



POWERFUL LAYER 1 ENCRYPTORS FOR ETHERNET SERVICES

ADVA ConnectGuard™ the new era of data protection

The fierce growth in cybercrime and the increased proliferation of network-hacking has left networks at greater risk than ever before. What's more, the rapid adoption of cloud-based services and the resulting migration of mission-critical data outside of enterprise walls raises significant security concerns. Concerns that need to be addressed urgently to ensure data remains secure and intact. The most effective means of protecting information in high performance networks is to deploy Layer 1 encryption.

Companies in all sectors are totally dependent upon the high-speed exchange of information between individual sites. If data security is not guaranteed these companies run catastrophic risks. This, in conjunction with the increasing cost of a data breach measured in both hard-dollar terms like legal settlements and soft costs such as loss of customer loyalty, makes the intelligent use of data protection technologies increasingly necessary for organizations of all sizes.

ConnectGuard - Layer 1 Ethernet Encryptor

- Lowest cost-per-bit network encryption available today
- AES 256 bit key length
- Protocol-agnostic, wire speed forwarding performance
- Ultra-low latency for high-performance data mirroring
- Strong authentication and dynamic key exchange
- Strictly separated security domain management platform
- Designed according to internationally recognized security standards

Compliance requirements encourages encryption, but with mandatory data breach notification, new EU directives GDPR, it now demands it!

The innovative network encryption technology from ADVA Optical Networking, enables customers to transport their data securely with ultra-low latency across high performance point-to-point network environments.

InfoGuard, the Swiss Cyber Security expert, is a major ADVA ELITE partner, providing their customers with large complicated network infrastructures based on the DWDM product range.

The ConnectGuard network encryption ensures data remains intact as it travels through the optical network. The safest method to protect information and guarantee data integrity with regard to latency and throughput is physical layer encryption. Network encryption at the physical layer is extremely powerful, reliably securing high-performance networks between data centres whilst maintaining superior application performance required by diverse networking protocols.

Key features:

- Security Mode - Encryption on physical layer (OTN)
- Security Algorithm - AES in Counter Mode, 256 bit key length
- Key exchange - Automatic communication key change without interruption of traffic via Diffie-Hellman process
- Access protection - Tamper-proof design providing emergency clear when power is removed
- EMI protection through metal shielding
- Password protection, identity-based operator authentication
- Key Entry - Automatic key generation with true random generator
- Management - Secure Remote Management (HTTPS, SSHv2)
- Two fully functional Ethernet management ports via web-based user interfaces
- Standard network management (SNMPv3/Standard MIB-II)
- Audit and Event Logging
- Network requirements - Dark fibre, dedicated wavelength or provider interface offering OTU-2E or OCE-192/STM-64
- Compliance - Fulfils FIPS 140-2 level 2 requirements

InfoGuard is pleased to offer the following range of powerful point-to-point encryption devices based on the ADVA FSP 3000R7 ConnectGuard technology. All devices are 19"rack mountable 1 unit high with dual power supplies.



ConnectGuard - 1 x 1G Ethernet
 ConnectGuard - 5 x 1G Ethernet
 ConnectGuard - 1 x 10G Ethernet

InfoGuard - The Swiss Cyber Security Expert

InfoGuard today has evolved, from supplying network security products, to be the leading Swiss cyber security expert. Long-standing experience in the field of security consulting based on ISO 27001 and NIST, penetration testing, attack simulation and security awareness has made InfoGuard the company to turn to for many large organisations. Offering a complete portfolio of leading network and security solutions as well as comprehensive cyber defence services, InfoGuard are able to secure conventional, highly virtualised and cloud infrastructures.