

# Highly secure data center connection for file and content applications

The R&S®SITLine ETH provides certified cryptography to safeguard data communications within Hitachi file and content systems.



## Big data – safe and sound

The secure storage and transmission of large, heterogeneous and fast-growing amounts of data is one of the primary challenges for companies and government authorities. Processes require seamless and audit-compliant documentation, and mission-critical information must be safeguarded. Security authorities and organizations need integrated solutions that enable efficient and failsafe management of internal documents and sensitive information while offering protection against unauthorized access. When a storage solution is distributed to multiple

geographically remote sites, the data transmission between these locations must be encrypted – regardless of whether leased lines or private communications links are used.

The storage provider Hitachi Data Systems and the specialist for IT security Rohde&Schwarz SIT GmbH have now bundled their expertise to offer a professional solution.

## File and content solutions from Hitachi Data Systems

Hitachi Network Attached Storage (HNAS) solutions make it possible to protect, archive, analyze and retrieve the data. The R&S®SITLine ETH secures the exchange of data within the distributed file and content solution.

Data that is no longer being processed but requires long-term storage can be moved to inexpensive storage space on the Hitachi Content Platform (HCP). The HCP has been specially designed to comply with legal requirements for long-term storage, and it ensures certified immutability of the data as well as its protection and integrity, along with authentication of those who access it.

Management of the data is fully automated: No administration is needed to handle data compression, encryption, internal redundancy, replication, and retention periods – even in large systems (with storage capacities of up to 40 petabytes or 32 billion objects/documents). At the branch offices convenient private cloud services can be easily implemented by upgrading the HCP to include local caching functions and cross-platform capabilities for performing full-text and index searches.

Within the data center, the data is encrypted using AES256 on the corresponding storage media. The R&S®SITLine ETH secures the transmission paths. Migration solutions permit interruption-free transfer of data that is currently unencrypted into pools of data that will be fully encrypted. In the process, costs can be cut by migrating existing storage media into the secure architecture.

You act. We protect.  
Encryption & IT security  
by Rohde & Schwarz SIT.



**ROHDE & SCHWARZ**

## BSI-approved encryption for HNAS and HCP

The R&S®SITLine ETH has been specially adapted for use in Hitachi file and content systems. With up to four Ethernet ports per device in a single rack unit, the R&S®SITLine ETH achieves a high degree of packing density unique for network encryption. The zero-overhead mode makes it possible to encrypt the data almost without latency.

The R&S®SITLine ETH secures both synchronous and asynchronous data backups. To do this, iSCSI, FCoE and FCIP are authenticated and encrypted. The R&S®SITLine ETH can be operated in transport, tunnel or bulk mode. The innovative group encryption capabilities secure transmissions within networks that employ more than two sites.

Security-relevant settings, such as certificates or encryption modes, are transmitted to the R&S®SITLine ETH online via the R&S®SITScope security management system. The monitoring and administration of the network and device settings have been integrated into the Hitachi Event Monitoring.

The R&S®SITLine ETH has been approved by the German Federal Office for Information Security (BSI) for handling data classified as RESTRICTED and NATO RESTRICTED.

Rohde&Schwarz SIT GmbH and Hitachi Data Systems GmbH offer individual consultation for developing a customized solution.

### File and content solution for three sites, secured by the R&S®SITLine ETH

