Powerful Solutions for Your IT Security



gerua



Network Security ______6



Securing Critical Infrastructure and Highly Sensitive Interfaces _____ 8







Secure Connections for Mobile Users and Home Offices ______ 14

Secure Cloud Connections _______12



Encrypted Communication via VPN __________16



Encrypted Communication via VPN up to Classification Level "Restricted"



Secure Remote Plant and IT System Service ________20



Secure Automation _______22



Secure Industrial Monitoring ______ 24

genua: Your Partner for Top IT Security Made in Germany

The more we connect to IT networks, the greater the importance of IT security: Your IT systems and communication paths have to function flawlessly, and at the same time your data must be reliably protected. genua is a German specialist for IT security – and we always strive to help you achieve this goal. The company founders have handled the corporate management of genua gmbh since 1992. This gives us the freedom to develop new concepts and pursue our goals. They are clearly defined: developing top-quality solutions that provide our customers with reliable IT security.

All our solutions are developed and produced in Germany, and targeted at meeting the highest security requirements. The quality of our systems is backed up by numerous certificates and approvals for use with classified information.

We provide top quality service for our IT security solutions, from implementation and ongoing support to meeting special requirements. genua's service comes directly from the manufacturer – a factor that is appreciated by the many companies and public authorities that rely on our solutions and service to protect their IT.



The three founders of genua: Dr. Michaela Harlander, Dr. Magnus Harlander, Bernhard Schneck (I. to r.)



Network Security

You work with a lot of sensitive data in your networks: data about customers and products, patents and research results, projects and strategies or even patients and therapies. You must reliably protect this information from unauthorized access or loss and at the same time, you cannot completely encapsulate your networks. These networks allow rapid exchange of data promoting efficient procedures that in turn give you decisive advantages: rapid development, intelligent production, comfortable administration and also rapid information processing related to management or security issues.

In order to be able to use the advantages provided by networks – without putting your IT security at risk – you have to secure the transitions from public networks to your LAN (Local Area Network) reliably. In addition, a larger LAN should be divided into different internal network areas, e.g. for administration, production and for research, and the interfaces between these areas should be carefully monitored. To this end we can provide you with the following top quality solutions – Made in Germany.





Comprehensive data analysis for highest security at critical interfaces



Firewall & VPN Appliance genuscreen

Strong protection on external and internal interfaces and reliably encrypted data transfers



Data Diode cyber-diode

Secure networking of industrial plants and critical infrastructure



Data Diode vs-diode

High-performance one-way data transfers into classified networks





Securing Critical Infrastructure and **Highly Sensitive Interfaces**

Some network interfaces present particularly high security requirements: for example, when public authorities or other organizations working in the security field link networks classified at different security levels. Or when linked networks in the economic sector include systems that control critical infrastructure or plants where incorrect functioning could lead to extensive damage or loss of life. Examples of such systems would be the electricity supply, technical systems at airports and railway stations or chemical works. The connections passing through these highly sensitive interfaces have to be exactly regulated – there is no room for error. We provide reliable solutions for these challenging tasks – Made in Germany – and if used in the classified area, with approval allowing the handling of classified information.





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Secure Connections between Sites

You are looking to connect new sites to your network, to integrate a newly acquired subsidiary or connect to an important partner so you can exchange data? Rapid exchange of information via the Internet is convenient. However, it must be reliably protected because there are others out there who are interested in your data as well: rivals, secret services and criminals and your information falling in their hands can have serious consequences. Our solutions allow companies, public authorities and security services to reliably protect data communication between remote locations and partners – if required, with approval for the classification level "Restricted". Our solutions are developed and manufactured in Germany and meet the highest security requirements – no one can eavesdrop here.





interfaces and reliably encrypted data transfers



Personal Security Device genucard

Remote access of home offices and small branches working on classified projects



VPN Appliance genucrypt

Strongly encrypted data transfers





Secure Cloud Connections

Cloud services are convenient and save on administration and resources. It is understandable that many want to use these advantages – but a further decisive criterion when transferring sensitive data to the Cloud is the level of security: Up- and downloads should only take place using high quality encrypted connections and to ensure confidentiality, only encrypted data should be stored in the Cloud itself. Our solutions are developed and produced in Germany and provide a trustworthy way to reliably implement these measures and ensure secure Cloud use.







Firewall & VPN Appliance genuscreen Strong protection on external and internal interfaces and reliably encrypted data transfers



VPN Appliance genucryptStrongly encrypted data transfers



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Secure Connections for Mobile Users and Home Offices

Employees traveling on business or working at home need to access your network via the Internet, for example to retrieve and process data and use internal applications online. This should be simple to do, regardless of the employee's location and the channel of communication they use. Meeting this sort of user requirement is important but another equally important question needs to be addressed: how reliable is the IT security provided during this type of remote access? After all, it is not only sensitive data that is being transferred via the Internet but – much more importantly from the security point of view – access is being allowed to your local network (LAN) and its confidential information.

This means that it is essential that third parties are neither able to read or manipulate the data being transferred nor be able to manipulate the access to your LAN. We provide convenient solutions made in Germany for companies, government and security services – with approval for the classification level "Restricted" if required.



