

VIAVI

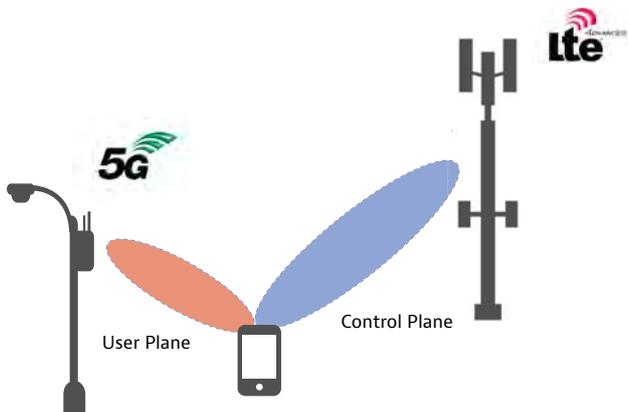
CellAdvisor 5G

5G Non-Standalone Analyzer

Concurrent Multicarrier Radio Assessment

The VIAVI CellAdvisor™ 5G is the ideal field test solution for 4G and 5G radio access networks. It performs signal analysis tests for each technology, as stand-alone LTE or 5G; and it offers the capability to perform concurrent LTE and 5G signal analysis as non-standalone (NSA) signal analysis.

5G non-stand alone was defined by the industry to facilitate the deployment of 5G in LTE networks, creating the ability to establish a multi-radio dual connectivity where mobile devices can use resources from two different nodes, for example, 5G and LTE.



5G NSA allows mobile devices to establish a connection with a master LTE node (anchor) for control plane services, as well as the connectivity to a secondary 5G node for user plane service such as downlink data.

Benefits of CellAdvisor 5G NSA Analyzer

- All-in-one 5G and LTE test solution offers the best total cost of ownership.
- 5G signal analysis including beam availability, and signal quality; properly characterizing 5G signal performance.
- LTE signal analysis including carrier aggregation, and MIMO verification, characterizing LTE signal performance.
- NSA analysis conducting concurrent analysis of 5G and LTE radios to quickly identify signal availability and performance issues.

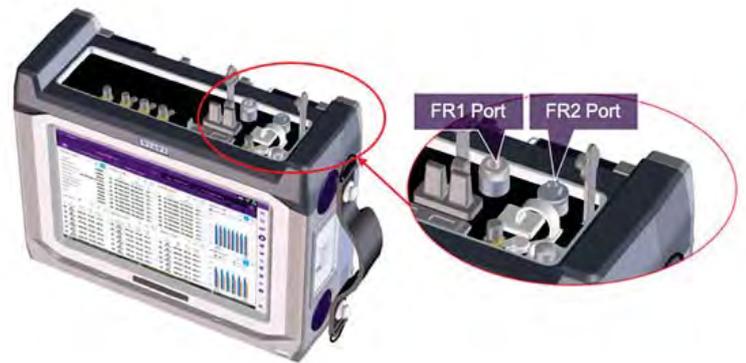
Features of CellAdvisor 5G NSA Analyzer

- NSA scanner: concurrent scanning up to eight different 5G or LTE carriers.
- NSA signal analysis: concurrent 5G and LTE signal analysis of signal power and quality.
- NSA route map: concurrent coverage of 5G and LTE signals in real-time.



To ensure 5G networks perform within required parameters, RF engineers and cell technicians need to quickly identify service performance issues and effectively isolate the problem sources. 5G service quality degradation can be attributed to a number of factors, for example, a temporary blockage or reflective conditions of 5G signals, or to possible impairments in the LTE signal due to interference.

VIAMI has optimized the CellAdvisor 5G hardware to perform concurrent signal analysis and coverage test of 5G carriers in FR2 (24GHz to 40GHz) and LTE carriers in FR1 (410MHz to 6GHz) developing a dual RF port dedicated for each frequency range.

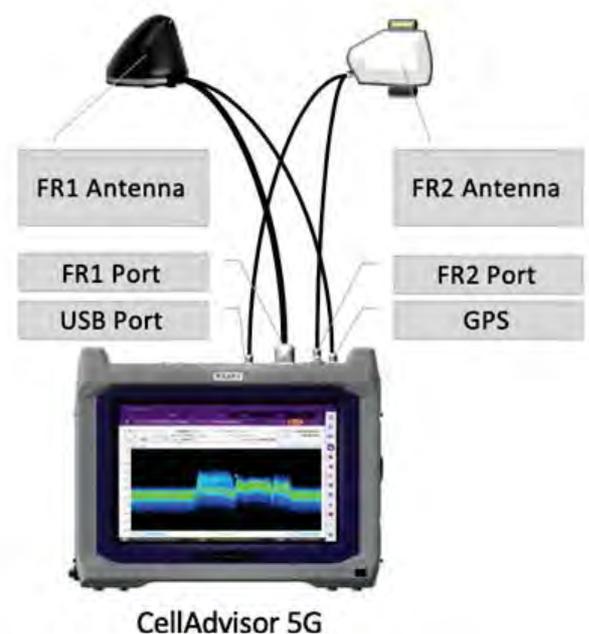


CellAdvisor 5G - Dual RF Port (FR1 and FR2)

This optimized design provides several benefits:

- CellAdvisor 5G performs quick and reliable concurrent FR1 and FR2 signal analysis, eliminating the need to constantly and rapidly switch between the RF paths of FR2 signals, which pass through the frequency downconverter and FR1 signals which bypasses the downconverter.
- Improved measurement accuracy, eliminating the compensation of different cable and connection losses of a wide range of frequencies.
- Easier test setup and flexibility with dedicated FR1 and FR2 antennas directly connected into the CellAdvisor 5G without additional cables, combiners, and adapters.

