

SITMinisafe

Encryption of modem links

- Automatic online encryption of serial data
- Compatible with analog, ISDN or GSM modems
- Configuration and key management via any terminal program
- Can be used on any PC platform irrespective of operating system
- Different selectable crypto-algorithms



SITMinisafe is an external device for encrypting data transmitted via modems. It is connected between the COM ports of the PC and the modem. Data are automatically encrypted before transmission and then decrypted at the receive end where another SITMinisafe is installed.

Typical applications

- Protecting data transmitted on nonsecure networks, say, telephone (file transfer, mail boxes, remote servicing/ diagnosis of data transmission equipment)
- Connection to LANs via modem (teleworkstations)

The SITMinisafe's small size and external connectors mean that it can easily handle a wide range of applications (external modem/radio modem).

Performance and functions

The unit encrypts and automatically decrypts serial data sent at rates up to 115200 bit/s (full duplex). Baud rates between 2400 and 115200 bit/s are set automatically. A fixed baud rate can also be set. Hardware handshaking and the standard protocol: 8 bits, no parity, 1 stop bit, are supported.

Different algorithms are available for the encryption. Up to 16 keys with a length of 128 bits can be saved by the unit and selected via parameters when a call is to be set up. The keys are stored in the unit in an encrypted form.

Control, initialization and key management can be performed using any terminal program. This makes the system independent of user platform and operating system. Control sequences determining the encrypted or plain mode or for key selection can be integrated in AT commands for the modem. SITMinisafe selects the commands concerned with encryption and decryption and lets all the modem commands through unchanged. The encryption mode forces the setup of an encrypted link or aborts the connection if the key is incorrect or missing. In the auto mode, SITMinisafe automatically determines whether the data in incoming calls are plain or encrypted. Plain data can be sent as and when required.

Keys can be entered manually via the terminal program. To ensure reliable assign-

ment, additional information that can be recalled any time can be stored with each key. All functions associated with keys require authentication by means of a password which has been selected by the user. All sensitive data are encrypted with a unique key and saved so that they cannot be read from the microcontroller.

SITMinisafe has an LCD indicating which parameters have been set, the data transmission mode, key settings and the device status.

With the Mode key, another data mode (encrypted, automatic or plain) can be temporarily selected for the next call.

Security functions, say, to prevent key tampering and parameter manipulation, stop calls being set up after a security violation. Violations are indicated by the LCD and the terminal program.

The unit meets all the requirements for a CE conformity mark and is approved for continuous operation.

General data

Power supply

Dimensions System requirements from plug-in power supply (6 V to 9 V, 70 mA) 80 mm x 55 mm x 15 mm COM port (RS232) any terminal program independent of operating system and user platform

Ordering information

SITMinisafe Equipment supplied 3534.4360 SITMinisafe, power supply, connecting cable

