



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

PICO-UMTS (3G) NETWORK



TLC Solutions' Pico-UMTS Network is the smallest, fully-specified UMTS network solution on the market today. This system can provide every major available feature in today's commercial UMTS networks including voice calling, Short Message Service (SMS), high-speed data, handovers and mobile authentication.

The Pico-UMTS Network 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.

- Flexible, private UMTS Network supporting voice, SMS, and high-speed data services
- Support for multiple backhaul options for connectivity into DoD or commercial networks
- Supports the use of any 3G mobile handset and provides all the major functions of a commercial network such as call-holding, call-waiting and caller ID
- Complete 3G wireless base station subsystem supporting high-speed packet data communications, both HSDPA up to 14.4 Mbps (21 Mbps with future SW upgrade) and HSUPA up to 1.5 Mbps (5.7 Mbps with future SW upgrade).

The Pico-UMTS Network can operate in a variety of modes, including as a single base station subsystem or as a larger, networked base station subsystem with multiple nodes. Optionally, each node in a multiple node system can be configured to operate independently should the IP backhaul lose connectivity.

All communications between the components of the Pico-UMTS Network are accomplished over IP connectivity, resulting in flexible network deployments that can be easily integrated into existing network infrastructure.

The Pico-UMTS Network supports currently UMTS band 1 (2100 MHz), UMTS Band 4 (AWS 2100 MHz), and UMTS Band 2 (1900 MHz) / UMTS Band 5 (850 MHz).

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 and 4G technologies.

As a small, woman-owned 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' Pico-UMTS Network is the most compact, portable UMTS network available in the market and is widely deployed by a number of DoD and other Government organizations.

The Pico-UMTS Network fully supports all the everyday functions expected from a 3G cellular network such as call-waiting, call-holding and caller ID.

Multiple systems can be networked together through satellite, WiMAX or other backhaul methods to increase the range of network coverage.

Based on the customer's operational requirements, the Pico-UMTS Network 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 Pico-UMTS Network is self-contained and can be ruggedized to survive some of the harshest weather conditions. Integrated into a portable suitcase with internal cooling fans and battery back-up, it provides reliable voice and data communications services in even the most remote locations.

SYSTEM SPECIFICATIONS

Features :

- 1000+ IMSI Subscriber HLR
- 1000+ IMSI Subscriber VLR
- Integrated SMSC
- Integrated 3G-GSN
- HSDPA—14.4 Mbps (21 Mbps with future SW upgrade)
- HSUPA—1.5 Mbps (5.7 Mbps with future SW upgrade)
- MMS Support (Optional)
- Integrated AUC
- Call Holding, Call Waiting, Caller ID
- 16 Channel Elements (24 with future SW upgrade)
- Up to 6 Watts Output Power
- Up to 2.2 km radius

Input Power

- 110-240 VAC 50/60 Hz or 9-32 VDC
- 75W Max Power Consumption

Temperature

- Operating -5° C to +45° C
- Storage -40° C to +85° C

Humidity

- Operating 0% to 95% Non-condensing

Dimensions

- Depends on configuration

Weight

- Depends on configuration

Network Interface Options

- Session Initiated Protocol (SIP)
- GSM Map (Optional)



TLC Solutions Inc
USER FIRST TECHNOLOGY

TLC Solutions, Inc.
120 Cumberland Park Drive, Suite 101
St. Augustine, FL 32095
phone: (904) 829-0323
fax: (904) 217-0328
email: sales@toplevelcom.com
www.toplevelcom.com