

New Standard for Ultra Secure Mobile Communications



Bittium Tough Mobile™ 2 has been built for professionals with the highest cyber security and mission critical requirements.

The unique multilayered software and hardware based security is complemented with the latest commercial features and modern smartphone usability. With the Multi-container feature both professional and personal use is secure, isolated and easy.

Bittium Tough Mobile™ 2 is specifically designed for maximizing security without compromising usability.

For more information, please contact:
secure@bittium.com



One device

For professional and personal use.



Unique multilayered security

Keeping data safe at all times.



Secure platform

For partners with own cyber security applications 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.



Military-grade durability

Designed to withstand extreme conditions - shock, vibration, water, dust and temperature.

Operating system

- Android™ 11
- Available with or without Google applications pre-installed

Chipsets

- Qualcomm® Snapdragon™ 670
- Powerful 64bit 8-core CPU
- Qualcomm® Adreno™ 615 high-performance GPU
- Dedicated Secure Element

Memory

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

Hardware-based security

- Trusted boot with HW and SW integrity validation
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- Authentication and cryptographic services for applications based on the tamper-proof secure element
- Disk encryption protected by secure element's authentication and security design
 - 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
- Trusted design and manufacturing in Finland
- Two-factor authentication (optional)

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)

UMTS/HSPA and bands

- 3GPP rel8, HSPA+, DL 42 Mbit/s, UL 5.76 Mbit/s
- Band configuration: B1, B2, B4, B5, B8

GSM/GPRS/EDGE bands

- 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™ positioning framework

Sensors

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

Display

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

Imaging and video

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

Audio

- 12MP autofocus rear-facing camera
- High-quality front-facing dual speakers (109dB@5cm SPL)
- Multi-microphone active noise cancellation
- Earpiece and microphone



Interfaces

- 3.5mm audio connector
- USB-C with Displayport, RNDIS and OTG
- Dual nano-SIM (DSDS) and MicroSD via 3-in-2 combo reader
- Wireless display (Miracast) compliant

Battery

- Embedded 3000 mAh Li-Ion

Mechanical

- Professional and inconspicuous design
- Size 148.3 x 77.5 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, NOM

Inbox accessories

- Charger
- USB-C cable
- SIM tray tool
- User guide

*specialised accessories available for mission-critical and tactical environments

Complementary software

Bittium SafeMove®

- SafeMove Mobile VPN for quantum-safe, always-on connectivity
- SafeMove EMM for device and application management
- SafeMove Comms for quantum-safe, end-to-end encrypted messages, voice, video, and group calls

More details available in separate datasheets.