TECHNICAL SPECIFICATIONS

Voice Encryption
Secure end-to-end encrypted voice over IP calls on any network – GSM, 3G, 4G, WLAN • 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 • Encryption keys are destroyed as soon as the call ends

Secure Messaging
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 key length

Device Protection
Hardened operating system • Secure Android OS built from source code with granular security management and streamlined, security-optimized components and communication stacks

Baseband firewall 2.0 • Unique protection against over-the-air attacks with constant monitoring of baseband processor activity • Baseband attack detection and initiation of countermeasures • Detection of attempts to track the user's location via SS7 or silent SMS

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

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

Verifiable Source Code
GSMK CryptoPhones are the only secure mobile phones on the market with source code available for independent security assessments. They can be verified to be free of backdoors, free of key escrow, free of centralized or operator- owned key generation, and they require no key registration.

360° security - armored and encrypted

The CryptoPhone 500i is a highly secure mobile phone that 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 with your confidential data and telephone calls. The GSMK CryptoPhone 500i enables you to put the trust where it belongs – in a trustworthy, open and scientific verification process.

GSMK CryptoPhone encryption technology is based on strong, well-researched algorithms combined with key lengths that provide peace of mind today and in the future.

Radio

GSM quad-band 850/900/1800/1900 MHz • 3G UMTS HSDPA / W-CDMA 850/900/1900/2100 MHz with HSUPA and HSPA+ support • 4G LTE 800/850/900/1800/2100/2600 MHz • Data rates up to 150 Mbps supported

Operational Features

Talk time up to 21hours • fully compatible with all GSMK CryptoPhone IP mobile, satellite and fixed-line encryption products • high transmission protocol efficiency with 4.8kbps bidirectional data streams for easy deployment on 2G GSM and other networks with limited data throughput

Connectivity

Integrated microUSB 3.0 / power connector • 3.5mm stereo audio jack • microSD memory card slot – microSDHC, TransFlash, microSDXC compatible • GPS • IEEE 802.11 a/b/g/n/ac Wireless LAN

Audio Codecs

Encrypted calls: ACELP® VLBR4 codec, optimized for high-quality voice in low-bandwidth situations • Decoding & playback: Qualcomm WCD9320 audio subsystem with support for a wide range of audio and video codecs and polyphonic ring tones

Display

5.1-inch sunlight-readable touch-sensitive HD Super AMOLED screen @ 1920 x 1080 pixels, 24 bit color depth • Corning Gorilla Glass 3

Digital Camera

Main camera with 15.9 megapixels resolution (5.312 x 2.988) with auto focus, built-in flash and integrated 1D and 2D bar code decoding • front camera with 2.1 megapixels resolution (1.920 x 1.080) • cameras can be completely disabled by hardware module controller

Dimensions & Weight

142 x 72.5 x 8.1 mm / 5.6 x 2.9 x 0.3 inches • 145 g / 5.1oz. incl. battery • integrated antenna

Standard Accessories

100-240V AC adapter • USB sync cable

Optional Accessories

12 / 24V vehicle charger • vehicle holder • USB docking station

Encryption Overview

Your local distributor: