



TopSec GSM

The mobile phone for your confidential calls

- ◆ High security level
- ◆ Top-quality speech encoding for end-to-end voice communication
- ◆ Invariably reliable speech quality
- ◆ Simple handling
- ◆ Recommended by the German Information Security Agency

TopSec GSM: mobile and confidential

The fast transfer of information and instant decisions, particularly at higher levels of management are more important than ever. Therefore, it must also be possible to exchange confidential information over mobile phones. In the GSM transmission mode, data is only encrypted between mobile phone and base station. Beyond that, the call is routed via radio relay or fixed networks without any protection. In some countries even the minimum security requirements for mobile communication are not met.

The TopSec GSM has been developed so that confidential information can be exchanged reliably and without any risk of eavesdropping.

The "top secret" mobile phone meets highest demands

The basis of the TopSec GSM is the renowned Siemens dualband mobile phone S 35i. The core, however, is the

crypto module. Due to its size of only 32 mm x 34 mm it has been completely integrated into the S 35i. The TopSec GSM cannot be distinguished from a normal Siemens S 35i mobile phone.

In addition to the encryption function, the TopSec GSM offers all advantages of a latest-generation mobile phone:

- ◆ Excellent speech quality
- ◆ Simple operation
- ◆ Voice dialling
- ◆ Compact size
- ◆ Low weight
- ◆ Internet access via WAP browser
- ◆ Soft modem and
- ◆ IR interface for mobile data transfer

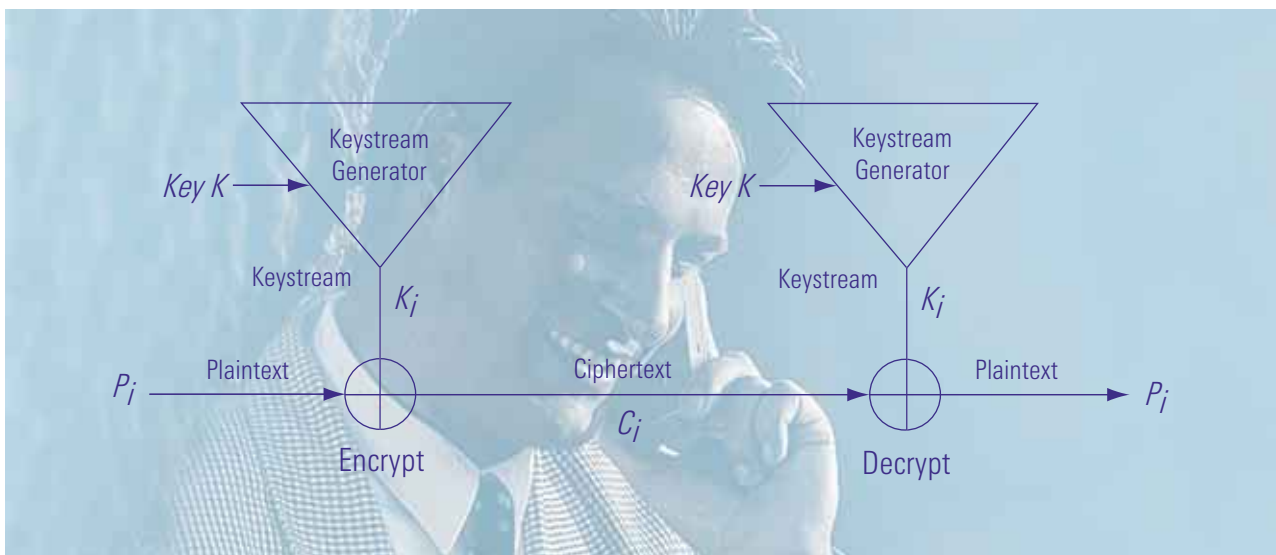
Encrypted speech is transmitted on the transparent GSM data channel. Through the use of the GSM half-rate vocoder, excellent speech quality is ensured even in the encrypted mode. To attain top security, two algorithms are combined; an asymmetrical algorithm with a 1024-bit key for key agreement and a symmetrical algorithm with a 128-bit key for voice encryption.

As is the case with the TopSec ISDN encryption devices for voice and data communication, the TopSec GSM is recommended by the German Information Security Agency, confirming the high security standard.

Security in mobile radio networks and on the ISDN landline network

The TopSec GSM is suitable for encrypted end-to-end voice communication in the GSM frequency ranges of 900 MHz and 1800 MHz. A confidential discussion can be carried on between two TopSec GSM mobile phones without any risk.

Encrypted calls from the TopSec GSM can also be made to the landline network: the only prerequisite is that the called ISDN station must be protected by a TopSec 703+ of the TopSec product family.



Absolute confidentiality at a single keystroke

Dial the number of the desired subscriber and briefly press the crypto softkey below the display to switch to the crypto mode.

"Crypto" is indicated in the display to confirm the encryption mode as well as a 4-digit control code (see figure). In the case of closed subscriber groups, automatic authentication is performed by a public key procedure.

Thus you can be sure that your communication is encrypted and that nobody can eavesdrop your call.



In the crypto mode, your TopSec GSM phone and the called TopSec station automatically agree on a new 128-bit key for each call. The 128-bit key is randomly determined out of 10^{38} possibilities and erased after the call is terminated.

This method is one of the essential security features offered by TopSec GSM.

Crypto mode indicated in the display



Size of crypto module

Specifications

Frequency range GSM class 4 (2 W) GSM class 1 (1 W)	880 MHz to 960 MHz 1710 MHz to 1880 MHz
Voice transmission (GSM half-rate vocoder)	normal operation, encrypted transmission
Operating voltage	3.6 V
Current drain	max. 400 mA
Operating temperature	0°C to 45°C
Standby time	up to 220 hours
Talk time	up to 6 hours

Size	118 mm × 46 mm × 21 mm
Weight	105 g

Ordering information

TopSec GSM	3531.6527
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More information at
www.rohde-schwarz.com
(search term: TopSecGSM)



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