Bittium

Bittium Secure Call™ Secure Voice, Video and Messaging Application



Bittium Secure Call™ is a secure voice, video and messaging application with end-to-end encryption. The communication application is designed for enterprise, government and other professional users with stringent information security needs.

The Bittium Secure Call supports deployment in commercial and private networks with no dependency on public internet or cloud services. It can be deployed and fully managed by the user organization. Bittium Secure Call can be complemented with Bittium Secure Suite™ to offer device security managements and the use of an additional VPN layer to provide dual encryption for secure communication.

FOR MORE INFORMATION, PLEASE CONTACT: salesglobal1@bittium.com



Governmental grade security

Achieved when using Bittium Secure Suite™ and Bittium Tough Mobile™ 2 hardware.



Versatile

Supports Android and Windows for chat, calls, attachments, group calls, video calls, group video calls and burn-on-read messages.



Superior audio & video quality

adapt to available bandwidth.



End-to-end security

Strong end-to-end encryption for VoIP calls and messaging. Supports dual encryption with Bittium SafeMove® Mobile VPN.



On-premises delivery

Secure Call can be installed on customer premises. Perfect communication solution for private networks.

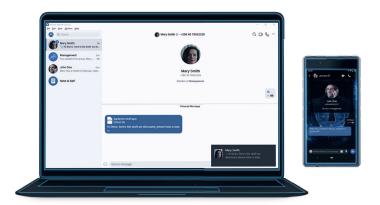


Easy to instal

The Secure Call client can be provisioned remotely to devices with Bittium Secure Suite™.

Bittium Secure Call™

Specifications



End-to-End Encrypted Calls

- Call setup and authentication are secured using the Signal protocol
- DTLS key exchange
- SRTP/AES-256 encryption
- · WebRTC compliant
- Uses the Opus codec for audio. For security, a constant bitrate is selected based on the network performance of participating devices. High quality audio starting from 8 kb/s.

End-to-End Encrypted Group Calls

- Multi-call with chairman support
- Chairman functions: mute/unmute and disconnect/reconnect participants
- End-to-end encrypted calls between all call participants, no termination of crypto at server
- Push-to-talk voice messaging

End-to-End Encrypted Messages

- Uses the Signal protocol, Curve25519, AES-256, and HMAC-SHA256 as primitives
- Ephemeral encryption keys, perfect forward secrecy
- Supports message attachments (picture, voice memo, video, contact details, audio message)
- Supports burn-on-read messages are visible for a prefined time only, and then automatically erased
- Support revoking recently sent messages
- Group messaging
- * Supporting dedicated PTT button on Tough Mobile 1 and 2. Functional also when phone is locked and screen off.

End-to-End Encrypted Video Calls

- Users can enable video for the call and have a video chat
- Automatically adjusts bandwidth used and adapts to the network conditions

Android App Protection

- Application lock: application access can be configured to require device authentication after a timeout
- · Screen capture prevention

Private Network Installations

- No dependency on external internet or cloud services
- Operates over cellular and Wi-Fi

Scalable Server Infrastructure

- Can be installed and operated on the same standard, Linux based server platform with SafeMove® server
- For scalable systems servers can run in the cloud

Centralized Contact Directory

- The app can use an online, centralized contact directory managed by Bittium Secure Call and the organization.
- For security, the contact directory is not synchronized to end devices.
- Integration with enterprise contact directories

Windows Client Application (Desktop Client)

- Suitable for Tactical Operations Center use (TOC)
- Links to a registered account on an Android device
- · Messages and calls go to both devices
- Supports printing conversations for archiving purposes

Enhanced Features with Bittium Tough Mobile 2

- Hardware backed key storage for all Secure Call content and keys on Bittium Tough Mobile
- Additional layer of security with Bittium SafeMove® Mobile VPN
- Supports the physical PTT button on Bittium Tough Mobile for Push-to-talk voice messaging
- Notifications from secure side to public side on Bittium Tough Mobile 2 C

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