R&S®SITLine ETH50
Reliable Ethernet encryption everywhere

Ethernet is an affordable and easy-to-use data transmission technology now common in wide area networks. One problem with WANs, though, is that they are exposed to the risk of manipulation. The solution: a secure, universal Ethernet encryption system.

The R&S®SITLine ETH50 is an exceptionally robust and compact (7.6”) Ethernet encryptor. With its extended operating temperature range (–20 °C to +70 °C) and fanless design, the encryptor can be installed in non-climatized server rooms, on desktops and in vehicles. Featuring the most advanced cryptographic methods, R&S®SITLine ETH50 provides outstanding security for NATO RESTRICTED, EU RESTRICTED and German VS-NfD classification levels (approved by Germany’s Federal Office for Information Security, BSI). It also allows the creation of user groups to manage network and security settings ensuring only authorized individuals to access classified data. In case of emergency, the encryptor has a clear button to delete all security-relevant data on the device.

Cost-efficient and flexible
Rohde & Schwarz Cybersecurity has designed the R&S®SITLine ETH50 to be highly efficient, secure and robust: It has been optimized to keep power consumption and system costs down. It also has a special security token that allows users to install the device quickly and to replace it easily in case it needs to be returned for servicing. To ensure that business and governmental agencies’ investments stay protected, R&S®SITLine ETH50 has been tested by the European Advanced Networking Test Center (EANTC) and has been verified as MEF-compliant by the Metro Ethernet Forum, proving that the device can be easily deployed in complex networks. Its scalable performance allows it to adapt flexibly to different sets of operating requirements.
**The universal solution for lower-speed networks**

The R&S®SITLine ETH50 special feature set makes it a unique solution for applications that need exceptionally strong security in challenging operating conditions, e.g. to secure confidential communications on site or between locations, protect radio relay and satellite links, safeguard the integrity of data running over public networks, or to connect mobile units securely. Designed to cover the lower end of the performance range, the device is available in three variants for 10 Mbit/s, 25 Mbit/s, 50 Mbit/s and 100 Mbit/s.

**Full network encryption with the R&S®SITLine ETH product line**

The R&S®SITLine ETH product line of Ethernet encoders includes devices in performance classes from 10 Mbit/s up to 40 Gbit/s. They utilize the most advanced cryptographic methods and standards (elliptic curves, AES and x.509) to be deployed in simple as well as complex network architectures. Their capabilities include securing individual links (point-to-point), star topologies (point-to-multipoint) and fully meshed networks (multipoint-to-multipoint). By avoiding additional overhead, they ensure that maximum bandwidth efficiency is achieved.

**Cross-location encryption with R&S®SITLine ETH**

Security policies for all R&S®SITLine ETH devices in any given location are managed online via the R&S®SITScope security management system (separated from network management administration).