

# FSM M-FLEXIBLE SECURITY MODULE



- Frame recognition, PCM, ATM, HDLC etc.
- Large keys storage space, 64 keys per encryption block (32 par)
- Each channel can use independent algorithm instance, block or stream (device supports simultaneous operation of multiple algorithms)
- Device comes with proprietary test algorithms and user can write 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

## Basic features

- Simultaneous symmetrical encryption for 4 independent data streams
- Interfaces: E12 (G.703 2048 kbit/s), V.11 (up to 10 Mbit/s), FE (Ethernet over TDM)

## Management

- PC, over the management interfaces (KU, TU). Device has embedded WEB Server which enables device management over standards. Browsers, independently of computer operating system.
- 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/or proprietary
- Preprogrammed and/or user defined
- SW and HW algorithms solutions
- All algorithm parameters are under the user control, so the manufacturer is out of security circle
- Key length (Very High) depending on applied algorithm

## Crypto synchronization

- Synchronization is universal for all types of algorithms
- Synchronization time is very low
- Resynchronization events:
  - User action, management
  - Automatically, based on incoming frame recognition PCM, ATM, HDLC etc.
  - On external request of terminal equipment
  - 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 Dual, redundant  
Nominal 24 or 48 VDC  
Option: 220 VAC  
up to 14 W
- Consumption
- Dimension with bumpers (W x H x D): 220 x 118 x 400 mm
- Weight 6000 g
- Operating temperature range (ETSI 3.3): -15°C up to +55°C
- Ingress Protection Rating IP67
- Vibration and shock resistant