This optimized design created by VIAMI makes it the first portable base station analyzer capable of testing and trouble-shooting concurrent multi-technology and multi-carrier cellular signals.

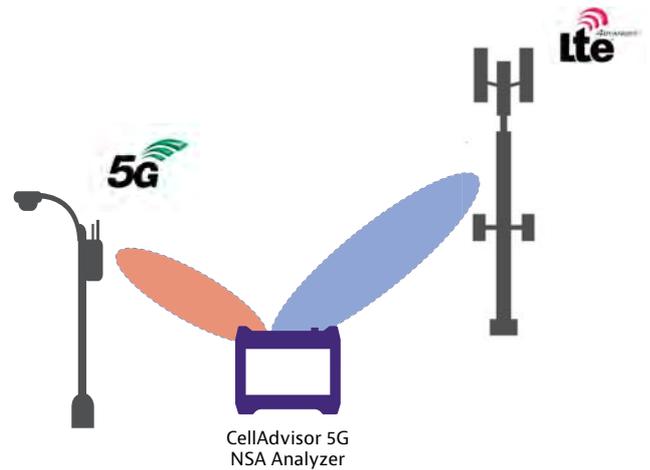


CellAdvisor 5G NSA Analyzer

Concurrent 5G and LTE Analysis

CellAdvisor 5G NSA Analyzer option mode offers the following concurrent 5G and LTE measurements and capabilities:

- 5G beam analysis and LTE reference signal power and dominance
- Channel power and signal quality measurements for 5G and LTE carriers
- Concurrent coverage maps of 5G and LTE carriers in real-time



NSA Analysis

5G and LTE

- 5G Beam Analysis, indicating the power level of the eight strongest beams
- LTE signal analysis, indicating the power and signal dominance

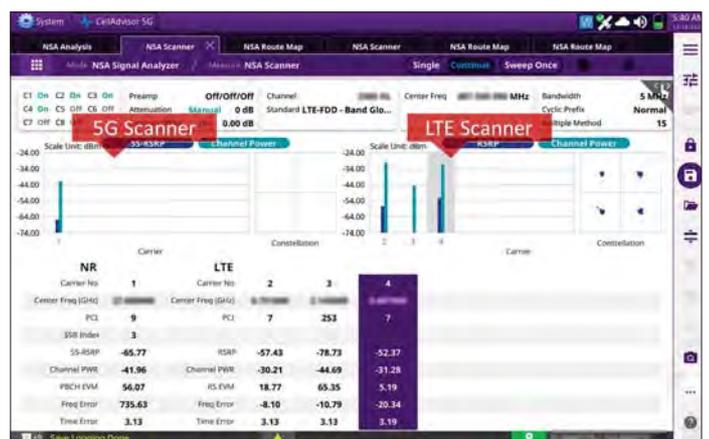


CellAdvisor 5G - NSA Analysis (5G and LTE)

NSA Scanner

5G and LTE

- Multi-technology scanning of up to eight 5G or LTE carriers.
- Concurrent channel power and signal quality of 5G and LTE carriers

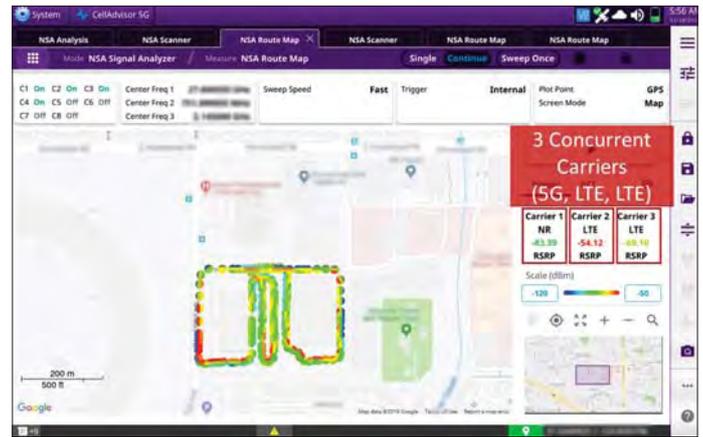


CellAdvisor 5G - NSA Scanner (5G and LTE)

NSA Route Map

5G and LTE

- Creates a concurrent 5G and LTE route map for up to 3 carriers in real-time
- NSA route map measurement data can also be exported for post-processing



