



TLC Solutions Inc.
USER FIRST TECHNOLOGY

TLC SOLUTIONS, INC.
PRODUCTS & SERVICES

WIRELESS NETWORKS
SYSTEMS INTEGRATION
PRODUCT DEVELOPMENT
CUSTOM FABRICATION

OTHER PRODUCTS
AVAILABLE

- PICO-GSM NETWORK
- PICO-UMTS NETWORK
- PICO-EVDO NETWORK
- PICO-CMDA NETWORK
- MULTI-STANDARD MOBILE SWITCHING CENTER (MSC)
- MINI-GSM BASE STATION SUBSYSTEM
- MACRO-GSM BASE STATION SUBSYSTEM
- MINI-UMTS BASE STATION SUBSYSTEM
- MACRO-UMTS BASE STATION SUBSYSTEM
- MACRO-CDMA BASE STATION SUBSYSTEM
- MACRO-EVDO BASE STATION SUBSYSTEM
- CHATTERBOX VOICE & SMS TRAFFIC GENERATOR

4G LONG TERM EVOLUTION (LTE) eNODEB



- 4G LTE was started as a project in 2004 by telecommunication body known as the Third Generation Partnership Project (3GPP).
- Our 4G LTE eNodeB can be configured with optional Power Amplifiers (PAs) to support MIMO
- Support for multiple backhaul options for connectivity into private or commercial networks
- Currently supports downlink data speeds up to 100Mbps and uplink data speeds up to 50 Mbps
- Rack-Mounted and Rugged Suitcase configuration options

TLC Solutions' 4G LTE eNodeB is the smallest, fully-specified LTE solution on the market today. This radio can provide every major available feature in today's commercial LTE networks.

The 4G LTE eNodeB is available in a number of different form factors and with a variety of options including support for multi-media, email and chat. It can be packaged in a carrying case capable of fitting in an overhead bin of most commercial aircraft making it easily deployable and operational within minutes.

Its design is ideal for supporting tactical communications, and public safety, homeland security, and other defense applications.

The eNodeB houses the components for transmitting and receiving LTE radio signals (transceivers). The transceivers are what communicate directly with mobile devices. The eNodeB is also responsible for encrypting

and decrypting communications between the mobile device and the MME.

The eNodeB supports up to 32 (current)/64 (future) channels (data only) with shared data rates of up to 100 Mbps (download) and 50 Mbps (upload).

The eNodeB will support [customer defined] LTE frequency band with various power output options (radio dependent). Each eNodeB will be able to be configured to any of the EARFCNs available in the [customer defined] Band.

All communications between the components of the 4G LTE eNodeB are accomplished over IP connectivity, resulting in flexible network deployments that can be easily integrated into existing network infrastructure.

ABOUT TLC SOLUTIONS, INC.

TLC Solutions is the leader in providing secure wireless network solutions designed specifically for portability, ease-of-use and tactical communications applications across a variety of standards including 2G, 3G, 4G, CDMA, WiMAX, and Radio technologies.

As a small business with expertise in systems integration, RF and network engineering, hardware and software development, and custom fabrication, TLC has been producing cutting-edge communications solutions and providing outstanding support to its Government and DoD customers since its inception in 2003.

For more information on any of our products or services please visit us on the Web at:
www.toplevelcom.com

FEATURES AND BENEFITS



TLC Solutions' 4G LTE eNodeB is the most compact, portable LTE network available in the market and is being deployed by a number of DoD and other Government organizations.

The 4G LTE eNodeB fully supports all the everyday functions expected from a 4G LTE network with a Server Platform Core, Home Subscriber Service (HSS), Mobility Management Entity (MME), Packet Data Node Gateway (PGW), Serving Gateway (SGW), and Element Management System (EMS).

Based on the customer's operational requirements, the 4G LTE eNodeB can be prewired and preconfigured to be set-up and operational within minutes of antenna deployment and the flip of the power switch.

Backed by TLC Solutions' world-class integration and support services, the 4G LTE eNodeB is self-contained and can be ruggedized to survive some of the harshest weather conditions. Integrated into a portable suitcase with internal cooling fans, it provides reliable voice and data communications services in even the most remote locations.

SYSTEM SPECIFICATIONS

Features :

- 1000+ IMSI Subscriber HSS
- 1000+ IMSI Subscriber VLR
- 32 (current)/64 (future) channels
- Downlink—up to 100 Mbps
- Uplink—up to 50 Mbps
- Various power output options

Specifications:

Input Power

- 110-240 VAC 50/60 Hz
- VDC Optional

Temperature

- Operating -25° C to +50 C
- Storage -45° C to +85°

Humidity

- Operating 0% to 95% Non-condensing

Dimensions

- Depends on configuration

Weight

- Depends on configuration

Network Interface Options

- Transmission Control Protocol/Internet Protocol (TCP/IP)
- Session Initiated Protocol (SIP)



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