Nemo Outdoor

Powerful Drive Test Tool for Measuring and Monitoring Wireless Networks

Nemo Outdoor from Keysight Technologies, Inc. has an established position both as a pioneer and leader in drive test measurement solutions. Nemo Outdoor offers a broad range of testing options, the widest range of 5G NR KPIs on the market, and support for all the newest technologies including 5G NR (SA and NSA), NB-IoT, LTE-M, 7CC carrier aggregation, VoNR, VoLTE/ViLTE, VoWiFi/ViWiFi, 4x4 MIMO, and eMBMS testing.

Features

- Quality-of-experience (QoE) metrics for the services and applications your customers are actually using.
- Automated measurements with extensive scripts and large-scale measurement lists enable you to focus on the actual task at hand during drive testing.
- User-defined parameters from signaling messages can be searched and displayed in info view and graph side panel during measurement and playback.
- Versatile benchmarking capabilities, including Nemo Intelligent Device Interface.
Reduce the time-to-market of your new services

To gain competitive advantage in today’s market, monitoring and improving customer experience is crucial. Nemo Outdoor enables the measuring of quality-of-experience (QoE) metrics for the services and applications your customers are actually using. The information provided by Nemo Outdoor assists in the verification and troubleshooting of new services reducing the time-to-market.

Nemo Outdoor’s diversity is only matched by its flexible user interface and ease of use. Owing to its single platform, all essential functionalities can be found in one location. Through the fully customizable user interface, the user is able to tailor Nemo Outdoor to their particular use.

5G ready

Nemo Outdoor supports real 5G NR field measurements, both standalone (SA) and non-standalone (NSA) modes, and offers the widest range of 5G NR KPIs on the market. The solution combines Nemo Outdoor with Qualcomm X50/X55, Samsung Exynos 5100/5123, and HiSilicon Balong 5000 chipset-based devices and 3rd party scanning receivers. The collected metrics include RACH information, TX power, rank (MIMO mode), modulation, MAC throughput and BLER, signal strength, and quality metrics of the SSB beams. In addition, we collect QoS measurements including throughput, and latency.

The 5G NR test system can be used to perform real 5G NR measurements with demodulation of the 5G NR reference signals and it enables simultaneous 2G, 3G, 4G, and 5G NR spectrum scan and frequency scan (CW) measurements. When paired with Nemo Intelligent Device Interface, Nemo Outdoor offers a revolutionary 5G benchmarking solution.
Comprehensive solution based on a single laptop

Nemo Outdoor allows operators to test and verify the capacity of wireless networks and it comes with an incomparable support for over 300 test terminals and scanning receivers.

Nemo Outdoor is highly suitable for targeted network problems in all the established and emerging phases of the network life cycle. It can be expanded to cover extensive and powerful measurements from drive testing to benchmarking and QoS measurements. All this on a single laptop-based software platform.

In addition to drive test and benchmarking measurements, the Nemo Outdoor platform is expandable to support voice (PESQ, POLQA/POLQA3 and VQMon) and video quality measurements, including streaming video analysis with the PEVQ-S algorithm. Nemo Outdoor also offers tools for various troubleshooting and verification tasks, such as DAS anomaly analysis, real-time RF ingress and missing neighbor detection, pilot pollution analysis, GSM interference analysis, and Qualcomm and Samsung diagnostic data logging. In addition, with the advanced mobile band scan feature, Nemo Outdoor continuously scans for pilot channels from specified bands and automatically adds them for pilot scanning.

The optional Nemo Active Test Application (NATA), Keysight’s proprietary communications interface and application, enables simple and productive deployment of Android-based smartphones in data benchmarking and voice quality measurements by utilizing the smartphones’ independent capacity more effectively. With NATA, Nemo Outdoor can be used to perform testing with non-rooted devices as well.