MXP7000

Mission-critical converged TETRA and LTE portable device

The MXP7000 provides versatile communications. It delivers mission-critical TETRA and 4G LTE broadband voice and data communications, in a secure and rugged Android device.

Your apps. Your comms. Your team. Together.

It's easy to use and operate the MXP7000. The large push-to-talk button lets users connect instantly, and the field-swappable battery helps them stay connected longer. Innovative audio technology enables your personnel to hear and be heard clearly, even in noisy and windy conditions. It has a 5 inch touchscreen and the device can run applications for optimal workforce productivity.

The MXP7000 is easy to deploy and manage, and it supports Bluetooth® 5.1 for data transfer. It has a GCAI-mini connector, so you can provide your teams with accessories tailored to their needs. No matter their mission, the MXP7000 is a device that helps your teams get the job done.

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GENERAL SPECIFICATIONS

SOFTWARE

Operating System	Android 13 Non-GMS

HARDWARE

Dimensions	Height: 210 mm (with antenna) Height: 150 mm (without antenna) Width: 80 mm Depth: 29.9 mm (with battery)
Weight	440g (with battery and antenna)
Battery options	5600mAh IMPRES™ 2
Housing colour	Black Green (selected models)
Display	5.0", 1280 x 720 Capacitive, touch-screen with Corning® Gorilla® glass
	Supports use with disposable and combat gloves
Controls	Large push-to-talk button Emergency button Dual function rotary knob 2 configurable side buttons
Memory	4GB RAM 64GB internal storage
	MicroSD slot[1]
SIM Slots	TETRA SIM: 2FF (Mini SIM)[2] LTE: 4FF (Nano SIM)
Camera	Rear 13 MP, with integrated flash Front 8 MP
Video recording quality	1080p at 60 fps
Sensors	Proximity Ambient Light Accelerometer Barometer Gyroscope E-Compass
Ports	GCAI-mini, USB-C

DEVICE SECURITY

User authentication	PIN or password
Key storage	Hardware-backed encryption with Trusted Execution Environment (TEE)
Trusted boot process	Included with the use of tamper resistant hardware
OS hardening	Android OS hardening and SELinux access control
Auditing	Auditing / logging functionality, with security logs captured and stored in a secured manner
Data-at-rest	Using Android's AES256 file based encryption
Data-in-transit	Encryption with IPSec VPN support
Secured device management	With the use of Integrated Terminal Management (iTM) solution
Restricted Recovery Mode	Included to avoid unauthorised access to features

AUDIO

Audio power at rated	2W
Audio distortion at rated	<1%
Audio power at maximum	3W
Max loudness	99Phon
Noise supression	Adaptive multi-microphone beam-forming
Number of microphones	3 dedicated + 1 loudspeaker as microphone

TETRA SERVICE

RF

Frequency bands	380-430MHz
Transmitter RF power	Class 3L (1.8 W) Class 4 (1 W)
Adaptive power control	Per EN 300 392-2
Receiver class	A and B
Receiver static sensitivity	-116 dBm (guaranteed) -118 dBm (typical)
Receiver dynamic sensitivity	-107 dBm (guaranteed) -109 dBm (typical)

DMO REPEATER

DMO repeater mode features and functions	ETSI type 1A DMO repeater for channel efficient operation
	Repeats DMO voice and tone signalling on selected talkgroup
	Repeats SDS and status messaging on selected talkgroup
	Transmission of repeater presence signal
	Emergency call (pre-emptive priority call)
	Monitoring of and participation in calls whilst in repeater mode

DATA

Short data	Status messaging in TMO and DMO
	SDS messaging in TMO and DMO Supports concatenated SDS (1000 characters)

VOICE

Full duplex call	TMO: Private, PSTN, emergency
Half duplex call	TMO: Private, group, emergency
Emergency call management (user customisable)	DMO: Private, group, emergency
	Non-Tactical: Emergency group call to dedicated talkgroup
	Hot Mic: Allows user to talk without needing to press PTT button
	Emergency status message to dispatch console
Other voice functions	Gateway
	Repeater
	Repeater mode
	PTT double push
	Pre-emptive priority calls

SECURITY[3]

Authentication	Infrastructure initiated and made mutual by radio terminal
Air Interface Encryption algorithm options	TEA 1 TEA 2 TEA 3
Protocols - security classes	Class 1 (Clear) Class 2 (SCK) Class 3 (DCK/CCK, OTAR-CCK, OTAR-SCK) Class 3G (GCK, OTAR-GCK)
End-to-End Encryption options	AES128 or AES256 for voice and short data with OTAK supported through optional Hardware Security Module (HSM)
	SIM based encryption including BSI
Other security features	Temporary disable (stun)
	Permanent disable (ESTI standard and customer restorable)

[1] Future software release required to support storage use

[2] For BSI encrypted models only

[3] Not all security options are available in every country, please contact your Motorola Solutions representative for more details.

