

# NITRO Wireless

## gNodeB Testing

A TMLite2 Application for Delivering  
gNodeB Software Efficiently and on Budget

### Challenges Facing Equipment Vendors

Equipment vendors face increasingly tight delivery timescales, increased pressure to reduce costs, while maximizing development ROI against the backdrop of complex 5G technology. But to accelerate software development more engineers require access to test equipment, especially at the early stages of development. The challenge for equipment vendors is to provide sufficient test equipment for as many engineers as possible with a limited budget.

### The VIAVI Solution

The TMLite2 is a software-only variant of the industry-standard TM500 Test Mobile Family that allows companies to provide multiple engineers cost-effective access to key test functionality for gNB testing. Tests can be run manually or as part of an automated campaign and results include comprehensive test logs to allow engineers to gain in-depth knowledge of the performance of the gNodeB software.

### Business Impact

With the market demanding tighter delivery timescales, it is important to ensure development costs are controlled without compromising software quality. A shift-level development approach which identifies software bugs early in the development cycle can yield significant savings. Studies have shown that fixing bugs late in the release cycle not only carries greater risk of missed deadlines, but can also cost 50-100 times more to fix compared to fixing them at an earlier stage.



## Sample Use Cases

**Use Case 1:** Enable engineers to develop and test multiple code blocks in parallel, e.g. different engineers working on different code blocks at the PHY, MAC or PDCP layers.

**Use Case 2:** Early stage 3GPP functional testing in order to detect and correct software bugs prior to system integration.

## VIAVI Benefits

- ✓ **Continuity Over the Test Lifecycle**  
Common software with the industry-leading TM500 Family to avoid wasting time correlating test results across different test groups.
- ✓ **TM500 Family – De Facto No. 1 Base Station Test Tool**  
Used by all of the world's leading base station developers, TMLite2 provides a cost effective version that can be utilized by multiple engineers.
- ✓ **Scalable Solution that Protects CAPEX**  
TMLite2 can be scaled to add more functionality and capability such as more UEs, lower latencies, etc. as projects develop or needs change.



### Get started with TMLite2 solution

Visit: [viavisolutions.com/products/tm500-network-tester](https://viavisolutions.com/products/tm500-network-tester)



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