

# Bittium

## Bittium Tough Mobile 2 C

Highest Level of  
Security for Mobile  
Communications



**Bittium Tough Mobile™ 2 C** provides classified, governmental level security for professionals with the highest security requirements.

The unique multilayered software and hardware based security is complemented with the latest commercial features and modern smartphone usability. With two separated operating systems (dual-OS), both professional and personal use is secure, isolated and easy.

Approved for CONFIDENTIAL (NCSA-FI, TL III) and NATO Restricted level communications.

FOR MORE INFORMATION, PLEASE CONTACT:  
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**One device**  
for professional  
and personal use.



**Dual-OS**  
Two hardened  
operating systems:  
• Bittium Secure OS  
• Android™ 11



**Secure  
platform**  
for partners with own  
cyber security appli-  
cations and solutions.



**Long device  
lifespan**  
enabling the integration  
and certification of  
governmental services.



**Trusted design &  
manufacturing**  
Made in Finland. Device  
and manufacturing  
audits possible for  
certification purposes.



**Unique multi-  
layered security**  
keeping data safe  
at all times.

## Two Operating Systems

- Bittium Secure OS for CONFIDENTIAL level use
- Android™ 11 for Personal use
- Both operating systems support Multicontainer feature

## Chipsets

- Qualcomm® Snapdragon™ 670
- Dedicated Secure Element

## Memory

- 4GB LPDDR4 RAM
- 64GB eMMC
- microSD expansion slot up to 256GB

## Display

- 5.2" Full HD (1080 x 1920) sunlight readable display
- Glove and wet usable capacitive touchscreen

## Bittium Secure OS

- Dual boot; full data and secure element separation
- Secure data folder for classified documents and other data files
- Excellent usability with NFC token
- Hardened, configurable and restricted cellular network security (call, SMS/MMS, IMS, VoLTE, aGPS, SIM application toolkit)
- Hardened Linux kernel
- Secured local connectivity (Bluetooth, WiFi, NFC, USB)
- Automatic system cleanup of secure data
- Can be used only in Bittium Secure OS mode
- Secure shutdown after lost network connectivity based on configurable time

## Bittium Secure Suite™ (included)

- Bittium SafeMove® Device Management
- Bittium SafeMove® Mobile VPN
- Secure push service for private networks
- Enterprise App Library
- Log server for collecting audit trail
- Crossnote notifications between Secure and Personal modes

## Bittium Secure Call™

- End-to-end encrypted communication application
- Messages, voice, video and group calls

## Hardware Based Security

- Trusted boot with HW and SW integrity validation
- Authentication and cryptographic services for applications based on

- the tamper-proof secure element
- Disk encryption protected by secure element's authentication and security design
- FIPS 140-2 compliant HW cryptography
- Hardware-based privacy mode
  - Microphones, cameras and Bluetooth disabled
  - Reduced sensor accuracy
- User credentials and encryption keys stored to hardware secure element
- Non-rootable device firmware
- Tamper-proofed to prevent data theft and hardware manipulation
- Always-on security monitoring, non-dependent on battery level

## Always Up to Date

- Frequent updates throughout the device lifecycle

## Professional Communication

- 3GPP Rel12
- QCI classes
- LTE Broadcast (eMBMS)

## LTE and Bands

- 3GPP Rel12
- Dual SIM dual VOLTE (DSDV)
- FDD/TDD Cat13/5, DL 400Mbit/s, UL 75 Mbit/s
- IMS, VoLTE, CA
- FDD: 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 20, 25, 26, 28, 29, 30, 66
- TDD: 38, 39, 40 (34, 41 optional)
- 3GPP rel8, HSPA+, DL 42 Mbit/s, UL 5.76 Mbit/s
- Band configuration: B1, B2, B4, B5, B8
- 850/900/1800/1900 MHz

## Complementary Radios

- Wi-Fi 802.11 a/b/g/n/ac (2.4 Ghz and 5 Ghz)
- BT5.0, NFC
- \*U-NII-3 Wi-Fi channels are not supported

## Physical Buttons

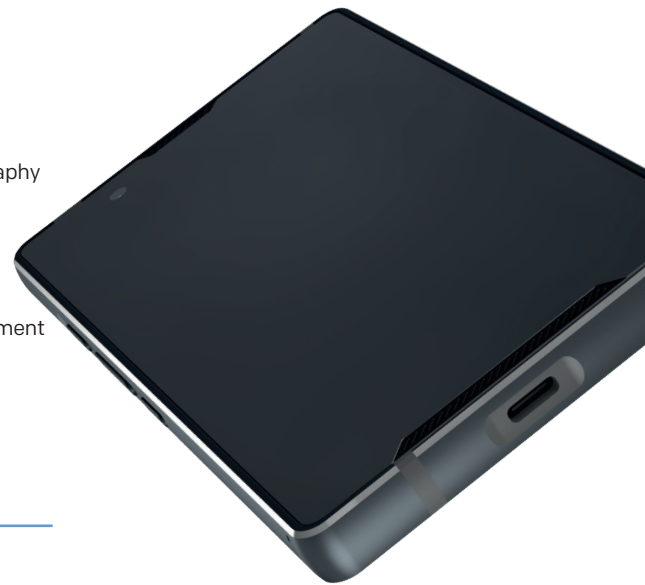
- Privacy mode activation
- Emergency button (programmable)
- PTT/PTV (programmable)
- Power/wake-up
- Volume up and down

## Positioning

- aGPS/Glonass/Galileo/iZat™

## Sensors

- 3D gyroscope
- 3D accelerometer



- 3D magnetometer
- Proximity sensor
- Ambient light sensor
- Barometric sensor

## Imaging and Video

- 12MP autofocus rear-facing camera
- 5MP front-facing camera
- Rear-facing LED flash
- 4K and Full HD video

## Audio

- High-quality front-facing dual speakers (109dB@5cm SPL)
- Multi-microphone active noise cancellation

## Interfaces

- 3.5mm audio connector
- USB-C with Displayport, RNDIS and OTG
- Dual nano-SIM (DSDS) and microSD
- Wireless display (Miracast) compliant

## Battery

- Embedded 3000mAh Li-Ion

## Mechanical

- Size 77.5 x 148.3 x 9.65mm
- Weight 194g
- IP67 water and dust resistant
- MIL-STD-810G shock and drop resistant

## Temperature Range

- -20°C...+55°C (operational)

## Certifications

- CE, FCC, ISED, GCF, NCSA-FI, NATO