CONNECTIVITY

TETRA ANTENNA

Connector	SMA
Impedance	50 Ω

LTE / 3G / 2G

LTE bands	Standard models: B1, B2, B3, B4, B5, B7, B8, B19, B20, B26, B28
	BSI Encrypted models[4]: B3, B7, B20, B28
3G bands	Standard models: B1, B2, B4. B5, B8
	BSI Encrypted models[4]: B1, B8
2G bands	Standard models: 850MHz, 900MHz, 1800MHz, 1900 MHz
	BSI Encrypted models[4]: 900MHz, 1800MHz

WI-FI

IEEE standards supported	802.11 a/b/g/n/ac
Wi-Fi bands	2.4GHz and 5GHz

BLUETOOTH

Bluetooth versions supported	Bluetooth 5.1 (data transfer only)
Bluetooth profiles	Generic Attribute (GATT) Attribute Protocol (ATT) Generic Access Profile (GAP) Serial Port Profile (SPP) Personal Area Networking Profile (PAN) Object Push Profile (OPP)

LOCATION SERVICES

Constellation supported	GPS, aGPS, Galileo, GLONASS, BDS (BeiDou)
GNSS antenna	Internal antenna
GNSS tracking sensitivity	GPS: -158dBm (50% Fix losses) -162dBm (typical)
Horizontal Accuracy, 2D	<5m (95% probable, -130dBm)
TTFF cold start	<60 sec (95% probable at -130dBm)
Protocols	ETSI LIP (short and long), Motorola Solutions LRRP

KEY FEATURES AND SETTINGS

DEVICE

Airplane Mode[5]	Turns ON/OFF mobile data, Wi-Fi and Bluetooth simultaneously
Location	Turns ON/OFF location functionality
Sound	Media volume Radio and voice calls Ring and notification volume Alarm volume
Night vision goggle (NVG) mode	Turn ON to set the display luminance for use with night vision goggles. LEDs will be turned OFF when in NVG mode
Display brightness level	Manual and automatic brightness adjustment
Flashlight	Toggle LED flashlight ON/OFF

TETRA

Talkgroup management	User friendly, flexible, fast and efficient interface
Talkgroups	TMO folders: up to 256, TMO talkgroups: up to 10000 DMO folders: up to 128, DMO talkgroups: up to 2000
Favourite talkgroup folders	Up to 3
Contacts management	Rapid search to find the contact easily
Contacts	Up to 1000 contacts
Multiple dialling methods	Dialling direct, scroll and select via touchscreen
Call alert	Vibrate alert and set ringtones via Android settings
Fall alert (man-down)	Triggers an emergency alert if the device is continuously tilted beyond a pre-defined angle
Message management	Distinct folders for each message type for flexible message management
Text message list	Up to 200 entries (short messages) At least 20 entries for outbox (long messages up to 1000 characters) At least 10 entries for inbox (long messages up to 1000 characters)
Status list	Up to 100 user-defined messages Assignable to One Touch Buttons
Text entry	Touchscreen for ease of use
Transmit Inhibit	Disables TETRA transmit and puts device into airplane mode

[4] Germany only.

[5] TETRA communications is still available.

DEVICE MANAGEMENT SOLUTIONS

Integrated Terminal Management (iTM)[6]	Requires iTM version 8.2.1 or newer

ENVIRONMENTAL SPECIFICATIONS

Operating temperature[7]	-20°C to +60°C
Storage temperature	-40°C to +85°C
Humidity (high), low and high temperature	ETSI 300 019-1-7 class 7.3E
Shock (bumps and shock), vibration (random)	ETSI 300-019 1-7 class 5M3
Dust and water Ingress Protection	Black model: IP68 per IEC 60529 Green model: IP67 per IEC 60529

US MILITARY STANDARD MIL-STD-810H

	METHOD	PROC/CAT
Low pressure	500.6	II
High temperature	501.7	I/A1,II
Low temperature	502.7	I,II
Thermal shock	503.7	I-C
Solar radiation	505.7	I/A1
Humidity	507.6	II / Aggravated
Salt fog	509.7	–
Blowing sand	510.7	II
Vibration	514.8	I/Cat 24,II/Cat 5
Shock[8]	516.8	I,IV,VI

[6] To be used in combination with the MXP7000 multi unit charger.

[7] Performance may be limited when operating at extreme temperatures.

[8] Drop test is covered as part of Shock Method 516.8 Proc IV, VI.

To learn more, visit: **motorolasolutions.com/MXP7000**

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