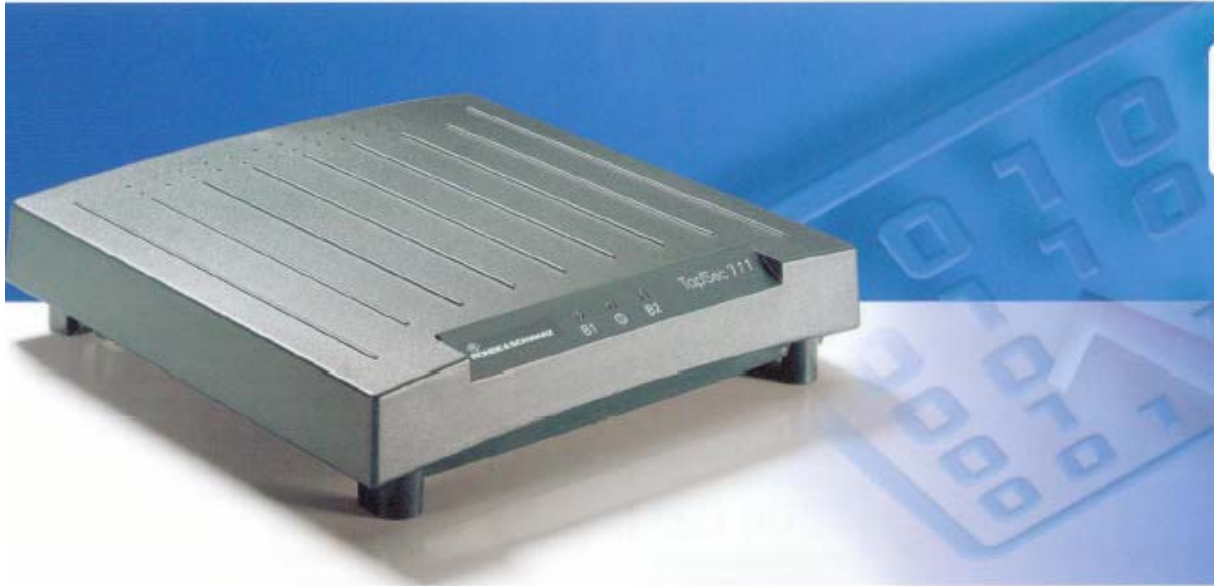




TopSec 711

Fax & Telephone Line Encryption



TopSec 711

Reliable encryption for telephone and fax

- ◆ Encryption of group-3 fax signals
- ◆ Encryption of voice signals
- ◆ Compatible with TopSecGSM
- ◆ Plug & play installation on analog communication port
- ◆ Easy operation
- ◆ Menu-controlled administration
- ◆ Secure remote administration

Security of dial-up lines

The globalization of business and private communication provides multiple targets for eavesdroppers and spies on telephone and data networks.

But which security measures are available to counteract such unauthorized intrusion?

The TopSec711 has been developed to protect fax transmissions as well as phone calls against eavesdropping attacks.

Fax encryption with TopSec711

With the TopSec711, faxes can be exchanged securely between two subscribers. The only prerequisite is that both subscribers are equipped with a TopSec711.

The header of faxes transmitted in encrypted form between two TopSec711 units optionally contains the indication "KRYPTO" and a user-specific ID of the TopSec711 that sent the fax.

Voice encryption with TopSec711

The TopSec711 also ensures confidential voice communication between two subscribers. The only prerequisite is that the called party also has a TopSec711 or a TopSecGSM mobile phone.

At the beginning of an encrypted voice connection, the two partner encryption units optionally output a communication-specific crypto ID to each of the telephones. The two subscribers can thus check whether the call really is confidential.

Encryption of confidential communication

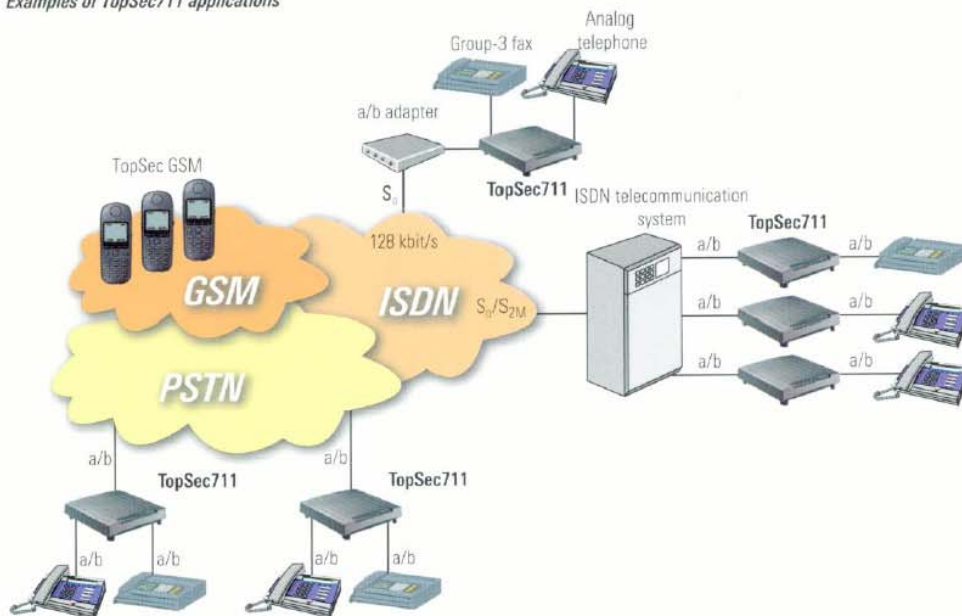
Encryption is based on a hybrid method. To attain maximum security, a combination of two algorithms is used: an asymmetrical algorithm with a 1024-bit key for key agreement, and a symmetrical algorithm for encrypting the confidential information.

In the encryption mode, the TopSec711 and the called station negotiate a new 128-bit key for the connection. The 128-bit key is determined randomly from 10^{38} possibilities and erased as soon as the communication is terminated.

Tap-proof communication through plug & play units

The TopSec711 is simply connected between the fax unit or telephone and the telephone network. The device can encrypt and decrypt outgoing and incoming faxes as well as phone calls.

Examples of TopSec711 applications



The transmission mode (plain/encrypted) is selected by adding a code number to the number of the called station.

During the communication, the subscribers at either end need only check the LEDs on their equipment to make sure that the information is being transmitted confidentially.

As an option, crypto operation can be enabled by a contactless chip card. This function prevents faxes from being encrypted or decrypted, and encrypted phone calls from being made, on an unattended TopSec711.

Intelligent mini-exchange integrated

A fax unit and a telephone can be simultaneously connected to a TopSec711.

When there is an incoming call, the TopSec711 automatically recognizes whether it is for the fax unit or the telephone and connects the call to the appropriate terminal. This applies to both plain and encrypted calls.



Specifications

Transmission protocol in encrypted mode	V.29 to fax units, V.32 to network
Transmission speed	14400 bit/s (fax), 9600 bit/s (voice)
Power supply	100 V AC to 240 V AC, 50 Hz to 60 Hz
Connectors	1 × telephone network 1 × terminal device 1 × administrator terminal 1 × power supply
Dimensions (W × H × D)	180 mm × 45 mm × 173 mm

Ordering information

TopSec711	5400.1002.02
Accessories (optional)	contactless chip card, adapter set for plug-in power supply unit



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or would like to discuss a specific requirement or project, please contact us at:

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