

VPN Unit

The main building block of the SecuriVPN system



SecuriVPN (virtual private network) is a unique hardware encryptor that caters to government organizations requiring very stringent VPN security in IP-based networks. This solution is ideal in a Homeland Security perspective, since it applies to both site-to-site and remote VPN access in large-scale networks with varying communication means in diverse and strategic locations.

Classified information is protected through hardware-based encryption, authentication and access control functions. The unit can easily be installed between the LAN network and the router or between an individual host and the rest of a network. The entire security process is transparent and effortless for users. SecuriVPN can apply a choice of custom, standard and national encryption algorithms.

Innovative security features such as red/black separation, possibility to choose custom, standard and national encryption algorithms and several redundant communication paths make this solution unique.

The unit's NAT (Network Address Translation) traversal functionality allows compatibility with NAT-performing devices. Other exclusive features include multicast capability, tamperproof design, Tempest approval and multiple configuration possibilities.

SecuriVPN unit is built to allow seamless integration with existing infrastructure and is easy to upgrade to future technology changes. User-friendly management systems with remote capabilities enable local and central configurations as well as network and key management.

Key Features

- Full hardware encryption of classified information over public networks
- Securing data up to SECRET level
- Red/black separation in hardware, a security feature that prohibits plain text channels
- Conforms to Common Criteria EAL 4+
- Manages several communication paths including IP over radio with transmit silence and satellite hops
- Handles multicast traffic
- TEMPEST EU/SWE MIL-STD
- NAT Traversal functionality
- Resources can be separated within the same LAN with multiple VPN units
- Redundancy capabilities
- Choice of algorithms
- Certificates and keys distributed on PIN protected smart cards
- Can be easily upgraded to accommodate future algorithms and technologies
- On-site and remote systems for network management, configuration and key management
- Made in Sweden

Technical specification - VPN unit

VPN basics

- IPsec enhanced
- 512 unicast + 512 multicast tunnels
- NAT traversal
- 100 Mbit/s linespeed
- IPv6 (option)
- 4000 keys

Modes of Operations

- Two-way tunnel
- One-way tunnel (diode functionality)
- Network modes: fixed, mobile and deployable

Ports

- Optical 100Base-FX (LC connectors) for data
Optical interface for local configuration and log output
- or
- Electrical interface RJ45 100Base-TX for data
9-pin D-sub RS232 for local configuration and log output
- Smart card reader for loading keys, certificate and configuration

Encryption Algorithms in hardware

- AES-256
- Custom/national algorithms
- EU approved algorithms

Device authentication

- X.509 Certificates and CRLs
- Symmetric keys

Device management

- Front panel user interface
- Serial port
- Smart cards
- Secure in-band remote management
- Secure local or remote firmware

Key Management

- Session keys from Key Server System
- Authenticated Session key exchange
- Enhanced IKE using RSA-PSS signatures (2048-bit modulus)
- Keys distributed on smart card

Monitoring & Log handling

- Local loggin device port
- Remote management with event secure syslog
- SNMP remote monitoring and control

Security Features

- Hardware based random number generator
- Red/black separation in hardware
- Emergency erasure of keys
- Tamper evident chassi
- Active and passive Tamper resistant
- POST (Power On Self Test)
- Replay protection
- Auto detection of local red/black circuit

High Availability and QoS

- Up to 10 units in parallel
- QoS, DiffServ
- 14 hours key battery backup
- Failover installation

Regulatory Compliance

- Common Criteria EAL 4+
- CE
- Tempest EU/SWE MIL-STD up to Top Secret

Power source (dual)

- 85-264 VAC (standard)
- 10-66 VDC (optional)
- Dual power supply optional

Operating Temperature

- -5 °C – +40 °C, 5 – 95% rel. H

Dimensions

- Measures: 442 x 44 x 272 (mm)
- Weight: 5-5,8 kg

Versions

- 19" - rack model – 1U height
- Desktop
- Front Connector Module
- Mobile unit (option)

MTBF

- >75 000h

Further details available upon request

Company Profile

Business Security AB is an independent Swedish company and manufacturer of secure encryption solutions for data, voice, fax, video and the Internet. We develop leading-edge encryption solutions for government entities and organizations with very stringent security requirements such as military departments, law enforcement agencies, multinational corporations and banks. So far, Business Security has delivered trusted security solutions to more than 40 countries worldwide.



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