



MicroMade

HAK2

USB key for software protection
and data encryption



Technical data:

- USB interface:
 - Speed: Low Speed (1.5 Mb/s)
 - Specification: USB 1.1 and USB 2.0
 - Driver: HID - human interface device
 - VID: 0x13AB - vendor ID
 - PID: 0x0001 - product ID
- Encoding:
 - Algorithms: DES, DES3
 - Keys: S0 (168 bit) - signature check
S1 (168 bit) - encoding
A (168 bit) - encoding
- Memory:
 - Capacity: 4 kB
 - Layout: 250 pages, 16 bytes each
 - Dimensions: 54 × 18 × 8 mm

General device description

The **HAK2** key is designed to be plugged into a computer's USB port. It operates with the lowest transmission speed defined for the USB standard (1.5 Mb/s).

HAK2 does not require any additional drivers. It uses the standard HID (human interface device) driver which has been included in the Windows systems since the Windows 98 version. This driver is also present in any operating system which supports USB keyboards.

Software can cooperate with multiple keys plugged into USB ports at the same time. There is no conflict between different applications using each their own **HAK2** key.

Data transmission between software and a **HAK2** key is encrypted using a DES algorithm. For each session a different transmission key is created based on the user password and random numbers.

The **HAK2** USB key can be used for:

- Protection against using illegal copies of software - key presence checked at startup
- Software access control - logging into a program by checking user passwords stored in the **HAK2** key
- Access to selected functions of a program by issuing digitally signed licenses
- Encrypting data saved on a computer's hard drive
- Transmission encryption between computers
- Encrypting data sent to others, for example by e-mail
 - Encrypting for a group of users using **HAK2** keys with identical S1 or A keys
 - Encrypting with specifying the key number - only this specific key can decrypt the data.