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

http://www.qosmotec.com
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

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