



Q o s m o t e c

software solutions gmbh

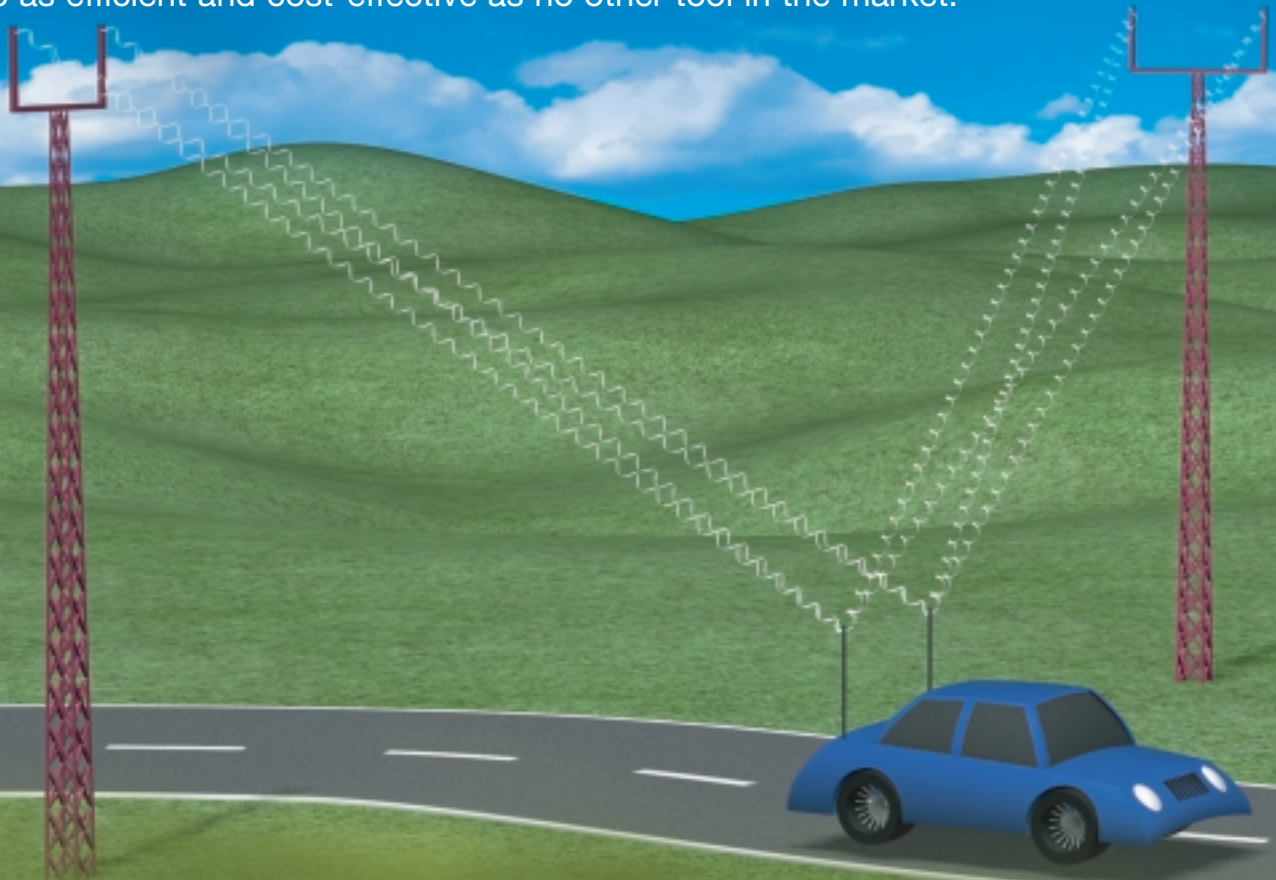
Dynamic MIMO Tester

MIMO transmission between multiple sender and receiver antennas is completely characterized by

- amplitude &
- phase

of the individual signal paths.

The Qosmotec Dynamic MIMO Tester emulates these conditions in the test lab as efficient and cost-effective as no other tool in the market.



Simulate dynamic handover scenarios with variable geometry, including antenna diversity, beam-forming and fast fading.

- All SISO and MIMO configurations (1x1, 1x2, 2x2, 2x4, 4x4, etc) supported
 - Covering all LTE frequencies
 - Bidirectional, ultra wideband
- ⇒ LTE-Advanced compatible and future proof

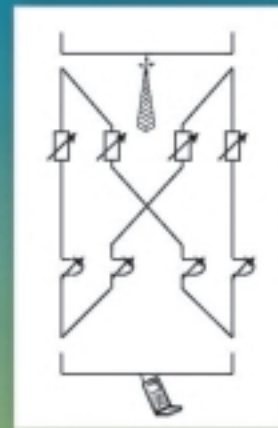


Technical Data:

- Frequency Range: 500 MHz – 3 GHz
500 MHz – 6 GHz
- Attenuators: 0 – 95 dB, 0.5 dB steps
± 0.8 dB or 2.5 % of set value
- Phase Shifters: 0 – 254°, 2° steps @ 1 GHz
± 5° or 4 % of set value
- Connectors: N(f)
- Impedance: 50 Ω
- Control Speed: min. 4000 actions/sec
real-time, parallel settings
- Power Supply: 100 – 240 V, AC
- CPU: Intel®Atom™
- Interface: Ethernet RJ45
- Size: 19" mountable, 6 HE
- Construction: fully meshed matrix
customizable with 2 to 8 inputs and outputs



Double 4x4 MIMO tester



Connection scheme (2x2 MIMO)

Easy-to-use graphical software approach:

Emulate radio and handover scenarios in SISO and MIMO environments based on drive tests within a virtual landscape.

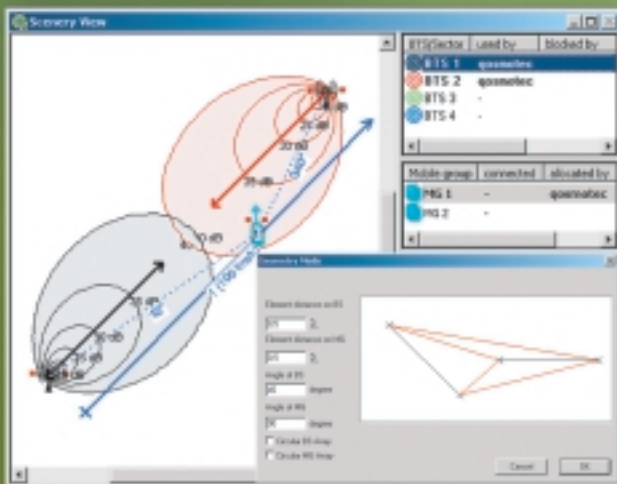
Automatic & unattended 24/7 test execution

Amplitude simulation based on

- ▶ Distance
- ▶ Frequency
- ▶ Antenna pattern and orientation
- ▶ Fast Fading (Rice, Rayleigh)
- ▶ Shadowing

Phase simulation based on

- ▶ Frequency
- ▶ Antenna element orientation
- ▶ Antenna element spacing



Intuitive Graphical User Interface



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