



Vlatacom Personal Crypto Platform for Voice encryption

Product Description

Vlatacom vPCP-V - Personal Crypto Platform for Voice encryption is a compact device designed for voice encryption in any VoIP, public, mobile, or land line voice communication system. The platform enables the installation of standardised or user defined encryption algorithm under user defined crypto keys and complete control over the encryption process. Prior to establishing secure channel both calling parties have to go through the three factor authentication process according to principles what the user has (i.e. a smart card), what the user knows (i.e. a PIN), and who the user is (i.e. fingerprint or voice recognition). Protected communication can be established over any voice communication channel that provides sufficient call quality. The system does not require any additional components such as VoIP servers or dedicated packet or circuit-switched data channels. The device is strictly personalized with strong user authentication which minimizes possibilities of misuse.

Key Features

- Encryption method: AES256 or custom algorithm digitized voice encryption
- Enables use of high quality individual and/or group cryptographic keys
- Encrypted authentication channel for both calling parties
- Connection to the master device via analogue audio (MIC/EAR) or Bluetooth (host device recognizes vPCP-V as a hands-free device)
- Authentication of both call parties prior to establishment of the encrypted channel
- Multi factor user authentication:
 1. Contactless smart card (ISO/IEC 14443)
 2. PIN code
 3. Biometric verification fingerprint scanner or voice recognition (optional)
- Device authentication by secure access module- SAM ISO/IEC 7816
- Security uncompromised even on low quality audio channels (tradeoff in interactivity/latency)
- Tamper-proof protection of both encryption keys and system software
- Vlatacom National Crypto Center- NCC Solution compatible for digital identity management of both device and user and cryptographic key management





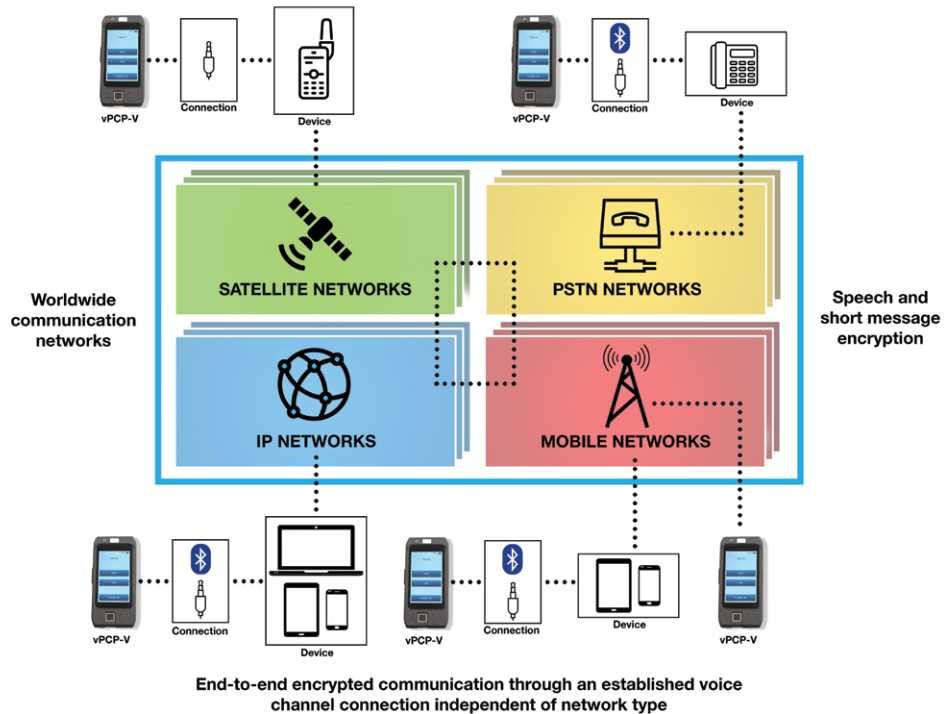
Market

The use of CODECs for voice compression in communication systems such as GSM, UMTS, COMA, or VoiP prevents the use of conventional voice-band modems for data transfer. The vPCP-V device solves this issue while also establishing an end-to-end digital encrypted channel by using digital modulation schemes that simulate speech in both time and frequency domain. This feature, along with strong multi factor authentication, makes vPCP-V suitable for use in government institutions, law enforcement, diplomatic consulates, military, and corporate communications.

Application

General use case:

1. Make ordinary voice call of any kind such as: 2G, 3G, VoiP, Skype, PSTN by using vPCP-V as a hands free device
2. Agree with calling party to go to encryption mode
3. Perform multifactor user authentication to vPCP-V
4. Automatic authentication of remote side and key agreement
5. Encrypted voice or text communication



Benefits

- Device authentication prevents misuse
- Authentication of both call parties prior to establishing the encrypted channel
- Device operation is independent of the master device operating system
- Encrypted voice transmission independent of master device and communication technology
- No additional infrastructure required



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