

Private LTE System

A Secure, High-Speed, Private LTE Network



Remote Industries



Public Events



Defence



Public Safety



Rural Communities



Enterprise

Communication possibilities made possible by Technology

3GPP-standards based LTE network designed to provide private coverage; configurable for Voice, Data and IoT

Shyam VNL offers a new generation of LTE eNodeB designed to connect remote rural areas, improve indoor coverage in offices and business parks and provide M2M (Machine to Machine) connectivity to heavy-machinery businesses that are often located away from the mainland, well outside the purview of public mobile networks.

Shyam VNL's Private LTE solution is easy to install and administer, with carrier-grade dependability and is designed for minimal CAPEX and OPEX.

Developed for rapid deployment, and simple configuration, it works in standalone mode even when backhaul connectivity is lost, a feature that's particularly important for military and other mission-critical operations like disaster rescue missions that require unfettered, continuous connectivity. Alternatively, a private LTE network can be used to gain better control over a congested public network, which often leads to transmission and interference problems.

BENEFITS

- Secure, instant, reliable communication
- Supports relevant bands for LTE
- Easy and rapid installation
- Low CAPEX and OPEX
- Fully remote - remote configure, monitor & operation

HIGHLIGHTS

- Multiple backhaul options: Fibre / IP Radio / VSAT
- Supports roaming and seamless handover
- Solar-powered with differential battery backup
- Configurable Quality of Service for mission-critical applications
- Field-proven in India

Private 4G LTE Networks

A new business model: 'Private LTE Networks' has emerged. Following key factors make it more effective and a viable in current scenario.

1. Regulations for private and semi-private use of LTE with license-free spectrum
2. Small cell, low power solution with carrier grade reliability
3. M2M, IoT and mobile communication
4. Software based vEPC

Shyam VNL's Private LTE Solution

To support multiservice, e.g. low bit rate IoT, human smart phone users, mission critical services, mobility across large area, Shyam VNL offers new generations of LTE eNodeB for private mobile networks that are designed to connect remote rural areas, improved indoor coverage and provide M2M (Machine to Machine) connectivity.

Shyam VNL Private LTE solution is easy to install and manage. It offers carrier-grade reliability. It is planned for less CAPEX and runs on low OPEX.

Shyam VNL Private LTE solution can be used to better congestion control, transmission and interference performance.

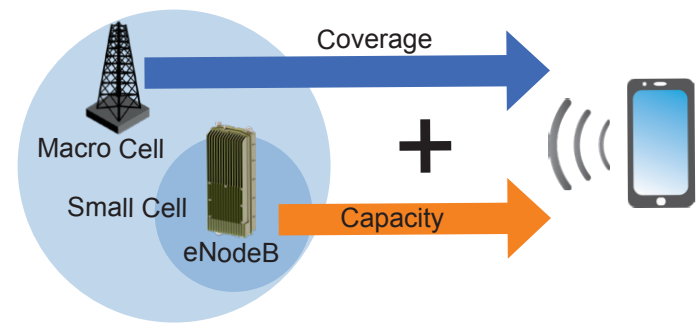
Shyam VNL Private LTE solution is developed for rapid deployment and easy configuration. Solution can be deployed in distributed and centralized architecture. It works in standalone mode even when backhaul connectivity is lost.

Deployable for following applications:

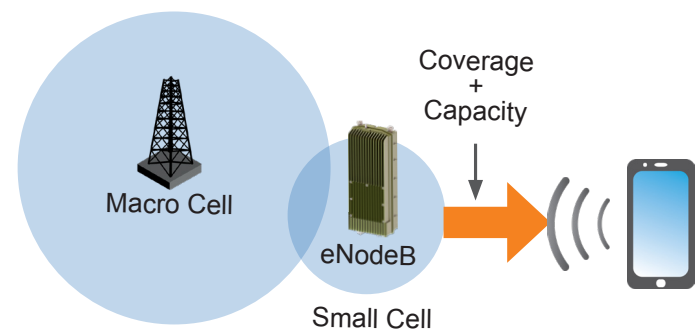
1. Extends coverage
1. Provides mobile connectivity in uncovered remote locations
2. Extends communication capabilities
3. Increased security and better control
4. High Speed data for IoT devices

This fully integrated solution sets up a private, secure, mobile communication network in a short time period to enable effective communication.

