

## Self-help in the event of failure

|   |   |
|---|---|
| Central power indicator not lighting:                 | <ul style="list-style-type: none"><li>• Check the socket outlet (power failure, fuse).</li><li>• Unplug PSU and plug in again, unplug connection to device and plug in again (corrosion, contact problems).</li></ul> |
| Signal lights B1/B2 not lighting:                     | <ul style="list-style-type: none"><li>• Check line terminals (unplug and plug in again, check cable for damage).</li><li>• Check ISDN port.</li></ul>   |
| Connection cannot be established or is not encrypted: | <ul style="list-style-type: none"><li>• Check that the unit has been administered (forced limitation).</li><li>• Check that the remote system is using an encryption device.</li></ul>                                |

### Emergency operation

Failure of the TopSec 703 power supply unit also affects downstream terminal equipment. In this case, unplug the TopSec 703 and connect the terminal equipment directly to the ISDN port.

### Service

Should you or your system administrator be unable to correct faults yourselves, please contact the Siemens service department.

- Telephone: ++49 - 89 - 722 49 311
- Fax: ++49 - 89 - 722 49 880 or ++49 - 89 - 722 49 806

## Technical data

|                                   |   |
|-----------------------------------|---|
| Weight:                           | 890 gr (incl. net adapter)  |
| Dimensions:                       | 180 x 173 x 34 mm <sup>3</sup> (LxWxH)  |
| Plug-in power supply unit SNG 6a: | 230V / 50Hz / 40 mA / 9.2 VA (standby 3.2 VA)   |
| Environment:                      | Storage temperature : -20°C to + 70°C<br>Operating temperature : + 5°C to +40°C<br>Rel. humidity : 5% to 95%  |
| Encryption:                       | Proprietary hybrid encryption system of Siemens AG with asymmetrical cipher exchange procedure (module length 1024 bits) and strong symmetrical user data encryption (cipher length 128 bits) |
| Cipher generation:                | The device enables 10 <sup>38</sup> symmetrical user data encryption options  |

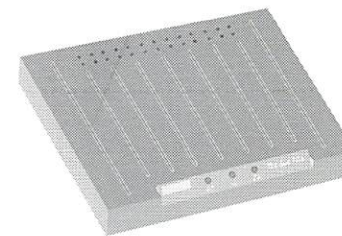


This device fulfils the requirements of the following EU guidelines:

- 89/336/EEC "EMC Directive"
  - 73/23/EEC "Low Voltage Directive"
- The CE marking confirms compliance.

# SIEMENS

## TopSec® 703



Issued by

Private Communication Systems Group  
Hofmannstr. 51  
D-81359 München  
Siemens Aktiengesellschaft

© Siemens AG 1998

All rights reserved. Subject to availability.  
Rights of modification reserved.  
Ref. No.: A31003-I1000-A002-1-76D1  
Printed in Germany  
(10/98)



# Safety information

The TopSec 703 unit fulfils the requirements of interference suppression and safety (CE).

The unit must only be operated in accordance with these installation and operating instructions and must not be opened.

- Do not expose the device to direct sunlight or other sources of heat.
- Protect the device from moisture and do not allow liquids to come into contact with it.
- Only use the approved plug-in power supply unit (PSU) supplied: SNG 6a from Friwo, reference number C39280-Z4-C65. The use of a different plug-in PSU could damage the unit or a terminal connected to it. The supply voltage specified on the plug-in PSU must correspond to the supply voltage at the socket outlet.
- In the event of a power failure, there is no emergency operation facility for the unit or a connected terminal (see "Emergency operation" further on).

# Package contents

- TopSec 703
- ISDN connecting cable
- Plug-in power supply unit
- Installation / operating instructions

# TopSec family

The TopSec family comprises the TopSec 702 unit (Euro-ISDN data encryption), the TopSec 703 unit (Euro-ISDN voice and data encryption) and the TopSec 730 unit (S<sub>2M</sub> voice and data encryption). The system can be administered via a PC using additional administration software to achieve:

- Forced encryption
- Generation and administration of closed user groups
- Authentication

# Installation

- Use the ISDN connecting cable supplied to connect the ISDN line terminal on the underside of the TopSec 703 unit to your Euro-ISDN junction box (S<sub>0</sub>).
- Connect your terminal equipment (Telefax Group 4 or PC), which must be approved by the Post Authority, to both terminal equipment ports on the underside of the 703 unit.
- Connect the plug-in power supply unit supplied to the underside of the unit and plug it into a socket outlet.
- When the unit is started up, the power indicator in the center should light up.
- The TopSec 703 can be used as a desktop model or it can be mounted on the wall. The units can be stacked when the rubber feet have been removed.
- The TopSec 703 unit has been set to bus configuration at the factory (default setting). It can be switched to port mode using the optional administration software.

