



High Capacity Transmission Systems Encryption vREBECCA (Vlatacom RELiABIE Communication ChAnnel)

Product Description

Vlatacom Rebecca is an encryption device for high-capacity digital transport systems (up to 2.5Gbps) such as fiber optic networks, digital radio relay devices, or lower capacity inverse multiplexing systems. A rich palette of interfaces enables the device to be easily integrated into new or existing transport systems. vREBECCA is not merely an encryption device – it is also a multi-Gbit/s communications platform based on cutting edge Field Programmable Gate Array (FPGA) technology. This feature allows users to adjust the vREBECCA device to their needs, including the implementation of their own algorithms, or in setting up special control, key exchange, and specific authentication methods that rely on user specific certification authorities.

Key Features

- High transfer capacity up to 2.5Gbps
(Note: Other versions available on demand (IP-VPN, PDH, 10GbE))
- Encryption done at the data link level (layer 2) or bulk mode (layer 1) to minimize latency
- Default encryption algorithm (AES-256)
- On-demand implementation of custom encryption algorithms
- Key production and key management system
- Tamper evidence and tamper proof mechanism ensures key protection
- Device authorization and certification
- Compatible with National Crypto Center (NCC) Solution
- Configuration terminal with three-factor user authentication (pin code, smart card, fingerprint)
- Remote monitoring via secure communication lines
- Interfaces:
 - Two Ethernet 10/100/1000BaseT
 - Two SFP modules for fiber optics (monomode 1310nm/1550nm, CWDM, DWDM or multimode 850nm)
- Redundant power supply from DC or AC sources





vKDD

Vlatacom Key Distribution Device (vKDD) is a robust terminal with tamper-proof encrypted memory. Its primary function is the distribution of sensitive data, like cryptographic keys.

Benefits

- Secure transport of sensitive information
- Complete control over data encryption
- Efficient use of bandwidth and low latency
- Simple to fit into new or existing ICT infrastructure
- Adaptable to suit the needs of each individual user

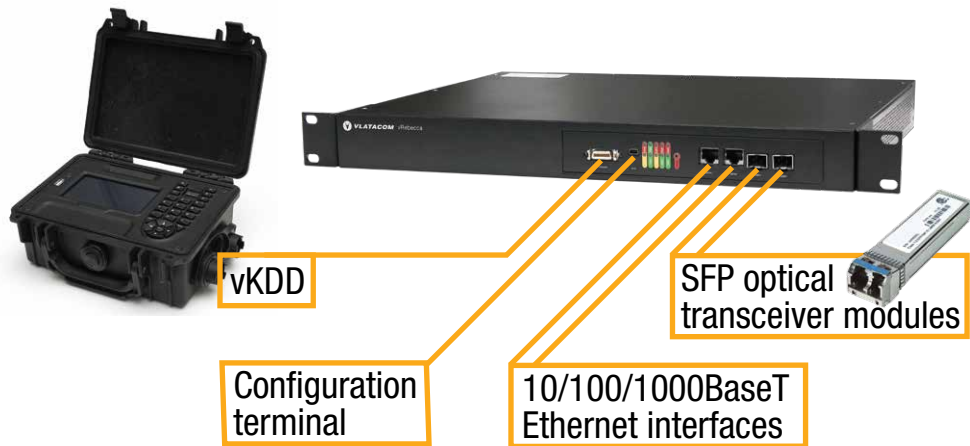
Market

In today's world, it is possible to tap into fiber optic cables without physically cutting the fibers by using specially designed couplers, making the transfer of sensitive data particularly vulnerable. Radio relay systems, which are commonly used as a backup for optical transport systems, or a quick-setup solution are even more susceptible due to their antenna-based transmissions which pass through open space.

The vREBECCA device is a solution to these problems, intended for the encryption of transmitted data in government information systems, bank systems, corporate networks, and military communication systems.

Applications

- Bulk mode encryption for router connections via leased fiber optic cables (up to 2 x GbE link aggregation)
- Packet level encryption for router connections via digital radio relay systems, Ethernet over MPLS network, metro Ethernet network or inverse multiplexed low capacity lines)
- SDH ring security. The connection between each ADD/DROP multiplexer pair is encrypted with a pair of vREBECCA devices.



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