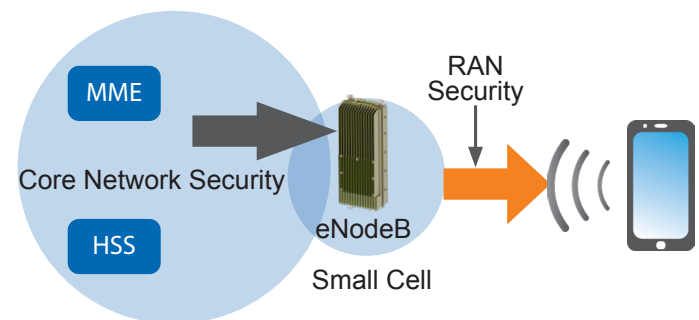
Increased Capacity

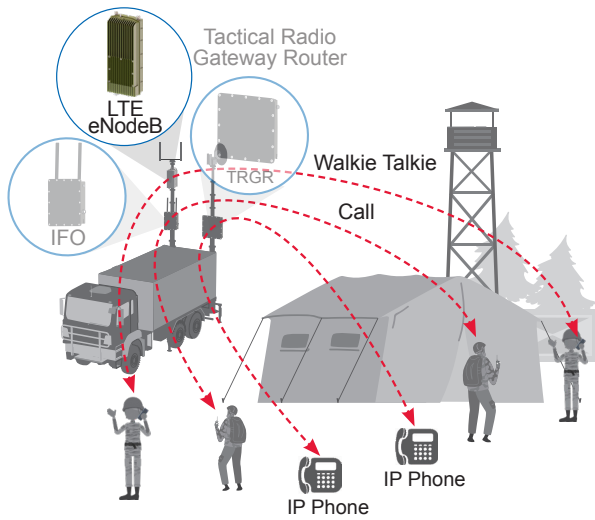


Extended Coverage



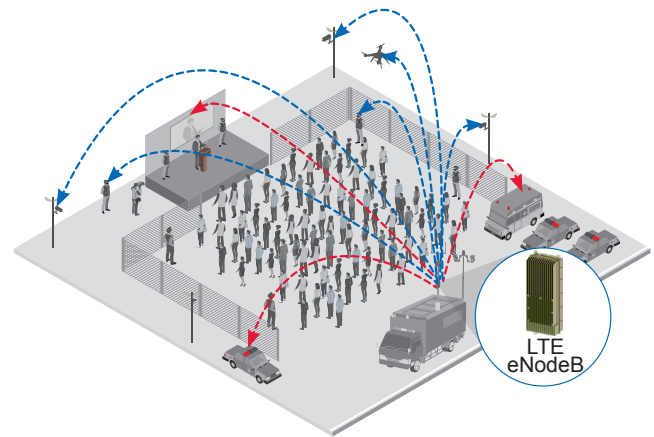
Enhanced Security





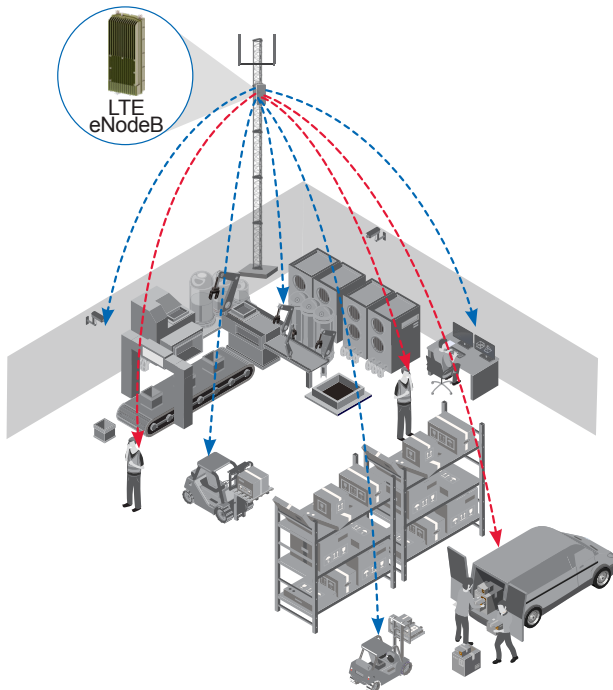
Defence Connectivity

The battlefield ready LTE mobile network can deploy on ground or any other strategic location for delivering real-time, secure and reliable voice and data communication.



