated user management
• Freely definable user groups, consistent for all WinCC configurations (including web clients)
• SIMATIC logon: Central, plant-wide user management based on MS Windows, maximum security through central user management

Consistent scalability – also via the web
SIMATIC WinCC is technology- and industry-neutral and features a modular and flexibly expandable design. It supports both single-user applications for the machine builder as well as complex multi-user solutions. It even facilitates the realization of distributed systems with multiple redundant systems – as well as client access to systems engineering via the Internet.

Numerous references across all applications and industries prove its versatility and high performance:

- Automotive production and suppliers
- Chemical and pharmaceutical industry
- Food, beverages and tobacco industry
- Machine and plant engineering
- Energy supply and distribution
- Trade and service sector
- Plastic and rubber industry
- Metal processing and steel industry
- Paper production and processing, printing industry, transport, traffic and logistics
- Water treatment and wastewater purification
- Building services management and management of properties
Automation and IT solutions are generally subject to permanent changes. Amongst others, this comprises modernizations of individual plant areas, subsequent plant expansions, implementation of central site-spanning monitoring solutions and optimization of site- or company-specific process workflows.

In order to meet such increasing requirements, the visualization solution has to be expandable as required without the risk of technology gaps or the need for complete new configurations. Investment protection is paramount. SIMATIC WinCC offers the requested integrated scalability from the single-user solution to the client-server solution with central Microsoft SQL server for data archiving and with online operator stations.
SIMATIC WinCC options and add-ons
Software expansions for individual requirements

Individual functional or sector-specific software expansions are available in the form of WinCC options as well as WinCC add-ons.

### WinCC V7 options

**Scalability**
- WinCC/Server – for distributed client-server systems
- SIMATIC Process Historian – powerful, plant-wide long-time archive
- WinCC/WebNavigator – plant operation and monitoring via the Internet/Intranet
- WinCC/TeleControl – integration of distributed remote stations in the telecontrol system

**Plant intelligence**
- SIMATIC Information Server – preparation of reports and evaluations based on historical WinCC data with the help of Microsoft Reporting Services or Microsoft Word/Excel; availability of reports via web-based interfaces at all times
- WinCC/DataMonitor – process visualization, data analysis and distribution
- WinCC/IndustrialDataBridge – bidirectional data exchange between different systems, without programming
- WinCC/PerformanceMonitor - production analysis based on individual key performance indicators (KPIs)

**SCADA expansions**
- The WinCC/Calendar Scheduler supports the initiation of time-specific actions, while the WinCC/Event-Notifier sends event-specific notifications
- WinCC/UserArchive for the user-specific management of data records

**Increased availability**
- WinCC/Redundancy – increased system availability through redundant WinCC stations
- SIMATIC Maintenance Station – visualization of the entire automation technology’s maintenance information
- WinCC/ProAgent – increased availability through process diagnostics

**Energy management**
- SIMATIC powerrate – for optimized energy consumption
- SIMATIC B.Data – for optimized and efficient operational energy management in terms of controlling, planning and energy purchasing

**Validation / tracking**
- WinCC/Audit and WinCC/ChangeControl – logging of operator actions, monitoring of project changes and tracking of the production process via audit trails

**System expansions**
- WinCC/ODK, WinCC/ConnectivityPack and WinCC/Connectivity Station – open interfaces for user-specific expansions

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### Examples of WinCC add-ons

WinCC add-ons are developed and marketed by other Siemens units as well as by external suppliers. Support for WinCC add-ons is offered by the respective product supplier, who also acts as contact partner for the product’s integration in the automation solution.
SIMATIC WinCC represents an innovative, scalable process visualization system with powerful functions for the monitoring of automated processes. SIMATIC WinCC offers complete SCADA functionality under Windows in architectures – from single-user to distributed multi-user systems with redundant servers and plant wide solutions with web clients.

The WinCC software is available in two versions

- WinCC complete package
  (RC: license for runtime and configuration)
- WinCC runtime package
  (RT: license for runtime)
The information provided in this brochure contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

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Siemens offers automation and drive products with industrial security functions which support safe system and machine operation. They essentially contribute to the realization of a holistic industrial security concept. Our products are continuously advanced under this aspect. We therefore recommend you to regularly inform yourself on updates of our products and to only use the respectively current versions. Relevant information is available at: http://support.automation.siemens.com. You can also subscribe to a product-specific newsletter via this link.

Moreover, safe system and machine operation necessitates the implementation of suitable protective measures (e.g. cell protection concept) and the integration of all automation and drive components in a holistic state-of-the-art industrial security concept for the entire system or machine. Also third-party products have to be taken into account in this context. Further information is available at: www.siemens.com/industrialsecurity