NITRO Wireless
Private Networks
A TM500 Network Tester and TeraVM Solution

The Challenge Facing Vendors
Private Network applications in environments such as airports, factories and mines require low latency, high throughput and high reliability in order to meet stringent safety regulations, QoS and performance requirements. Private network system vendors face the challenge of ensuring that equipment meets both technical specifications and that end customers achieve their productivity, efficiency and other business goals.

The VIAVI Solution
VIAVI TM500 and TeraVM RANtoCore test solutions are widely used for development and pre-deployment testing of LTE and 5G RAN and Core macro network infrastructure. The same tools can also be used for proving the design, software and performance of Private Network infrastructure. Real-world test scenarios for low latency, maximum throughput, reliability and stability can be performed in the lab – providing evidence that stringent requirements can be met. By choosing a solution that is already widely used, vendors can be confident in their test results.

Business Impact
Thorough testing is required to ensure that customer demands are not compromised. For vendors to be able to successfully sell their products they need to be able to demonstrate a high standard of design proving and performance. VIAVI tools are built on common and upgradeable common software that allow the same tools to be used for multiple projects across different market verticals to improve ROI.
Sample Use Cases

**Use Case 1:** Measure end-to-end performance for a simulated group of users using a mix of video, voice and data within an industrial plant. For example, check video quality scores, video data rates are >50 Mbps and latencies <20 ms to prove that private network components are correctly designed.

**Use Case 2:** Ensure high quality video with low latency for accurate drilling. Latencies in order <20 ms are expected with high data rates for live high-definition video. Other users (not low latency) can access, e.g. voice, internet through Mobile Network Operator (MNO) service.

VIAVI Benefits

- **TM500 – the De Facto Base Station Test**
  The TM500 is used by all of the world’s leading base station developers.

- **Protect CAPEX Investments**
  Systems can be re-used for other application verticals beyond small cells ensuring continuity.

- **No Compromise on Performance**
  Delivers best performance, e.g. max throughput, low latency for safety critical and monitoring applications, e.g. mining.

- **Productivity**
  Large install base of the TM500 enables same scripts, automation, can be re-used.

Get started with VIAVI Private Network Test solution

Visit: viavisolutions.com/solutions/private-5g