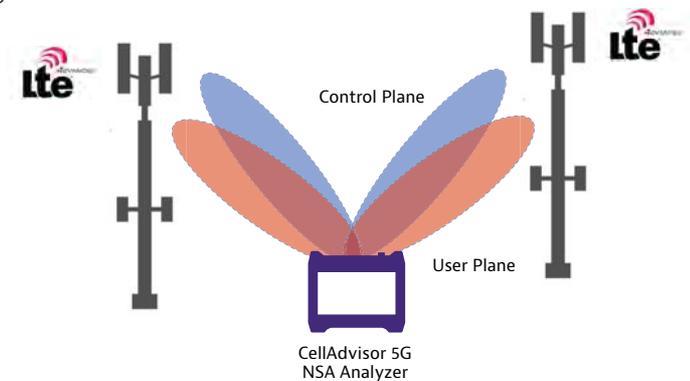
CellAdvisor 5G - NSA Route Map (5G and LTE)

CellAdvisor 5G NSA Analyzer

Concurrent Multicarrier LTE Analysis

CellAdvisor 5G NSA Analyzer option mode offers the following concurrent multi-LTE measurements for applications where it is assigned a master LTE (anchor) node for control plane and data and as a secondary node LTE for supplemental data:

- NSA Analyzer performs multi-carrier LTE reference signal power and dominance.
- NSA Scanner performs Channel power and signal quality measurements for multiple LTE carriers.
- NSA Route Map perform concurrent coverage maps of multiple LTE carriers in real-time.



NSA Analysis

LTE and LTE

- Concurrent multi-LTE signal analysis, indicating the power level and signal dominance of each carrier

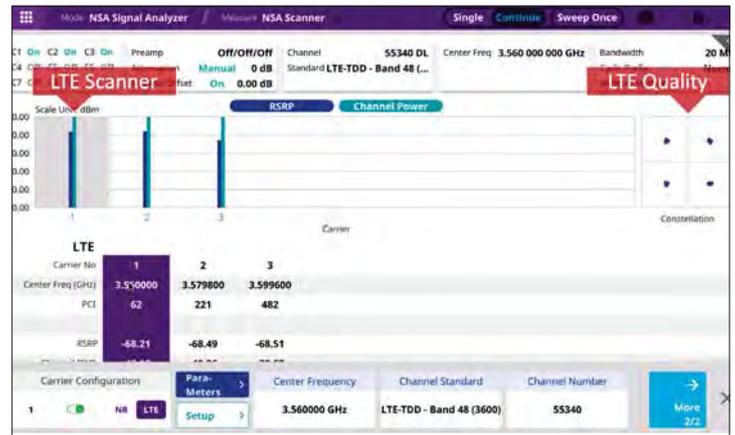


CellAdvisor 5G - NSA Analysis (Multi-LTE)

NSA Scanner

LTE and LTE

- Multi-carrier scanning of up to eight LTE carriers, of any band and any bandwidth
- Concurrent channel power and signal quality of LTE carriers



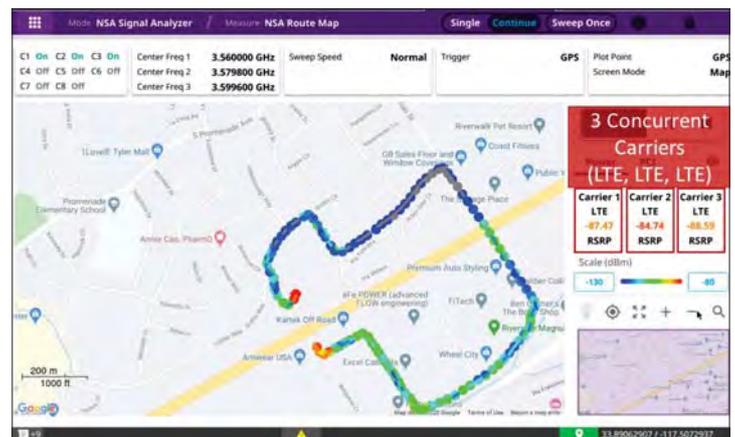
CellAdvisor 5G - NSA Scanner (Multi-LTE)

NSA Route Map

LTE and LTE

- Creates a multi-carrier LTE route map for up to 3 carriers in real-time.
- NSA route map measurement data can also be exported for post-processing.

CellAdvisor 5G is the first field-portable test solution in the market that enables RF engineers to test, identify and rectify both 5G and LTE/LTE-A radio access issues with one easy-to-use solution.



CellAdvisor 5G - NSA Route Map (Multi-LTE)

Ordering Information

Part Number	Description
CA5000-F002N	CellAdvisor 5G with 2 RF ports (FR1 and FR2)
CA5000-F002N-O	CellAdvisor 5G with 2 RF ports (FR1 and FR2) with RFoCPRI hardware
CA5000-PU01	CellAdvisor 5G 1 RF port upgrade to 2 RF ports
CA5000-S043	CellAdvisor 5G NSA Analyzer

VIAVI CellAdvisor 5G simplifies radio access troubleshooting process, so technicians can easily and confidently resolve performance issues for all types of cell sites.



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