



RSP Mobile Radio-Monitoring Stations

Mobile Radio-Monitoring Stations

RSP function as a mobile measurement laboratory of electromagnetic spectrum.

RSP functions:

- control parameters of radio emissions,
- monitoring and control of bandwidth occupancy,
- direction finding and location of emission sources,
- recording of demodulated signals,
- results reporting.

Mobile Radio-Monitoring Stations RSP are particularly assigned to carry out the monitoring of the radio spectrum in the urban environment, where signals measurement is difficult due to reflections from the elements of the infrastructure. Movable measuring stations are pursuing specific measurements of radio signals in accordance with the ITU-R recommendations and the EU requirements. The stations are successfully used by the Office of Electronic Communication.

One of the primary functions of the RSP is direction findings and the location of the undesirable sources of radio emissions (*non-permitted operations*), with the use of a single Mobile Radio-Monitoring Stations in motion. Target location is calculated in real time using a mathematical model that provides complete automation of the process. Mobile measuring station allows for permanent direction finding of the signals source, signals that appear periodically and signals with variable frequency. RSP provides visualization of the recent position of the station against the background of the map and allows for the vehicle orientation during the location of emission sources.

FEATURES

- Detection of radio signals.
- Audio monitoring of demodulated signals.
- Recording of demodulated signals.
- Direction finding and localization.
- Measurement of the radio signals parameters.
- Visualization of the RSP position on the map and vehicle orientation.



ISO 9001:2008
AQAP 2110:2009
AQAP 2210:2006



AC 057
QMS



Measuring capabilities

- Detection of radio signals.
- Audio monitoring of demodulated signals.
- Recording of demodulated signals.
- Direction finding and localization.
- Measurement of the radio signals parameters:
 - ✓ Electromagnetic field strength according to ITU-R SM 378-6 (± 3 dB),
 - ✓ Frequency according to ITU-R SM.377.3,
 - ✓ Emission bandwidth according to ITU-R SM.328-10 and ITU-R SM.443,
 - ✓ FM signals maximal frequency deviation for f : 125 kHz with 2 kHz + 3% additive deviation,
 - ✓ AM signals depth modulation with deviation $< 5\%$.

- Geographical attitude of the station on digital map.
- Monitoring of the activity of determined radio channels and frequency bands.
- Task planning and its automatic execution according to predefined schedule.
- Visualization, recording and processing of measurement results.
- Automatic detection of illegal emissions.

- Reports printout.
- Wireless transmission of measurement results and control data.

