

PUMA T4-TLE

Homeland Security & Critical Infrastructures

PUMA T4-TLE (DUAL MODE TETRA – LTE ENHANCED) THE NEW GENERATION OF PROFESSIONAL HANDHELD

The PUMA T4-TLE is a new concept of handheld device, combining reliable and secure TETRA communications with new value-added services provided by broadband data LTE technology.

Field officers are presented with increasingly demanding challenges. These evolving scenarios require dismounted officers to become mobile sensors in addition to autonomous operating units. The progressive introduction of broadband connectivity into professional radio networks provides an opportunity for end users, who can benefit from enhanced capabilities that improve operational efficiency thanks to new devices able to support both traditional and broadband technologies.

The PUMA T4-TLE handheld provides the security and the robustness of a traditional TETRA radio together with the advanced features commonly available on smartphones.

TETRA fast and secure communications are vital in emergency and mission critical situations where LTE allows the sending and receiving of images and video, as well as providing access to database, remote office automation and enhanced multimedia capabilities.

Key features

- Simultaneous TETRA voice and LTE data
- Large and wide full touch display
- Android OS with a set of APP supporting video, imaging and operational/clerical tasks
- Full TETRA TMO/DMO voice and data capabilities including DMO repeater function and multi-slot PD/ TEDS data transfer
- Local communications capability including Wi-Fi, NFC and Bluetooth establishing a personal area network for sensors connection
- GPS and accelerometer for enhanced location services
- Easily expanded via external accessories to increase supported functions



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PUMA T4-TLE



TECHNICAL DATA

Radio characteristics

Frequency bands	
TETRA	380MHz to 470 MHz and 806MHz to 870MHz
GSM/GPRS/EDGE	700MHz, 850MHz, 900MHz, 1800MHz, 1900MHz
LTE	Band 1, 3, 5, 7
Protocols	TETRA: TMO, TEDS, DMO, DMO Repeater, DMO via Repeater, DMO via Gateway LTE
Output power	
TETRA	1.8W (class 3L)
LTE	32dBm (max)
Channel spacing	
TETRA	25kHz (step 6.25kHz)
TEDS	25kHz and 50kHz
FM	12.5kHz and 25kHz
LTE	1.4, 3, 5, 10, 20MHz
Security support	
TETRA	Air-Interface Encryption, (TEA1, 2, 3)
TETRA/LTE	End-to-End Encryption (with applique)
Battery duration	
TETRA	about 20 hours at 1W (class 4) or about 18.5 hours at 1.8W (3L class)

Mechanical characteristics

Dimensions (included battery)	(HxLxW) 138mm x 60mm x 38mm
Weight (included battery)	Approx. 400g

Environmental specifications

Operative temperature	-20 °C to +55 °C (conformance tested) -30 °C to +60 °C (degraded)
Storage temperature	-40 °C to +85 °C
Dust and rain protection degree	IP67

Operating System and Memory

Operating System	Android 5.1
RAM	1GB
Internal Storage	8GB FLASH eMMC
Additional Storage	Micro SD (Up to 32GB)

User Interface

Display	3.6" colours LCD TFT high resolution with 16 million colours
Rotary knob	Unique knob for both talkgroup selection and audio volume
PTT and programmable keys	Large PTT for half-duplex voice calls Two programmable functional keys next to PTT
Emergency button	Placed on handheld top, programmable to send emergency call and/or status
Navigation keys	Four arrow navigation keys with acceptance button in central position Two programmable keys (F1, F2)
LED	One red and one blue for voice calls One multicolour for wireless connection (Bluetooth, Wi-Fi) to other devices and accessories
Brightness and proximity sensors	For automatic display brightness adjustment For automatic de-activation of touch screen display and private call loudspeake activation
Microphone/loudspeaker	A loudspeaker for private calls placed above the display Two microphone/loudspeaker placed below the navigation keys Audio power 1W @ 4ohm each
Connections	Antenna SMA connector (upper side) 18 pin connector for dedicated accessories Micro-USB for audio/data COTS accessories and battery charger
Video camera	5.0MP (2608 x 1960 pixels resolution with LED flash, placed in the rear side)

GPS

Acquisition sensitivity	-155dBm
Tracking sensitivity	-159dBm
Position accuracy	5m (probability 50%)
Protocol	ETSI LIP standard
GLONASS	Dual-mode functionality support for GLONASS

Miscellaneous

Other HW resources	Bluetooth® Wi-Fi NCF Vibracall Accelerometer Magnetometer Gyroscope
Base applications	Browser, multimedia player/recorder, file manager, e-mail, phone book
Accessories	Antennas (short and whip), desktop and travel chargers, desktop multi-charger, headset, lightweight and throat mic headset, earphone, audio kits, wearable PTT, remote speaker microphone, skull microphone, USB programming and data cables.



For more information please email infomarketing@selex-es.com

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