



SIEMENS



Protecting
productivity
Integrated Industrial Security

[siemens.com/industrial-security](https://www.siemens.com/industrial-security)

Defense in Depth

Security threats force you to take action

Defense in Depth

With defense in depth, Siemens provides a multi-level concept that protects your plant both all around and in depth. The concept is based on the elements plant security, network security, and system integrity, as recommended by ISA 99 / IEC 62443 – the leading standard for security in industrial automation.

Plant security

Plant security prevents unauthorized persons from gaining physical access to critical components using a number of different methods. This starts with conventional building access and extends to securing of sensitive areas by means of key cards. Tailored industry security services include processes and guidelines for comprehensive plant protection. These range from risk analysis and the implementation and monitoring of suitable measures to regular updates.

Network security

Reliable firewalls which protect production applications from unauthorized access from standard office environments are indispensable in this day and age. Segmenting of the plant network into individual subnets, for example with a cell protection concept or by establishing a demilitarized zone (DMZ) on the basis of SCALANCE, offers additional protection. Secure worldwide access to outlying plants is facilitated by remote maintenance functions via VPN.

System integrity

The third pillar of defense in depth is assuring system integrity. Here the focus is on protecting automation systems and control components such as SIMATIC S7-1200 and S7-1500, as well as SCADA and HMI systems, against unauthorized access and on fulfilling special requirements such as know-how protection. This component is also concerned with user authentication, access and change permissions, as well as system hardening, i.e. reducing the vulnerability of components against network attacks.





Plant security

- Physical access protection
- Processes & guidelines
- Security services protecting production plants



Network security

- Cell protection, DMZ and remote maintenance
- Firewalls and VPN

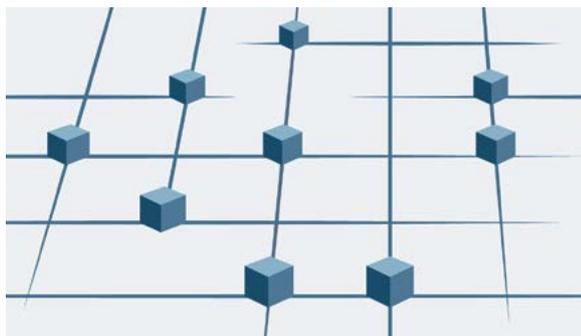


System integrity

- System hardening
- Authentication and user administration
- Patch management
- Detection of attacks
- Integrated access protection in automation

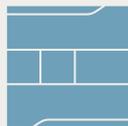
Industrial Security as part of Totally Integrated Automation

With industry standard security products for network security and system integrity which are integrated in the TIA Portal, your automation solutions can be efficiently safeguarded and the defense in depth concept for the protection of industrial plants and automation systems can be implemented.



Totally Integrated Automation
Efficient interoperability of all automation components

Hannover Messe Highlights 2015



SIMATIC
S7-1200



SIMATIC
S7-1500

Functions:

- Manipulation protection at the control level
- Graded security concept including HMI connection
- Expanded access protection with Security S7 communication processors by means of firewall and VPN
- Know-how and copy protection

Benefits:

- ▶ Improved detection of manipulated configuration data
- ▶ Protection against unauthorized configuration changes
- ▶ Additional protection against unauthorized network access
- ▶ Protection of intellectual property in configuration data and against unauthorized duplication

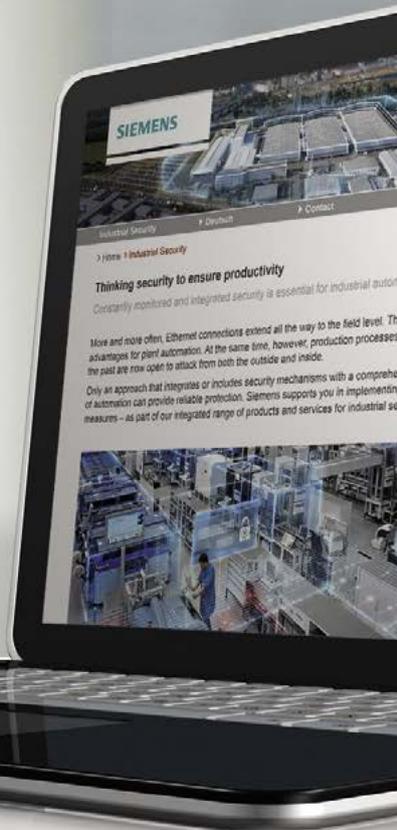
Find out more:

[siemens.com/
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Experience and discover dependable Industrial Security:

Get acquainted with the defense
in depth concept from Siemens
and learn about all aspects of
industrial security.

Industrial
security –
at a glance!



Security information:

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates.

For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit: <http://www.siemens.com/industrialsecurity>

To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit: <http://support.automation.siemens.com>

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