QPER Test Bed
The Network-in-a-Rack

- The cost efficient test plant substitute
- Emulate a complete mobile network in a simple industrial rack
- Suited for MVNEs and MVNOs to improve their service

QPER Test Bed enables engineers to perform controlled mobile network test scenarios indoors without the need for a fully-fledged test lab. Based on Qosmotec's QPER/AIS technology, it allows to test UE and SIM-card functionality in a completely emulated mobile network. Thus, QPER Test Bed is the ideal test platform for operators basing value-added services on existing networks, for instance MVNEs or MVNOs.

Improve performance and quality without a fully-fledged test plant
QPER Test Bed emulates all components of a mobile network - providing core and radio access functionality - and inter-faces mobile via radio signals. Thus, any kind of UE can register to the emulated network and use its services. The simulation also covers the mobility of the subscriber, who can handover between cells, different network technologies and even between different operators such as in roaming scenarios.

Thereby, QPER Test Bed shrinks the test lab to the size of an industrial rack.
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QPER Test bed joins an attenuator matrix with a network emulator under control of a single GUI.

The network emulator supplies the full network functionality of a mobile network and provides RF connectivity via GSM or UMTS RF modules. A matrix of RF attenuators inserted between the RF modules and the UEs provides for signal strength and handover control. UEs can thus move around between the individual cells and set up calls, send SMS or transmit data via PS connections, e.g. towards value added services (VAS) under test feeding the data interface of the emulator.

Mobility can be simulated based on our unique QPER virtual drive test interface with user-defined routes and adjustable signal impairments like fast fading. Alternatively, the mobile itinerary can be fed into the tool via a GPS logger interface, e.g. to replay a recorded drive test session.

Furthermore, the GUI allows to monitor various base station properties and the network registration status of the mobile terminal.