GSMK

GSMK CryptoPhone® 23

Secure desktop phone for professional users with 360° protection, hardened operating system, and end-to-end voice and message encryption

Secure Calls
Secure end-to-end encrypted voice over IP calls • 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 and File Transmission
Based on the same strong encryption algorithms used for GSMK CryptoPhone voice encryption • Optional end-to-end encrypted file transfer functionality allows files from any desktop or laptop computer to be uploaded to the phone's secure storage container via Ethernet cable, and then sent securely to one or multiple other compatible CryptoPhones • Future-proof replacement of legacy fax encryptors • Easy-to-use alternative to encrypted e-mail • Requires no extra infrastructure elements or client software on connected computers •

Device Protection
Hardened operating system with security-optimized components and communication stacks protects device against outside attacks

Encrypted Storage
Encrypted storage system for contacts and messages 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. 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

Design
State-of-the-art graphical user interface for convenient operation combined with future-proof and reliable hardware

Compatibility
Fully compatible with all GSMK CryptoPhone IP secure mobile, desktop and satellite phones, including all GSMK CryptoPhone 400, 450, 500, 500i, 600, 700, IP19 and CP20 series secure phones as well as GSMK CryptoPhone IP PBX Gateways

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360˚ Security: End-to-end encrypted voice and messaging

- High Assurance CryptoPhone Security
- Innovative graphical user interface
- 7" (17.8 cm) TFT display with capacitive touch
- 17 dedicated function keys
- Future-proof platform
- Full source code available for review
- Hardened operating system
- Made in Germany

Technical Data
Future-proof CPU platform and hardware design

Interfaces
- Gigabit Ethernet interface (RJ-45)

Power Supply
- Power consumption 13W max
- External power supply (230V +/- 10%, 50/60Hz, Europlug or country-specific AC power plug)

Audio
- Electronic hook switch (DHSG standard)
- Dynamic microphone

Display
- 7" (17.8 cm) 1024*600 px color TFT display
- 16.7 million colors
- Capacitive touch
- LED call indicator

Keyboard
- Dial pad with vanity codes
- 17 dedicated function keys
- 5-way navigation element

Mechanical
- Dimensions 270 mm x 170/130 mm x 150/195 mm
- Weight approx. 1.000 g / 2.2 lbs
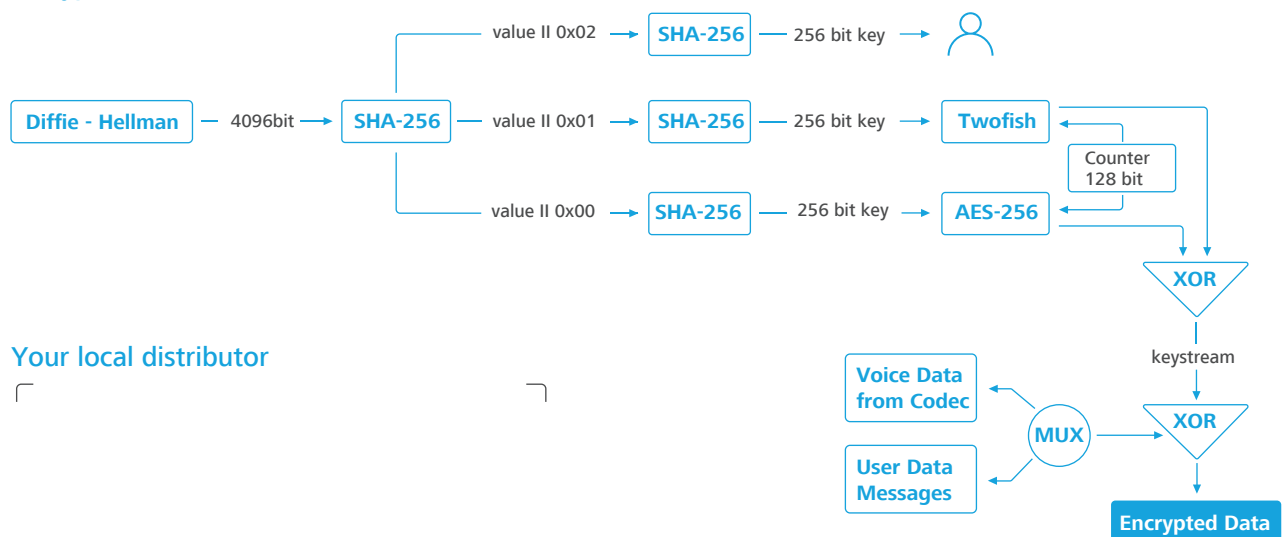
Type Approvals
CE, EN 55032, EN 55024, EN 62368-1

Color
Black

Product Code
7600.023

Encryption Overview

Diffie - Hellman — 4096bit → SHA-256

- value II 0x02 → SHA-256 — 256 bit key →
- value II 0x01 → SHA-256 — 256 bit key → Twofish
- value II 0x00 → SHA-256 — 256 bit key → AES-256

Counter 128 bit

XOR

keystream

Voice Data from Codec

User Data Messages

MUX → XOR

Encrypted Data

Your local distributor