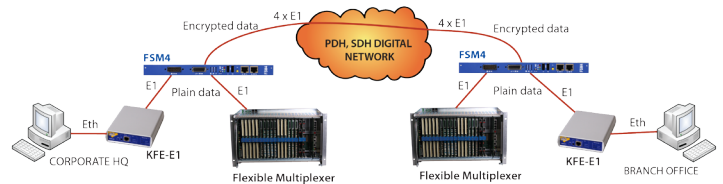


FSM4-FLEXIBLE SECURITY MODULE

High performance encryption device



Basic features

- Encryption for up to 4 channels with 2048 Kbit/s with G.703 interfaces
- Device performs duplex encryption for: Primary PCM, Interface converters etc.

Management

- PC, over the management interfaces (Fast Ethernet). Device has embedded WEB Server and SNMP agent which enables device management over standards Browser, independently of computer operating system.
- Flexible Multiplexer physically over the internal management buss (SPI) by using software SUNCE.
- From front panel (Tasters and LEDs) for the basic device management and line testing functions.

Telecommunication features

- Device testing and link connection validation by activating appropriate loops
- The statuses of all channels are stored in internal database accessible to the operator (and telecommunication management system)
- Recorded data: loss of signal, alarm signal indication status, synchronization status, loop activity and test results.

Algorithms and crypto – parameters

- Block and stream ciphers / standard and proprietary
- SW and HW algorithms solutions
- All algorithm parameters are under the user control, so the manufacturer is out of security circle
- Key length depending on applied algorithm
- Each channel contains its own key collection
- Each channel uses independent algorithm instance, block or stream (device supports simultaneous operation of multiple algorithms)

- Device comes with standard algorithms AES or Salsa20, and user, if necessary, writes his own algorithm
- Algorithm, keys, log-file-s and other security parameters are stored in a separate protected memory. Device provides reliable data storage without power for a period of 3 to 6 months

Crypto synchronization

- Synchronization is universal for all types of algorithms
- Synchronization time is less than 50 ms
- Resynchronization events:
 - Automatically, based on incoming frame control
 - On external request
 - Periodic check for non framed mode
- Device enables remote device key change, from the set of existing keys

Protection

- The entire unit is shielded and protected from the opening
- Protected memory will be deleted on every opening of device (Tamper proof). No authorized opening.
- Fast erasure off all crypto parameters with or without power supply.
- Parameters and algorithms are not readable.

Technical data

- Power supply 48 or 60 Vdc nom
230 Vac option for 1U case up to 15 W
- Consumption
- Equipping Unit for 19"/ETSI subrack with FM8 or FM2, weight 950 g
Independent unit 1U height for 19"/ETSI rack
- Operating temperature range: -5°C up to +45°C

