

Bittium Secure Call™ is a quantum-safe 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.

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. Secure Call can be complemented with Bittium SafeMove® for secure device management and an additional VPN layer to provide multilayered encryption for secure communication.

As part of Bittium Tough Mobile 2 C communication solution, Bittium Secure Call has been approved for NATO Restricted level communications.

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



Governmentalgrade security

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



Versatile

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



Superior audio & video quality

Audio and video streams adapt to available bandwidth.





End-to-end security

Strong quantum-safe end-to-end encryption for VoIP calls and messaging. Supports multi-layered encryption with Bittium SafeMove® Mobile VPN.



On-premises delivery

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

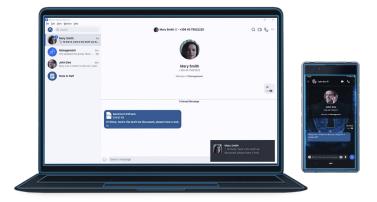


Easy to install

Secure Call client can be provisioned remotely to devices with Bittium SafeMove®

Bittium Secure Call™

Specifications



End-to-end encrypted voice calls

- Call setup and authentication are secured using the Signal protocol
- > DTLS key exchange
- > SRTP/AES-256 encryption, ML-KEM
- > 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 calls between all call participants, no termination of crypto at server
- > Conference calls

End-to-end encrypted messages

- Uses the Signal protocol, ML-KEM, Curve25519, AES-256, and HMAC-SHA256 as primitives
- Ephemeral encryption keys, perfect forward secrecy utilizing Post-Quantum Cryptography algorithms
- Supports message attachments (picture, voice memo, video, contact details, audio message)
- Supports burn-on-read messages that are visible for a prefined time only, and then automatically erased
- Supports revoking recently sent messages
- Group messaging
- Supports message acknowledgements and classification
- Support for group creation only for announcement purposes
- > Support for automatic group removal

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
- > Conference calls with video option

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
- > Integration to Bittium Secure Suite

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
- High availability to ensure seamless operational performance
- Registration methods: email or phone numbers

Centralized contact directory

- The app can use an online, centralized contact directory managed by Bittium Secure Call and the organization
- Contact directory is not synchronized to end device native address book due to security reasons
- Integration with enterprise contact directories
- Option to hide a selected user from contact directory

Windows client application (desktop client)

- Suitable for Tactical Operations Center (TOC) use
- Links to a registered account on an Android device
- > Messages and calls go to both devices
- Supports printing conversations for archiving purposes
- > Standalone Windows client
- Screen sharing option

Enhanced features with Bittium Tough Mobile 2

- Hardware backed key storage for all Secure Call content and keys on Bittium Tough Mobile 2
- Additional layer of security with SafeMove Mobile VPN
- Notifications from secure side to public side on Bittium Tough Mobile 2 C
- Supports PTT audio messages via Tough Mobile 2's physical buttons

Bittium · Ritaharjuntie 1, Fl-90590 Oulu, Finland · Tel. +358 40 344 2000 · www.bittium.com

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