GSMK CryptoPhone® 600G

Secure mobile phone for professional users with 360° protection, hardened operating system, Baseband Firewall, tamper-resistant hardware and end-to-end voice and message encryption

Supports the highest FIPS 140-2 and Common Criteria security level requirements

NEW TAMPER-RESISTANT, TAMPER-EVIDENT HARDWARE DESIGN

SECURE CONTACTS
Secure contacts list and call history time-line

DETECT LOCATION TRACKING
Detect attempts to track user location via SS7 or silent SMS

SECURE STORAGE
Encrypted storage system for contacts, messages and notes

APP PERMISSION ENFORCEMENT
Control access to network, data and sensors (camera, mic etc)

HARDENED ANDROID
Secure Android built from source with granular security controls

EMERGENCY ERASE
Last line of defense emergency erase function

Some phones promise privacy... **Cryptophone delivers intelligence.**
Secure Calls
Secure end-to-end encrypted voice over IP calls on any network – 2G, 3G, 4G, WLAN • Strongest and most secure algorithms available today – AES256 and Twofish • 4096 bit Diffie-Hellman key exchange with SHA-256 hash function • Readout-hash based key authentication • Autonomous key generation, no pre-installed key material • Encryption keys securely and immediately erased from the device after each call

Secure Messaging
Based on the same strong encryption algorithms used for GS MK CryptoPhone voice encryption – 4096 bit Diffie-Hellman initial key exchange, AES256 and Twofish message encryption with 256 bit keys

Device Protection
Hardened operating system with secure boot and device runtime integrity checks
Secure Android OS built from source code with granular security management and streamlined, security-optimized components and communication stacks • Seamless secure boot feature • Secure boot, kernel, recovery, kernel object and APK signature keys • Runtime checks of core applications and services ensure that only signed and trusted code is loaded on the device

Configurable OS security profiles
Hardware module controller and permission enforcement module control access to network, data and sensors (camera, microphone, etc.), keeping you in control of your individual security policies

Baseband Firewall 2.0
Unique protection against over-the-air attacks with constant monitoring of baseband processor activity • Baseband attack detection and initiation of counter-measures • Automatic discovery of IMSI Catchers and rogue base stations • Detection of attempts to track user location via SS7 or silent SMS

Tamper-resistant, tamper-evident hardware design
Dedicated hardware security modules with CPU supervisor, watchdog timer, on-chip temperature sensor and removal-resistant coating • Shield removal detection circuitry and Environmental Failure Protection (EFP) for temperature, voltage, internal clock frequency, and duty cycle provided by immediate reset circuitry • Supports the highest FIPS 140-2 and Common Criteria security level requirements

Trusted Platform Module (TPM) for platform measurement and attestation
Trusted Computing Group (TCG) TPM specifications • level 2 version 1.2, revision 116 • Active shield and environmental sensors • Memory Protection Unit (MPU) • Hardware and software protection against fault injection

Encrypted Storage
Encrypted storage system for contacts, messages, and notes with smart folders protects data at rest against unauthorized access

Verifiable Source Code
GS MK CryptoPhones are the only secure mobile phones on the market with source code available for independent security assessments. This permits individual source code audits in accordance with national and international verification and certification standards designed to verify device integrity mechanisms, correct implementation of all encryption algorithms, and the absence of backdoors

Compatibility
Fully compatible with all GS MK CryptoPhone IP secure mobile, desktop and satellite phones, including all GS MK CryptoPhone 400, 450, 500/500i and IP19 series secure phones as well as GS MK CryptoPhone IP PBX Gateways
Enterprise customers asked for more features... Cryptophone 600G is the answer

Technical Data
Quad-core Krait CPU 2.3GHz, graphics accelerator, QDSP, microSD card slot

Radio
GSM/GPRS/EDGE (850/900/1800/1900 MHz), UMTS/HSDPA+ (B1, B2, B4, B5, B8), LTE advanced (3GPP, FDD, IMS, VoLTE, Carrier Aggregation, B2, B3, B4, B5, B7, B13, B14, B17, B20)

Connectivity
USB 3.0 (fast charging), Wi-Fi 802.11 a/b/g/n/ac, accessory interface for connecting custom extension modules, such as sensor accessories, TETRA or tactical radio modules, car charger and satellite modules

Audio
High-performance speakers, multi-microphone ANC

Display
5” Full HD (1080*1920) LCD, Glove-usable capacitive touch, functional in wet conditions

Camera
8 MP with Auto focus and LED Flash, 2 MP for front facing applications, Full HD video capture and playback, both cameras can be disabled

Mechanical
Dimensions 141mm x 75,5mm x 13,5mm, 180g, IP67 rating, MIL-STD-810G shock resistant, Temperature range -20°C to +55°C (-4°F to 131°F)

360˚ SECURITY: END-TO-END ENCRYPTEDVOICE AND MESSAGING ON A FULLY ARMORED PLATFORM

- High Assurance CryptoPhone Security
- IP67 water and dust protection
- MIL-STD-810G shock resistant
- Glove-usable touch screen
- Extremely durable mechanical design
- Full source code available for review
- Hardened Android OS
- Emergency erase function
- Made in Germany

Encryption Overview

Diffie - Hellman 4096bit SHA-256

value II 0x02 → SHA-256 256 bit key → USER

value II 0x01 → SHA-256 256 bit key → Twofish

value II 0x00 → SHA-256 256 bit key → AES-256

Counter 128 bit

keystream

MUX

XOR

Voice Data from Codec

User Data Messages

ENCRYPTED DATA

Your local reseller

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Not all secure phones are created equal. **Accept no compromise.**

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<th>Feature</th>
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<th>Silent Circle Blackphone</th>
<th>APPS</th>
<th>Cellcrypt</th>
<th>KoolSpan</th>
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<th>Signal</th>
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<td>Encrypted Calls</td>
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<td>Encrypted Messages</td>
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<td>No-VoIP</td>
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<td>VoIP calls use specific protocols and ports. A problem for truly global use.</td>
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<td>App Permissions</td>
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<td>Denying apps access to data stored on the phone enhances privacy</td>
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<td>Fake App Location</td>
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<td>Download an app in China but make it think you're still at the hotel weeks later.</td>
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<td>U.S. government computer security standard used to approve cryptographic modules</td>
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<td>Covert Device</td>
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<td>Travelling internationally with a secure phone can make you a target</td>
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<td>IMSI Catcher Detection</td>
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<td>Stingray type devices are used around the world for tracking and monitoring</td>
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<td>Cell Jammer Detection</td>
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<td>Did I just lose signal or am I being jammed?</td>
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<td>SS7 Anytime Interrogation Detection</td>
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<td>Paging requests from the global SS7 network used for tracking</td>
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<td>Detect ‘Silent SMS’</td>
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<td>Someone using silent sms to check my phone's location</td>
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<td>For sale to public</td>
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