The Lekha's Vyapi LTE NIB is available for deployment of LTE Private networks. The product is optimized for battery operation and work as vehicle mount or as man pack base station.

LTE Private Networks are widely getting adopted in many business critical and mission critical network scenarios. Lekha's Vyapi NIB is optimized for lesser number of users and different traffic pattern. The design is compact, lower power of operation and portable. Network in Box with micro EPC and application offers ease to operate dynamic networks with lower cost of ownership.

The product offers extreme flexibility for battery operated manpack radio and private network moving platform for disaster relief networks. NIB accommodates compute power for core network and edge application to optimize the backhaul bandwidth. Solution includes Network Management System for operation, administration and management functions.

Specifications

- LTE Band 28 frequency.
- 5,10 and 20 MHz bandwidth
- 2Tx 2Rx mode of operation
- Up to 64 concurrent users
- FDD mode
- Modulation in DL and UL: Up to QAM64
- Output power 5W per antenna
- Power saving modes for battery operation

Features Supported

- Modular design
- Support for Voice, Video and Data
- Interoperated with majority of the UE chip vendors.
- NLOS deployment
- Compact design with IP66 enclosure.
- Power save modes for battery operation
- support
- Compute for hosting application within NIB.

Core specification

The key components of the EPC are: (i) MME (Mobility Management Entity); (ii) S-GW (Serving Gateway); (iii) P-GW (Packet Data Network Gateway); (iv) HSS (Home Subscriber Subsystem); and (v) IMS(IP Multi Media Subsystem)

HW Specification

- Backhaul: 1 RJ45
- Console Ports: USB2.0/USB3.0
- Power Consumption: <200W
- Enclosure: IP66
- Dimensions: 355x351x150 mm
- Weight: Less than 14kg
- Installation: Wall or Pole Mount, Manpack
- Compute for EPC and Applications – Intel Core i5/Core i7, with 16GB DDR RAM.

Configuration and Monitoring:

The reference solution includes an interactive configuration tool with which user can manage all standard configurations. There is also an integrated GUI to manage multiple NIB/eNBs, configure them and display logs from each of them. NIB reference design supports SNMPv3 to integrate with NMS tool to enable monitoring and configuration management