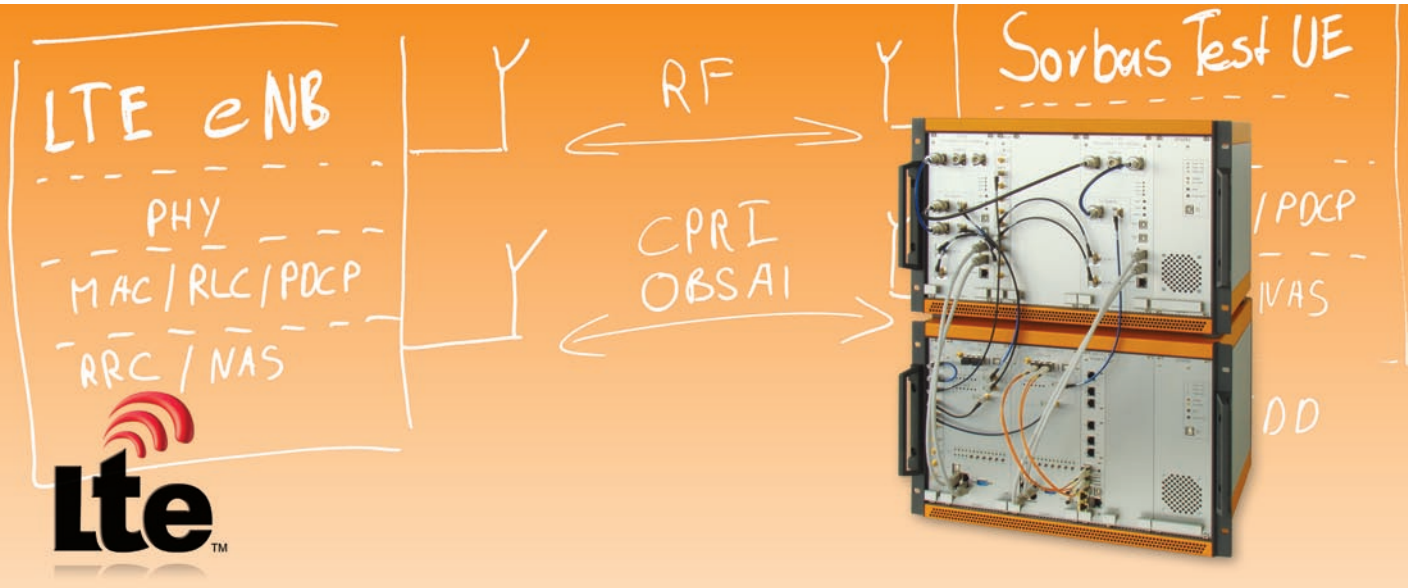


SORBAS 200 Software Option: Multi-UE Testing



Signalion's Multi-UE option offers:

- Simulation of multiple UEs in one sector
- Multi UE L1/ PHY testing
- Detailed HARQ testing
- Detailed Scheduler testing
- UL interference testing
- Throughput analysis (in combination with PDCP/L3 option)
- Stepwise migration to up to 2000 connected UEs per cell

Extend your SORBAS 200 Test-UE with the Multi-UE option and be able to simulate multiple UEs with only one device!

Increase Cost Efficiency

by reusing the Single UE hardware platform for up to three Multi-UE test applications (Functional Test, Performance Testing, Capacity Testing)

Shorten Time To Market

with efficient testing and high quality support for test system integration

Improve your Test Quality

with SORBAS advanced regression testing capabilities

Multi-UE Test Applications:

FUNCTIONAL TEST

Starting with a low number of UEs, SORBAS allows users to increase the number of available UEs according to their test needs and budget. This allows the in depth testing of PHY, MAC & RLC algorithms and functional testing of the scheduler as well as HARQ functionality.

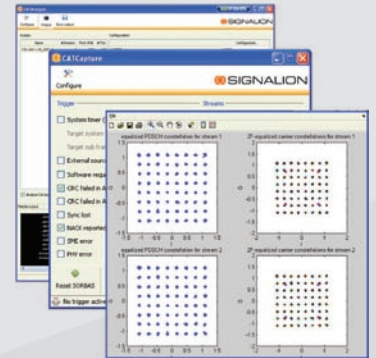
The SORBAS Multi-UE option allows the emulation of multiple UEs on the same test platform. Such an approach offers inter-UE coordination in a repeatable and deterministic fashion which allows the user to run sophisticated tests such as:

- eNB response to rogue UE behaviour
- UL multiple access contention
- Timing advance mismatch

Such tests are not achievable using real UEs.

Furthermore, SORBAS offers a wide variety of different traces that enable eNB bugs to be identified and repaired. In combination with CAT (Capture & Analysis Tool), SORBAS Multi-UE option offers a powerful set-up for multi-UE functional eNB testing. Customers can achieve a significant reduction in root cause analysis time with this tool set.

Fully repeatable and deterministic control of individual UE is available via the Multi UE GUI as well as with Signalion's open LTE API. This allows a seamless integration into customers' regression testing environments.



PERFORMANCE TESTING

A number of different test cases allows the evaluation of the performance of an eNB under different conditions such as:

- realistic channel conditions for different UEs
- UL-Interference from adjacent cells (simulated along with the Intracell Up-link signals)
- different traffic models for each UE

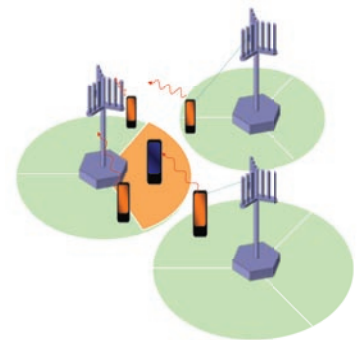
Performance testing may include the complete L3 protocol stack for each mobile via the SORBAS L3 option. Measurement capabilities offer different means to optimise and demonstrate functionality of the resource scheduler performance.

An LTE cell can be loaded with multiple UEs using a repeatable time profile in a controlled test environment.

CAPACITY TESTING

Once Multi-UE functional and performance testing has been completed, the final test phase may be stress testing. In such a test, the cell is loaded and stressed using thousands of UEs having an active connection on RRC level.

The SORBAS test system with the Multi-UE option can support capacity testing in conjunction with an established third party capacity test products for the S1/X2 interfaces if required



CONTACT

Signalion GmbH
 Am Waldschlösschen 2
 D-01099 Dresden, Germany
 Fon +49 351 20693130
 Fax +49 351 20693111
 Mail sales@signalion.com