

# Basic security of the networks through Layer 2 encryption

## Fast and secure Ethernet encryption on Layer 2

- **Basic backup** on a lower network layer
- Spying IP addresses and the internal network structure is impossible
  - DDoS or APT attacks severely limited
- Reliable protection against manipulation and espionage of the transported complete dataset
- Works without end-user intervention (e.g., password / token)

## Integral part of every network planning

- Enables a substantial increase in IT security
- Technology is available on the market



# Ethernet encryption with R&S®SITLine ETH

- Real-time Ethernet network encryption with scalable throughput
- Secure data transmission via landline, radio relay and satellite links for bandwidths from 25 Mbps up to 40 Gbps
- Advanced cryptographic methods and standards (elliptic curves, AES, X.509)
- R&S®SITScope | separate security management system for the Ethernet encryptors
- BSI certification VS-NfD – RESTRICTED, certification from Federal Railway Agency, CC EAL4+ in certification

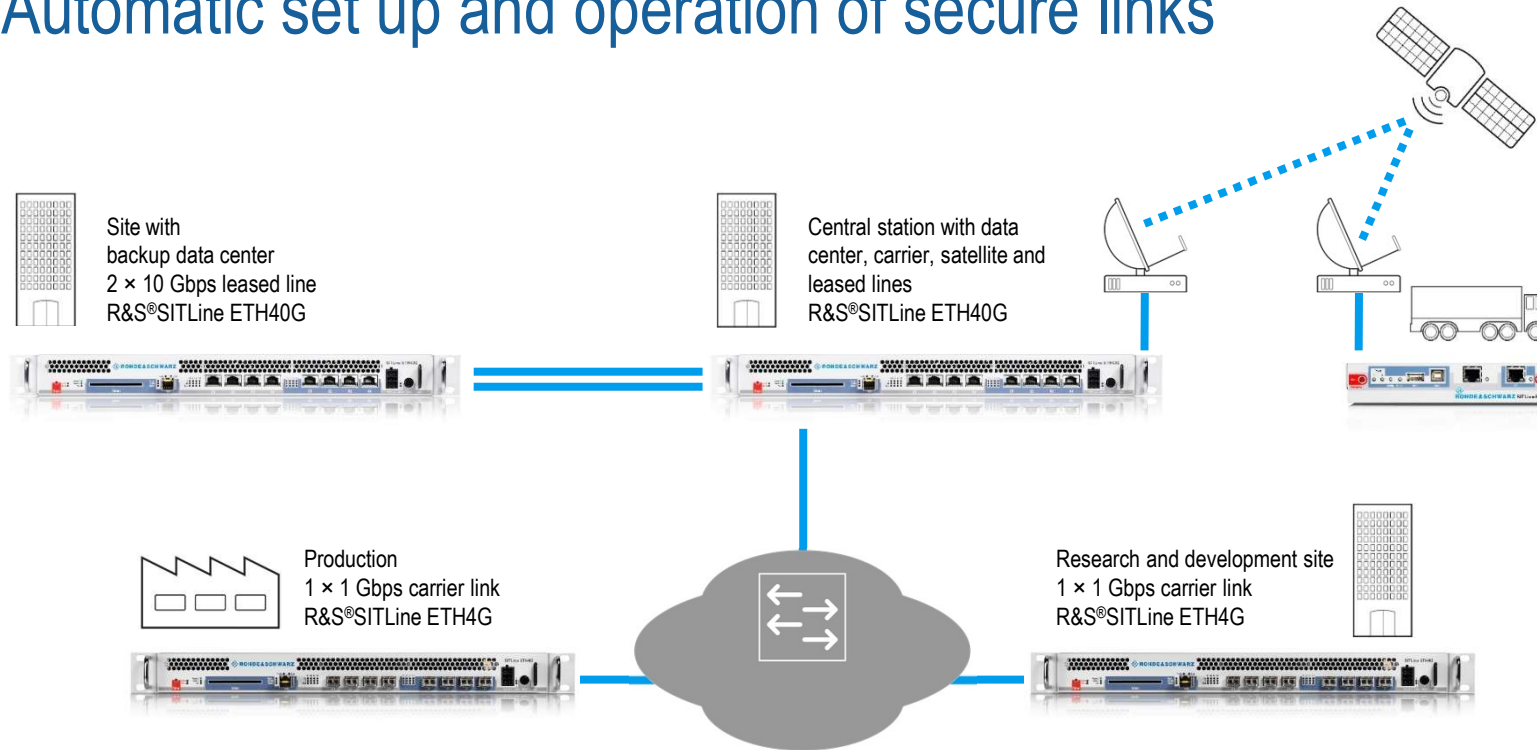


## Main features

- Flexible deployment in modern transmission networks
  - Encryption based on port, VLAN or group assignment (multipoint)
  - Maximum bandwidth efficiency, avoidance of overhead
  - Convenient online management capabilities for device configuration and for security and network settings
- Secure authentication
- Tamper-proof devices
- Very compact design (one height unit for all devices), very low energy consumption
- Approved by the German Federal Office for Information Security (BSI) up to the German restricted (VS-NfD), NATO restricted and EU restricted classification levels



# Automatic set up and operation of secure links



R&S®SITLine ETH is preconfigured before it is sent to the operating site. On startup, it automatically sets up encrypted L2 links via Fast Ethernet, 1 Gigabit Ethernet and 10 Gigabit Ethernet. The same applies to backup devices.