

Secure Communications

BLR-LTE (Boucle Locale Radio – LTE)

Wireless tactical communications system for theatres of operations

Integrated in ruggedized cases and equipped with tactical antennas, the BLR-LTE is the ideal choice for mission and operations in extreme and harsh environments.

Designed to be deployed within a theatre of operations, BLR-LTE offers a high performance wireless broadband IP service to inter-connect forces information systems in operation.

It integrates the key features of the BLR-IP which is used by French forces in theatres of operation. It also implements the 4G/LTE standard and thus offers new mobility services.

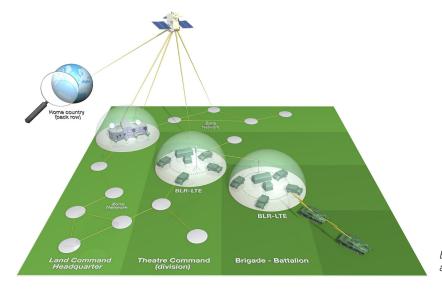
The BLR-LTE offers the capability of secure IP interconnection with speeds up to 48Mbit/s over a distance greater than 20km.

System break down:

The BLR LTE system consists of elementary interconnected functions:

- LTE network: fixed infrastructure, eNodeB (radio relay), EPC (Evolved Packet Core) and terminals.
- Security: add on to the LTE system to reach security clearance needs.
- User Services: services implemented above the LTE layer: voice service, data and video.
- Operating: transversal function, configuration, supervision and system control.
- Mission preparation: set of tools to prepare and lead system roll out.





Example of role out on a theatre of operations

Key Benefits:

- System communication controlled
- Work with a wide secure LTE terminal ecosystem (tablet, smartphone, router modem, USB dongle...)
- Quick set up, by a small team
- Interoperability with current systems
- Wide range of radio configurations adapted to the required deployment topology
- Scalable system

Key Features:

- 4G / LTE Standard
- Secure IP interconnection with speeds up to 48Mbit/s
- Distance greater than 20km
- Wireless broadband IP service
- Transport of different sort of streams: data, encrypted voice, videoconference, streaming, chat, messaging...
- Security clearance management: restricted access and NATO restricted
- Connection to different civilian and military communication systems (operator WAN, zone networks, satellite)
- Resistant to harsh conditions

System main characteristics

Performances	 4G/LTE Technology (UIT-3GPP standard) 48 Mbit/s IP rate, Range = 20km 50 User Equipment per system
Interfaces towards other networks	• S0/T0 (ISDN) and T2 (ISDN, QSIG, DREX), Ethernet, X21/V11, Optical fiber
Frequencies	 Transmission power: 30 to 40dBm Frequency band (TDD or FDD modes): 2.3GHz, 3.5GHz, 700MHz, 400MHz Several bandwidth: 3MHz, 5MHz, 10MHz, 15MHz or 20MHz
Environmental conditions	 Indoor equipment: 0°C à +40°C (operating range) Outdoor equipment (outdoor radio unit, antennas and mast): -40°C to +55°C
Power supply	• 110V-240Vac 50Hz/60Hz or 48Vdc Battery optional
Connection module (MR) in rackable or case configuration	 Subsets dimensions: 19" (width) and 1U or 2U (height) Case configuration: Case dimensions: 580/400 x 580 x 740 (h x w x d, mm) Weight < 65kg Operation with open cases Stackable on two levels
Antennae, ODU and mast	 Radio equipment and antennas proposed according to deployment topologies Mono-sector or tri-sector configurations installed on 21m tactical mast
Nomadic Client Station (SC), for the LAN IP service	 Dimensions: 402 x 583 x 740 (h x w x d, mm) Weight < 50kg Operation with open cases Radio equipment and directional antenna installed on 6m tactical mast
Mobile terminals	Offer based on the available LTE terminal ecosystemSmartphones , indoor box, USB dongle, etc