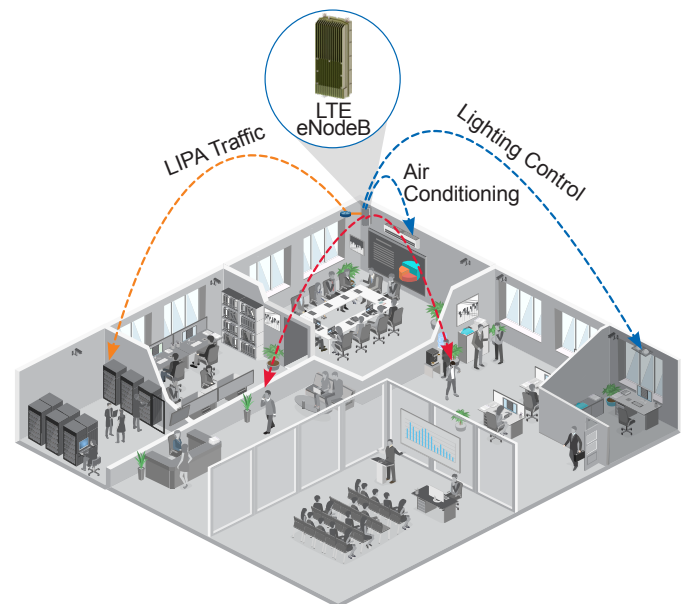
Public Rally Connectivity

The private LTE mobile solution is high-power with low-latency and interference free to provide connectivity to emergency service, public event. It is designed for outdoor and extreme conditions.



Remote Industry Connectivity

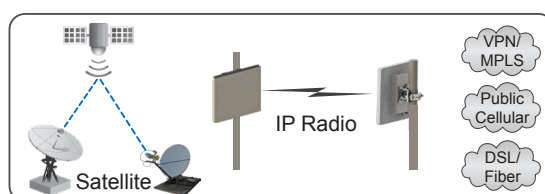
Private LTE provides local and public connectivity with secure, efficient and high level of productivity. It brings new opportunities with connected tools, robotics, and machines



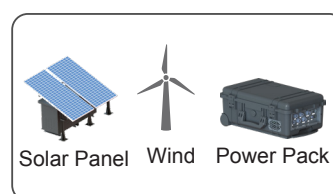
Enterprise Connectivity

Enterprise LTE solution provides fast, reliable and with granular network control. Seamless combination of private and public networks along with advanced features LAA, LIPA and SIPTO brings a host of solutions for enterprise communication needs.

--- Private Network
--- Public Network
--- LIPA Traffic



Backhaul Options



Power Options

SOLUTION OVERVIEW

Shyam VNL's private LTE network provides remote industries, public events, defence, public safety, rural communities, and urban firms with a high-speed, secure data and voice network. This system is fully integrated and delivers quick, reliable, encrypted communication, as well as good performance in noisy and multipath settings

A typical system includes:

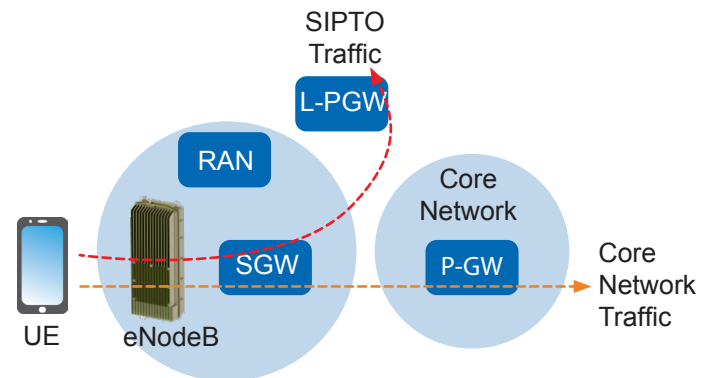
1. LTE solution with optional solar power and differential battery backup
2. Multiple IP backhaul options (Fiber/IP Radio/VSAT)
3. Connectivity to existing radios through Radio Gateway

