TECHNICAL SPECIFICATIONS

Radio
GSM quad-band 850/900/1800/1900MHz • EDGE EGPRS class B, multi-slot class 10 • CSD

Voice Encryption
Strongest and most secure algorithms available today – AES256 and Twofish • 4096 bit Diffie-Hellman key exchange with SHA256 hash function • readout-hash based key authentication • 256 bit effective key length • encryption key is destroyed as soon as the call ends

Message Encryption
Based on the same strong encryption algorithms used for GSMK CryptoPhone voice encryption – 4096 bit Diffie-Hellman initial key exchange, AES256 and Twofish message encryption with 256 bit effective key length. Supports long SMS and encrypted self-destructing "Eyes Only" SMS.

Device Protection
Encrypted storage system for contacts, messages, and keys with smart folders protects confidential data against unauthorized access • hardened WM 6.1 operating system with granular security management and streamlined, security-optimized components and communication stacks protects device against outside attacks

GSMK CryptoPhones are the only secure mobile phones on the market with full source code published for independent security assessments. They contain no »proprietary« or »secret« encryption, no backdoors, no key-escrow, no centralized or operator-owned key generation, and require no key registration.

Interoperability
Fully compatible with all GSMK CryptoPhone circuit-switched mobile, satellite and fixed-line encryption products • PBX integration available

Trustworthy Voice & SMS Encryption
The CryptoPhone 301 comes with full source code available for independent review. Finally, you can perform an independent assessment to ensure that you can rely on strong encryption without any backdoors in the communications device that you entrust your security to. The GSMK CryptoPhone 301 enables you to put the trust where it belongs – in a trustworthy, open and scientific verification process.

GSMK CryptoPhone technology is based on well-researched algorithms for both encryption and voice processing. It features the strongest encryption available combined with key lengths that provide peace of mind today and in the future.
**Operational Features**
Talk time up to 8 hours • standby time up to 270 hours

**Dimensions & Weight**
104.5 x 59 x 15.75 mm • 110g incl. battery • integrated antenna

**Display**
2.8-inch sunlight-readable transreflective TFT LCD screen with LED backlight @ 240x320, 64k colors

**Navigation / Buttons**
5-way navigation keypad • dedicated talk / hang-up buttons • volume up / down buttons

**Connectivity**
Integrated USB/ power/ audio connector • MicroSD memory card slot • Bluetooth V2.0 with Enhanced Data Rate and A2DP for stereo wireless headsets • IEEE 802.11 b/g Wireless LAN

**Audio codecs**
Encrypted calls: CELP and ACELP® VLBR4
Decoding & playback: WAV, WMA, AMR-NB, AMR-WB, AAC, AAC+, eAAC+, QCP, MP3, polyphonic ring tones

**CMOS Camera**
2.0 megapixels resolution (can be completely disabled upon request)

**Standard Accessories**
100-240V AC adapter • USB sync cable • stereo headset with microphone

**Optional Accessories**
12V car charger • solar panel charger • vehicle mount kit

**Satellite Upgrade Option**
Upgradeable to dual-mode secure GSM and Thuraya satellite communications using the GSMK CryptoPhone T2 upgrade package

---

**Encryption Overview**

Diffie - Hellman → 4096bit → SHA-256 → value II 0x02 → SHA-256 → 256 bit key → Twofish → Counter 128 bit → XOR → keystream → MUX → XOR → ENCRYPTED DATA

**Your Local Distributor:**

---

GSMK Gesellschaft für Sichere Mobile Kommunikation mbH • Berlin, Germany
Tel. +49 700 CRYPTTEL [27 97 88 35] or +49 30 2462-5000
Fax +49 700 CRYPTFAX [27 97 83 29]
http://www.cryptophone.com