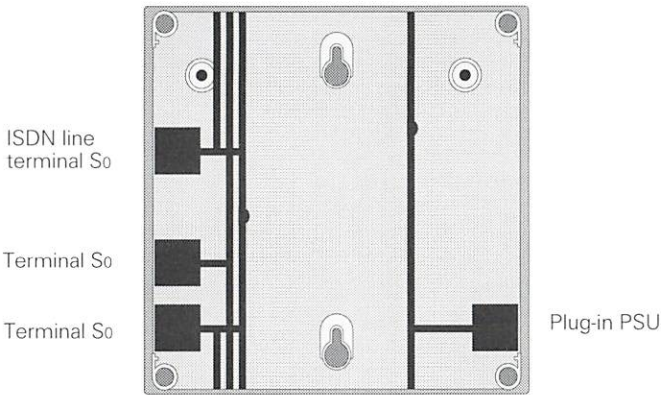


Figure: Underside of unit

# Implementation options

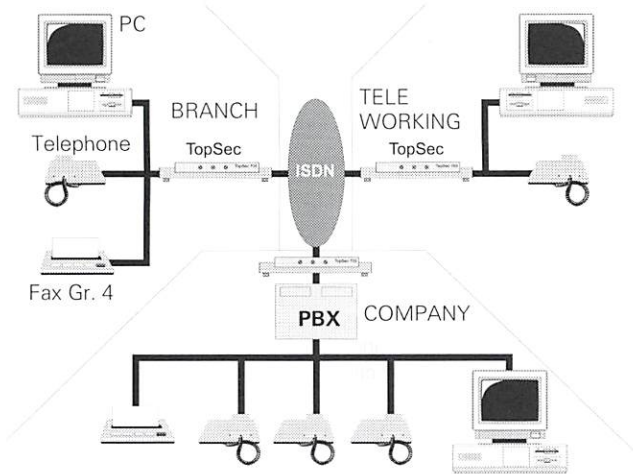


Figure: Configuration example

The TopSec 703 unit encrypts outgoing data and decrypts incoming data for communication via S<sub>0</sub> lines (Euro-ISDN) with telephones, telefax Gr.4 or video conferences.

In an open system, each TopSec 703 communicates with another unit in the TopSec family (default setting).

In a closed system, data can only be encrypted within the system (this is administered by a system administrator).

# Operation

The TopSec 703 supports simultaneous and independent duplex mode of both (Euro-ISDN) B channels with 64 kbit/s. Both encrypted and unencrypted connections are supported. When transmitting encrypted data, the remote system must also use one of the TopSec family products. The terminal equipment must set up and clear down the connections.

## Establishing an unencrypted connection

When dialing a number, the selection digit "0" must be dialed before each telephone number even in the case of international calls:  
Example: 0 0042 12345678

If TopSec 703 is installed between the terminal equipment and a PABX, the line access digit must be dialed after the selection digit:  
Example: 0 0 0042 12345678

## Establishing an encrypted connection

When dialing a number, the selection digit "9" must be dialed before each telephone number even in the case of international calls:  
Example: 9 0042 12345678

If TopSec 703 is installed between the terminal equipment and a PABX, the line access digit must be dialed after the selection digit:  
Example: 9 0 0042 12345678

If the unit is part of an administered system, this prefix need not be dialed in the case of forced encryption or it may be replaced by another digit. For further information, please contact your system administrator.

## Signal lights

The signal lights (B1 and B2) on the front of the TopSec 703 unit provide information on the operational status of a B channel. Both B channels can be seized at the same time (e.g. video application).

The following applies:

- Green light : Unencrypted connection
- Red light : Encrypted connection

The signal lights can indicate the following operational conditions:

|  |   |
|--|---|
| Service LED red flashing                     | Self-test after power supply voltage has been applied     |
| Service LED green lighting                   | Ready for operation                                       |
| Service LED red lighting                     | Error indication  |
| B1/B2 LED off                                | No connection   |
| B1/B2 LED green flashing                     | Unencrypted connection setup                              |
| B1/B2 LED green lighting                     | Unencrypted connection                                    |
| B1/B2 LED red flashing                       | Encrypted connection setup                                |
| B1/B2 LED red lighting                       | Encrypted connection                                      |
| B1 and B2-LED flashing alternating red/green | Remote operation by administrator (e.g. software upgrade) |