FEATURES

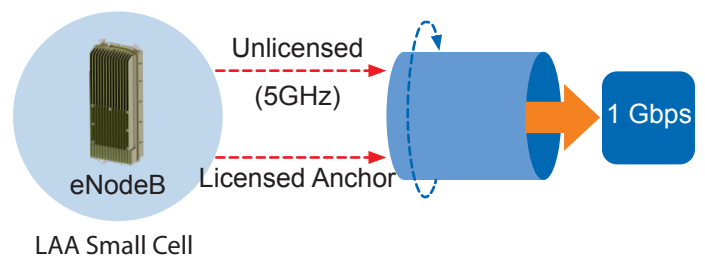
1. Multimedia communication with 4G/LTE connectivity for remote areas
2. Secure communication through fixed-line and wireless backhaul with Data and Internet service at remote locations
3. Enables voice (VoLTE), Video (ViLTE) and data
4. Localization of 4G calls & location-based services
5. Easily movable/portable towers; easy to redeploy sites
6. SON – Self Optimizing Networks
7. SIPTO- Selected IP Traffic Offload
8. LAA- License Assisted Access
9. LIPA- Local IP Access
10. Local breakout; improved user experience and reduced traffic over backhaul/core

Private 4G/LTE Network

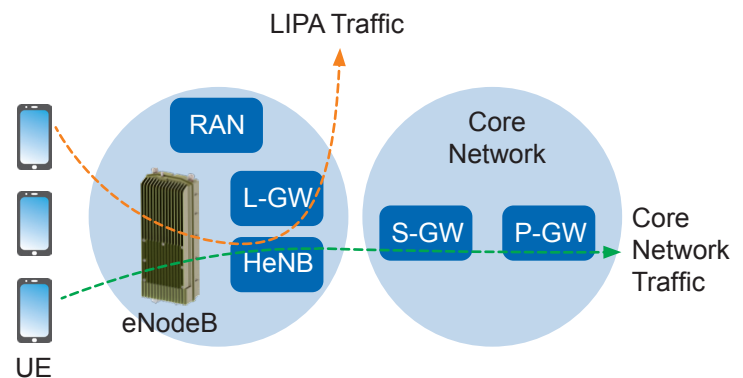
SIPTO – Selected IP Traffic Offload



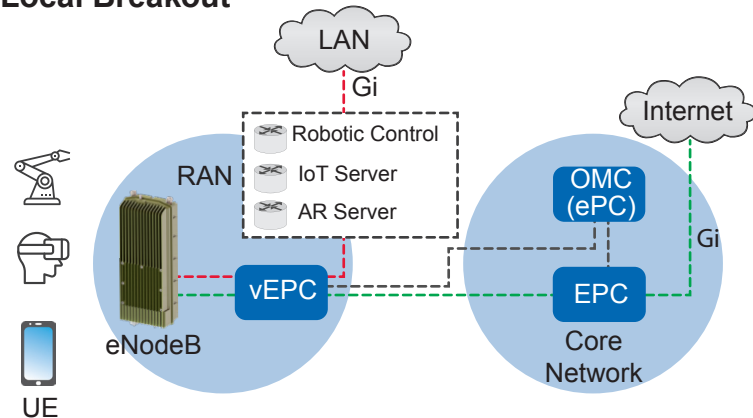
LAA – License Assisted Access



LIPA – Local IP Access



Local Breakout



For further information visit our website www.shyamvnl.com



CORPORATE HEADQUARTER

Shyam VNL Private Limited

21-22, Phase IV, Udyog Vihar
Gurgaon 122 015, Haryana, INDIA
Tel +91 124 265 7600

<http://www.shyamvnl.com>

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