Coverage Measurement System TS9955 (Mobile Radio or DAB)

Highly accurate and fast coverage measurements in mobile radio or DAB networks

Brief description

TS9955 is a high-performance system for measurements carried out in the planning, installation, optimization and quality monitoring of mobile radio or DAB networks. This system is not only suitable for high-precision and fast field-strength measurements, but in an upgraded configuration (see following pages) also for a comprehensive interference analysis which in this unique form is offered by Rohde & Schwarz only.

TS9955 means an investment in a highly efficient equipment providing extremely fast and reliable measurements. It is basic configuration for field-strength measurements, the system is able to measure four GSM900 channels simultaneously at a speed of up to 90 km/h (63 mph) and with the Lee criterion being adhered to, ie a distance of a few centimeters between the measurements. Preparing fieldstrength profiles and detecting any field-strength gaps is thus speeded up considerably so that accurate data required for calibrating the planning tools are quickly available.

Main features

- Measurement of field strength; up to four GSM channels at a time at speeds of up to 90 km/h and the LEE criterion being complied with
- Frequency hopping over 124 channels





1800/1900 and analog systems or DAB

- Integrated test mobiles for various standards
- Acquisition of RxQual, RxLev and layer-3 information via test mobile in GSM900/1800/1900 networks
- Acquisition of signalling data for other mobile communication standards such as ETACS, D-AMPS and CDMA
- Acquisition of field-strength and signalling data in DAB and DVB-T networks
- Collection of positioning data via GPS (Global Positioning System)
- Removable hard disk for easy data handling (PC card)
- Realtime graphics
- Ten user-definable event keys, various system events with freely definable thresholds
- User-friendly measurement software for controlling all system components
- Comprehensive evaluation software

System configuration

The complete measurement equipment can be accommodated in a car. The system installed in the car mainly consists of test receiver, navigation systems, test mobiles, process controller and software. The core of the system is the powerful Test Receiver ESVD (ESVB for DAB, DVB-T and CDMA) which is not only extremely fast but also provides maximum level accuracy and frequency stability. Unlike conventional controllers, the robust Coverage Analyzer PCSP features excellent electromagnetic shielding so that it is absolutely neutral to the highly sensitive measuring equipment.

Software

Measurement Software ROMES integrates and administrates all system components and is ideally supplemented by the Software Package ROSEVAL (see page 313) for drafting and evaluating the test tours.