Security Laptop cyber-top

Mobile work in separated networks



Security Laptop vs-top

Remote access of mobile employees working with classified information



Personal Security Device genucard

Remote access of home offices and small branches working on classified projects





Encrypted Communication via VPN

The Internet can be accessed almost everywhere and it is cheap to use, making it ideal for data communication. High security, on the other hand, is not a feature of public networks: information being transferred round the globe is read by many and even supposedly secure third party services can have vulnerabilities or even hidden backdoors. You should not take this risk with communication between company sites or when connecting with employees that are traveling.

We recommend that you only send sensitive data via the Internet using high quality encrypted connections in a Virtual Private Network (VPN) that has been made with a trustworthy security system. Our VPN solutions are manufactured in Germany and use the strongest encryption algorithms. In addition, many of our solutions undergo regular certification and approval by the Federal German Office for Information Security (BSI), in order to provide an independent validation of their quality. You can rely on the fact that our products have no weaknesses or backdoors.



Security Laptop cyber-top Mobile work in separated networks **Security Laptop vs-top** Remote access of mobile employees working with classified information **Personal Security Device genucard** Remote access of home offices and small branches working on classified projects Firewall & VPN Appliance genuscreen Strong protection on external and internal interfaces and reliably encrypted data transfers **VPN Appliance genucrypt**

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Strongly encrypted data transfers



Encrypted Communication via VPN up to Classification Level "Restricted"

Data communication via the Internet is simple to use and readily available. The Internet can also be used for classified data communication but additional high security requirements have to be met: classified data may only be encrypted and transferred via the Internet using VPN (Virtual Private Network) systems that have been approved at the appropriate security level.

Our VPN solutions are manufactured in Germany, use encryption with the strongest algorithms and have been approved for the German, NATO and EU classification level "Restricted". This covers the large majority of classified data as relatively little information is given a higher classification. Government offices, security services and companies dealing with confidential information can use our VPN solutions to exchange data classified as "Restricted" via the Internet. And our mobile solutions will allow notebook users "on the road" and those working in their home offices to securely connect to "Restricted" networks.





Remote access of mobile employees working with classified information



Personal Security Device genucard

Remote access of home offices and small branches working on classified projects



Firewall & VPN Appliance genuscreen

Strong protection on external and internal interfaces and reliably encrypted data transfers





Secure Remote Plant and **IT System Service**

Remote maintenance of machine plant or IT systems via the Internet is attractive for both sites: manufacturers or service providers can guarantee their customers rapid support and extend the range of services they provide; the customers can receive professional support at any time and the maintenance requirements and downtime are shortened - meaning costs are also reduced. To ensure that such a profitable business relationship does not bring high follow-up costs with it, it is important that high IT security requirements are met. This results from remote maintenance of plant or IT systems requiring that customers open their networks for external access. If malicious software or unauthorized third parties are able to use this path to gain access to, for example, a production area and cause damage there, it could involve substantial additional costs - and certainly affect the business relationship with the manufacturer or service provider.

We support manufacturers, service providers and also end customers that use remote maintenance services with the installation of high security systems. Key features of our solutions are their simple integration in existing networks, ease of operation and audit-proof recording of all activities.





High-secure remote service access to industrial plants and IT systems



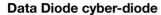


Secure Automation

A high degree of automation is required to achieve intelligent factories – the buzzword here is "Industry 4.0": Machines communicate with other machines; the products beeing processed provide information via bar codes or RFID chips; and the other systems along the production line from stores to logistics and service are networked with each other and can independently organize optimized processes. This allows highly efficient production processes to be achieved, which nevertheless can accommodate product variations – without human intervention. This is an enormous step forward for industrial production. However, from the IT security point of view, it begs the question: when all components can communicate with each other, how is sensitive data protected from unauthorized access and how can control systems be protected from malicious software and manipulation?

Our solutions allow you to control and restrict data communication as required: for example, to exclusively allow one-way file transfer – data traffic in the opposite direction is consequently blocked – and thereby provide secure protection for your automated production facilities





Secure networking of industrial plants and critical infrastructure



Remote Service Appliance genubox

High-secure remote service access to industrial plants and IT systems





Secure Industrial Monitoring

Operators of gas turbines, industrial robots or machine tools would ideally like 24/7 trouble-free operation and avoid unplanned downtime with its rapidly incurring costs – not to mention the loss of image caused by late deliveries and angry customers. Ongoing monitoring is an important component in ensuring a high operational reliability: You gain an ongoing overview of all plant operational data and can react to the first signs of a fault, before it leads to a more serious problem or breakdown.

However, the following should be borne in mind: every system that is connected to a network for monitoring is, in principle, also vulnerable. The system network connections have to be reliably secured to ensure that monitoring does not create an open door for malicious software and hackers and thereby add new potential causes of failure. We have developed a high-end solution for this problem.



Date Diode cyber-diode

Secure networking of industrial plants and critical infrastructure



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Extract from our Customer List:

- ■■ Berlin-Bonn Information Network (IVBB)
- **■■** EUROGATE
- Freudenberg Group
- ■■ German Bundestag
- ■■ German Federal Agency for Technical Relief (THW)
- ■■ German Federal Armed Forces
- ■■ German Federal Ministry of Labour and Social Affairs
- ■■ German Federal Office for Information Security (BSI)
- ■■ German Federal Statistical Office
- ■■ Homeland Security

- ■■ Hubert Burda Media
- ■■ HypoVereinsbank
- ■■ KASTO Maschinenbau
- ■■ Klüber Lubrication
- ■■ MAN
- ■■ MTU Aero Engines
- ■■ Munich City
- ■■ Munich University Hospitals
- **--** WMF
- ■■ Würth Group