# 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.

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 Secure Suite™ to offer secure device management and the use of an additional VPN layer to provide dual 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.



# Governmental grade security

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



#### Versatile

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



security

# On-premises delivery

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



## Superior audio & video quality

Audio and video streams adapt to available



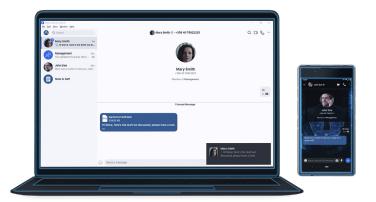
#### Easy to instal

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

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

### 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
- > 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, 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 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
- For security, the contact directory is not synchronized to end devices
- 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 Bittium 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

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