



**TLC Solutions Inc.**  
USER FIRST TECHNOLOGY

**TLC SOLUTIONS, INC.**  
**PRODUCTS & SERVICES**

WIRELESS NETWORKS

SYSTEMS INTEGRATION

PRODUCT DEVELOPMENT

CUSTOM FABRICATION

**OTHER PRODUCTS**  
**AVAILABLE**

- 5G NETWORKS
- LTE NETWORK
- GSM NETWORK
- UMTS NETWORK
- EVDO NETWORK
- CDMA NETWORK
- MULTI-STANDARD CORE NETWORK
- CHATTERBOX CELLULAR TRAFFIC GENERATORS

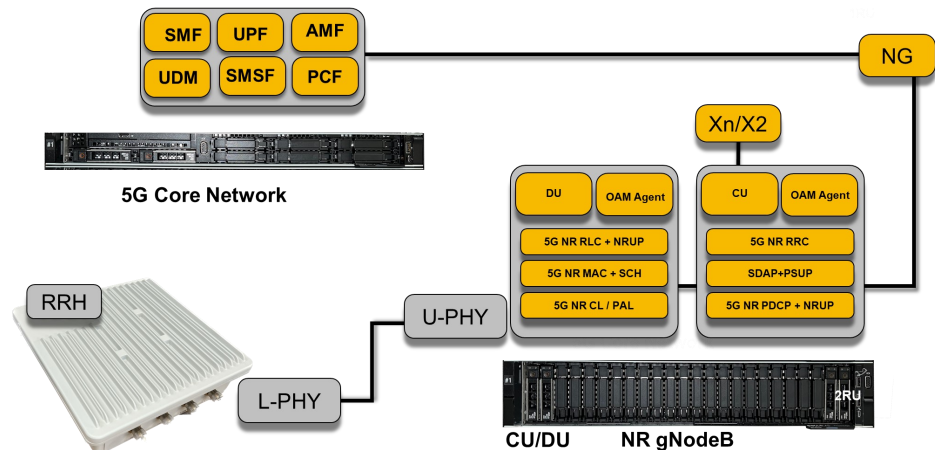


## 5G SA (STAND ALONE) gNodeB

- *Combined CU/DU Support*
- *Configurable with up to Three (3) Remote Radio Heads (RRH)*
- *RRH (FR1 sub-6 GHz range) 5W 4x2 MIMO Configuration*
- *High Speed throughput up to 1.6 Gbps*
- *Local/Centralized Management GUI*

TLC Solutions' 5G SA Network Architecture supports end-to-end 5G deployments. The 5G SA gNodeB is an integrated gNodeB solution consisting of a processing server platform and up to three 5W 4x2 MIMO Remote Radio Heads connected via fiber. The platform is targeted for supporting training environments and mobile applications. The Remote Radio Heads are supplied in individual IP65 rated outdoor enclosures and the server infrastructure is installed in a portable transit case delivering a solution that is ideal for both laboratory testing environments as well as outdoor field applications. Optionally, the configuration can be supplied with a secondary server platform to support the 5G Core Network delivering the full end to end 5G SA system solution in a man portable platform.

### 5G Architecture



## 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 the Latest 5G systems as well as support for previous 2G, 3G, 4G and CDMA 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](http://www.toplevelcom.com)



Backed by TLC Solutions' world-class integration and support services, the TLC 5G SA is self-contained and can be ruggedized to meet requirements for deployment in harsh environments.

## SYSTEM SPECIFICATIONS

### 5G SA (Stand Alone) gNodeB:

- Number of UE's per cell: 128UE's
- Carrier bandwidths: Up to 100MHz
- Data speed: Up to 1.6 Gbps
- Multiple 5G O-RAN Frequency Radio Head options:
  - n77u (3.7-4.2GHz)
  - n78 (3.3-3.8GHz)
  - n79 (4.6-4.9GHz)
- RFOuput Power: +37dBm per antenna port
- Based on 3GPP Release 16 & ORAN compliant

### Input Power

- 110-240 VAC 50/60 Hz

### Temperature

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

### Humidity

- Operating 0% to 95% Non-condensing



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