Brochure

VIAVI

RANtoCore

Delivering the most
realistic test environments

We can help propel your network to the next generation

Ensuring a high quality, secure and consistent service

The requirement for increased bandwidth, capacity and coverage is exponential and the need for high network security has become more fundamental than ever.

Fulfilling the potential of the evolving 4G and the introduction of 5 G will require an innovative and dynamic approach to network architecture in order to support all the proposed use cases.

It is essential to satisfy the never-ending demand for more data, more efficiency, as well as continuing to support legacy technologies.

Next generation technology is enabling the possibility of connected driverless cars, virtual and augmented reality, remote robotic surgery, smart city infrastructure, wearables, plus many more. It won't just stop there, technologies will be further extended with a whole host of applications we're yet to realize are possible.

To address these new requirements, the industry is preparing to converge the Radio Access Networks (RAN) and the Core networks to bring processing functions and resources closer to the user, with the aim of reducing latency and traffic load, and increasing bandwidth on the network.

RANtoCore

Rigorous testing through the design and development phase of this new environment is vital to the success of commercial deployments. The earlier you test, the earlier you find problems. Testing may be complex but it does not need to be difficult.

We provide the tools to develop and prove network performance to meet current and changing demands. We enable our customers to analyse, develop and validate the performance and capability of a wide variety of network functions and devices, providing improved operational efficiency and security.

TM500

TM500™ has established itself as a leading network test solution for cellular infrastructure equipment manufacturers worldwide. It was the first 3G, 4G and 5G test mobile and is regarded as the industry standard when it comes to base station development and testing via RF.

The TM500 is a scalable test system for validating network performance as experienced by end users, across multiple cells and different radio access technologies. It is able to measure the complete performance of the network, from RF through to the packet core – this includes interaction with other users, the simulated RF environment and mobility, accurately replicating real-world user behaviour profiles.

TeraVM

TeraVM® is a virtualized application emulation and security performance test solution, ensuring that highly optimized networks and services can be delivered with minimal risk.

TeraVM was established into the industry with the first-to-market NFV test solution, delivering comprehensive test coverage for application services, wired and wireless networks.

TeraVM offers the flexibility to run anywhere - lab, datacentre and the cloud, with consistent performance coverage.

RANtoCore

Only through the use of a complete end-to-end RANtoCore™ testing and validation solution will you be able to gain a complete overview of the network and how it will perform under the demands of real-world traffic scenarios.

Our TM500 and TeraVM products combined offer a complete end-to-end test solution from the Radio Access Network through the EDGE to the Core Network, simulating real-world traffic and ensuring networks are robust enough to cope with the complexity and demands of devices and traffic at scale.

Delivering realistic test environments – from the Radio Access Network through the EDGE to the Mobile Core Network

Playing a pivotal role
in validation innovations

Why choose us?

Our tools go beyond basic boundary performance testing, simulating real-world traffic and ensuring networks are robust enough to cope with the complexity and demands of devices and traffic at scale.

Our focus is on delivering our customers with innovative, quality, high performing test solutions to give them the confidence to deploy the infrastructure needed to support next generation technologies.

By continuing to innovate, we can help you stay ahead of market need, empowering you to prove network performance under real-life usage conditions.

We have been a key partner in 5G research, playing a pivotal role in test and measurement innovations to enable wireless technology research teams to develop concept-proving system prototypes, towards 5G and beyond.

Our industry-firsts

- Commercial 3G test mobile system

- Commercial 4G test mobile system

- TDD-FDD handover with a 4G test mobile

- Carrier aggregation on a 4G test mobile

- End-to-end cellular IoT test

- 4G/5G waveform aggregator for Software Defined Air Interface (SDAI) with dynamic 4G/5G waveform

- Performance evaluation of massive MIMO technology (up to 128 antenna elements)

- 4G/5G Dual connectivity demonstration

- 5G test bed for fast 5G waveform/L2 demonstration

- 5G prototype based on Verizon specifications specs and 3GPP components, using a full server based architecture to deliver 10 Gbps throughput

- Massive IoT traffic modelling – 1 million devices per Km2

- Commercial 5G test mobile system

- 5G NR Massive MIMO System Level Test Solution

- 5G NR prototype for Ultra-Reliability, Ultra-Low Latency use cases

VIAVI Solutions

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