



Rohde & Schwarz Cybersecurity

COMPANY OVERVIEW

ROHDE & SCHWARZ

Make ideas real





OUR VISION

We are a trustworthy IT security specialist. By supporting our customers along their way into a secure and digitalized world, we make a significant contribution to digital sovereignty.



Rohde & Schwarz Cybersecurity

YOUR TRUSTWORTHY IT SECURITY SPECIALIST

We provide protection against the constant changing cyber threats to governmental and commercial customers with special IT security needs and certification requirements.

As pioneer of highly secure encryption technologies we deliver **high-speed network encryption and zero trust based endpoint security**. The majority of these products is approved for securing **“classified information – for official use only”** by the German Federal Office for Information Security. These trusted security solutions support users along their way into a secure and digitalized world and thus make a significant contribution to digital sovereignty.

Rohde&Schwarz Cybersecurity is a subsidiary of the technology group Rohde&Schwarz, a leading supplier of solutions in test & measurement, technology systems and networks & cybersecurity.

ENCRYPTION OF GOVERNMENT NETWORKS

For government agencies, it is essential to secure digital communications - to maintain data privacy, protect sensitive information and meet regulatory requirements. This is where **high-speed network encryptors** come in, ensuring that confidential data is encrypted end-to-end in real time as it is transmitted over a computer network. The data is only encrypted during transmission, so it is unencrypted at both the sender and receiver.



With over 30 years of cryptographic expertise, Rohde & Schwarz Cybersecurity is one of the pioneers in the field of high-speed network encryption. Our **Layer 2 and Layer 3 encryption** solutions securely protect public authorities from espionage and manipulation and ensure reliable and secure site-to-site connections.



Your benefits:

- ▶ „Security Made in Germany“ – more than 30 years of cryptographic expertise
- ▶ State-of-the-art cryptographic methods and standards
- ▶ Approved by the German Federal Office for Information Security: VS-NfD (RESTRICTED), EU & NATO RESTRICTED

PROTECTION OF CLASSIFIED WORKSTATIONS

When classified information is processed using IT systems, cybersecurity becomes directly relevant. Depending on the level of classification, authorities must take protective measures to ensure the availability, integrity and confidentiality of classified information. These include technical and organizational measures such as access control, data deletion and destruction, and data backup.

With our **cybersecurity software products**, developed in Germany and approved by the German Federal Office for Information Security (BSI) for securing classified data, we enable public institutions and private companies to secure workstations in such a way that classified information can be stored and processed.

Our solutions for secure mobile and stationary work have been developed with special attention to **usability** and **administrability**, and allow **high flexibility in the choice of end devices**.



Your benefits:

- ▶ High-security for laptops und PCs
- ▶ Zero-trust-to-Windows approach
- ▶ Approved by the German Federal Office for Information Security: VS-NfD (RESTRICTED), EU & NATO RESTRICTED



SECURITY FOR AEROSPACE AND DEFENSE INDUSTRY

The protection of sensitive information is subject to various legal regulations on secrecy and requires special security precautions. In this context, the protection of secrets does not only come into play in public institutions. In the private sector, too, classified information is processed, for which regulations relevant to secrecy are mandatory.

Our solutions offer the **highest level of IT security for companies** subject to secrecy regulations by protecting data at classified level. You thus benefit from **secure interfaces** and **encrypted transmission paths** to transfer classified data securely. The approvals granted by the German Federal Office for Information Security (BSI) are valid for the classification levels EU and NATO RESTRICTED.



Your benefits:

- ▶ Protection of classified information
- ▶ Secure transmission of classified data
- ▶ Approved by the German Federal Office for Information Security: VS-NfD (RESTRICTED), EU & NATO RESTRICTED



SECURITY FOR CRITICAL INFRASTRUCTURES

IT security is of particular importance for operators of critical infrastructures, i.e. energy, water, waste management, food, health, transport and traffic, information technology and telecommunications, finance and insurance, government and administration, and media and culture.

Due to their importance to society and economy, critical infrastructure organizations and institutions are subject to comprehensive and strict guidelines. Ensuring **data protection** and **data integrity** is a top priority. This requires IT products that ensure availability, integrity, authenticity and confidentiality. We support operators of critical infrastructures in complying with the highest security standards and deliver **solutions for optimal protection of the IT infrastructure**.



Your benefits:

- ▶ Ensuring data protection and data integrity
- ▶ Optimal protection of the IT infrastructure
- ▶ Approved by the German Federal Office for Information Security: VS-NfD (RESTRICTED), EU & NATO RESTRICTED

Next generation encryption

POST-QUANTUM CRYPTOGRAPHY & QUANTUM KEY EXCHANGE

Quantum computers promise to greatly push the boundaries of computational efficiency, solving problems that today's systems are overwhelmed with. As a result, they could make all current public-key encryption methods insecure in the future.

The IT industry urgently needs to develop new encryption methods that can withstand quantum computers. Research and development are essentially concerned with two approaches. **Post-quantum cryptography (PQC)** uses algorithms that, according to current knowledge, cannot be calculated at a realistic speed even with the help of a quantum computer.

However, for high-security applications, it is not recommended to rely solely on PQC methods alone: Even PQC algorithms can eventually be broken, if corresponding quantum or classical algorithms are found in the future. An effective complement is **„Quantum key distribution“ - known as „QKD“**. It is particularly secure because QKD does not rely on algorithms but on quantum physical laws.

„Secure communications networks have the status of critical infrastructure in modern information societies.“

Christian Stüble, CTO Rohde & Schwarz Cybersecurity



Quantum-resistant encryption systems will have to replace current cryptography in the coming years. This will require solutions for various areas of application. National and European QKD and PQC research projects are currently pooling expertise from companies, science and practice. They are laying the foundations for **future-proof encryption technology**. We are also already researching today how to defend against tomorrow's threats and are making our cryptographic expertise and experience in building and implementing secure devices and systems available to numerous research projects.

Selected research projects:

- ▶ **DemoQuanDT:** Development and construction of a demonstrator route with trusted nodes between Bonn and Berlin.
- ▶ **OPENQKD:** A European project aiming at strengthening Europe's global position at the forefront of quantum communication capabilities.
- ▶ **QuNET:** Establishment of a pilot network for quantum communication in Germany, which is used for tap-proof and tamper-proof data transmission. Initially, the network is intended for communication between federal authorities.

At a glance

ROHDE & SCHWARZ CYBERSECURITY

- ▶ A leading provider of IT security solutions
- ▶ More than 30 years of cryptographic expertise
- ▶ Extensive project experience in the area of state and federal networks and classified workstations
- ▶ All-in-one solutions approved for securing classified data with a unified security management
- ▶ A company of the Rohde & Schwarz Group
 - Independent family business, in the market for over 85 years
 - Subsidiaries in more than 70 countries
 - Revenue of 2.53 billion € (FY 2021 / 2022)
 - Around 13,000 employees worldwide



Service that adds value

- ▶ Worldwide
- ▶ Local und personalized
- ▶ Customized and flexibel
- ▶ Uncompromising quality
- ▶ Long-term dependability

Rohde & Schwarz Cybersecurity GmbH

Muehldorfstrasse 15 | 81671 Munich, Germany

Info: +49 30 65884-222

cybersecurity@rohde-schwarz.com

www.rohde-schwarz.com/cybersecurity

Rohde & Schwarz GmbH & Co. KG

www.rohde-schwarz.com

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