

The background is a high-angle, wide shot of a modern industrial manufacturing plant. The floor is filled with various machines, conveyor belts, and workstations. In the foreground, a worker in a blue uniform is operating a machine. Overlaid on the scene are several digital elements: a semi-transparent login window with a password field (seven asterisks), a 'Login' button, and a padlock icon; a monitor on the left showing 'Line 4' and '99 %'; and various glowing blue and red lines and grids that suggest a digital or cyber environment. The Siemens logo is in the top left corner.

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.

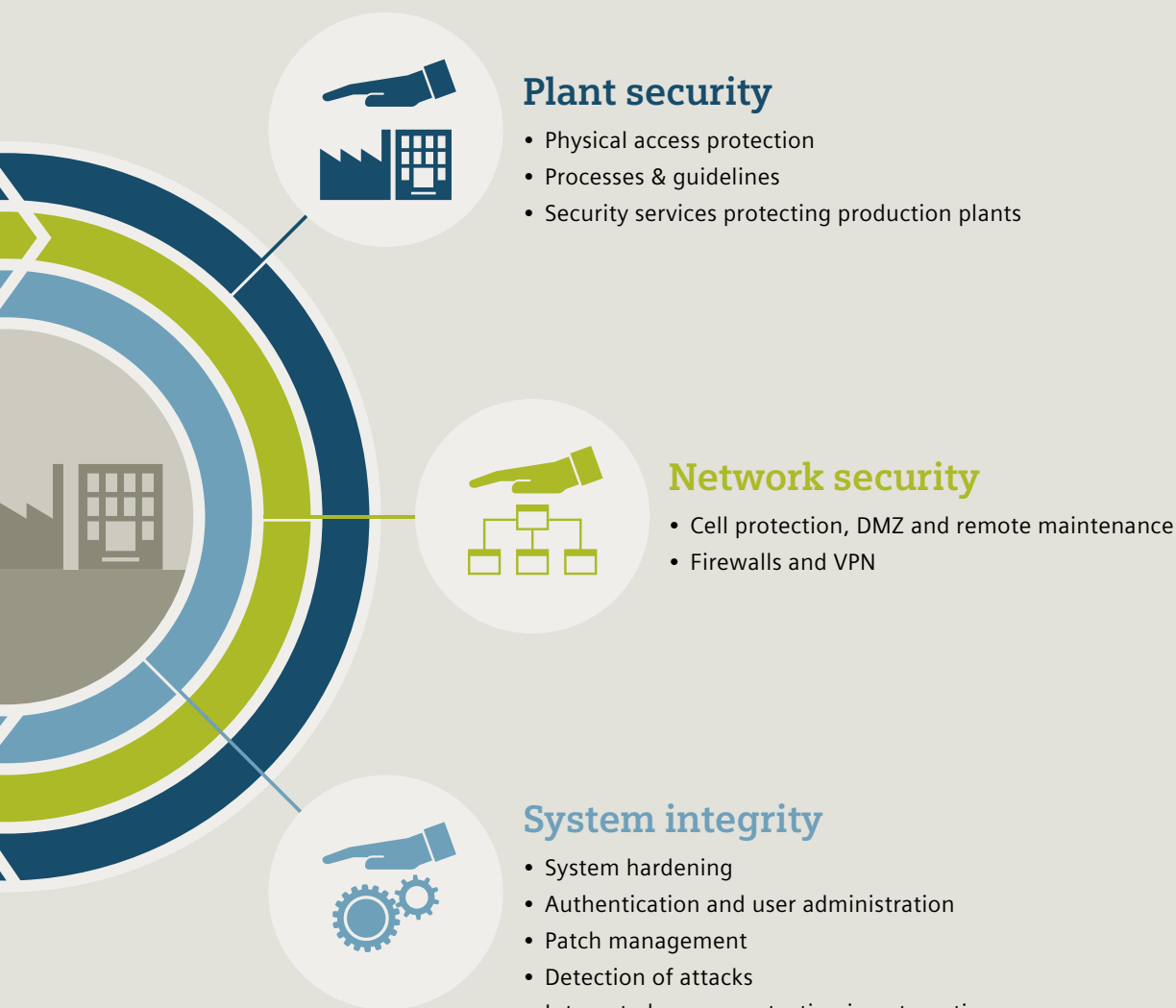
### Network security

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

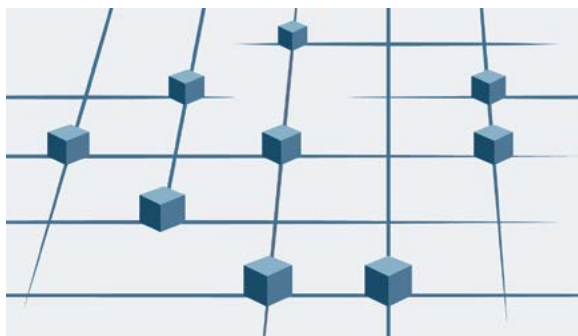
The third pillar of defense in depth is assuring system integrity. Here the focus is on protecting automation systems and control components such as SIMATIC S7-1200 and S7-1500, as well as SCADA and HMI systems, against unauthorized access and on fulfilling special requirements such as know-how protection. 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.





## 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

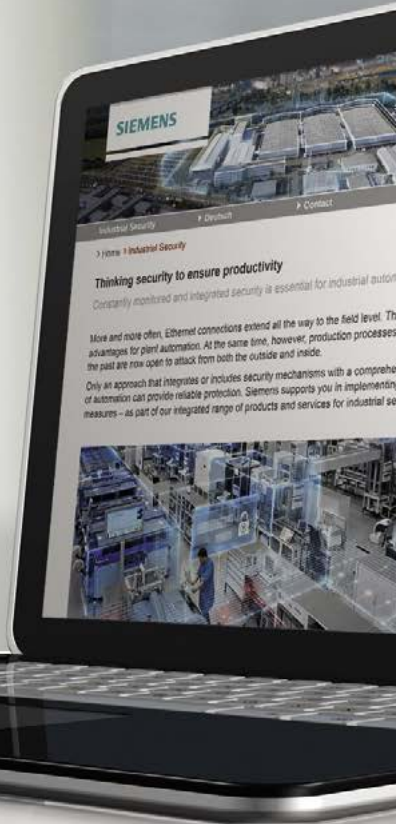
Find out more:

**siemens.com/  
industrial-security**

## 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>

Subject to change without prior notice  
Article No.: E20001-A320-M101-X-7600  
Dispo 21507  
170/66811  
DR.DF.FA.15.ISEC.52.02  
WS 0415 0.5  
Printed in Germany  
© Siemens AG 2015

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual 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.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.

Follow us at:  
[twitter.com/siemensindustry](https://twitter.com/siemensindustry)  
[youtube.com/siemens](https://youtube.com/siemens)

Siemens AG  
Digital Factory  
P.O. Box 48 48  
90026 Nürnberg  
Germany