KASMON

Radio Spectrum Monitoring System

Radio Spectrum Monitoring System KASMON software allows for supervising the use of assigned frequencies, localization of illegal transmission sources and inconsistent with the concession use of radio bandwidth.

KASMON provides an automatic process for execution of radio emission measurement thanks to the implementation of up-to-date hardware (*radio direction finders, radio receivers, spectrum analyzers antenna systems with commutators and antenna rotators*) and specialized software. Performed measurements are carried out in accordance to the ITU-R recommendations.

Operator receives the processed results of measurements outcomes in the form of images on the map, as well as in the form of reports printouts.

KASMON implemented in the Mobile Radio Monitoring Station allows, even in the urban surroundings, to localize the signal source and provide the extensive knowledge of the electromagnetic environment.
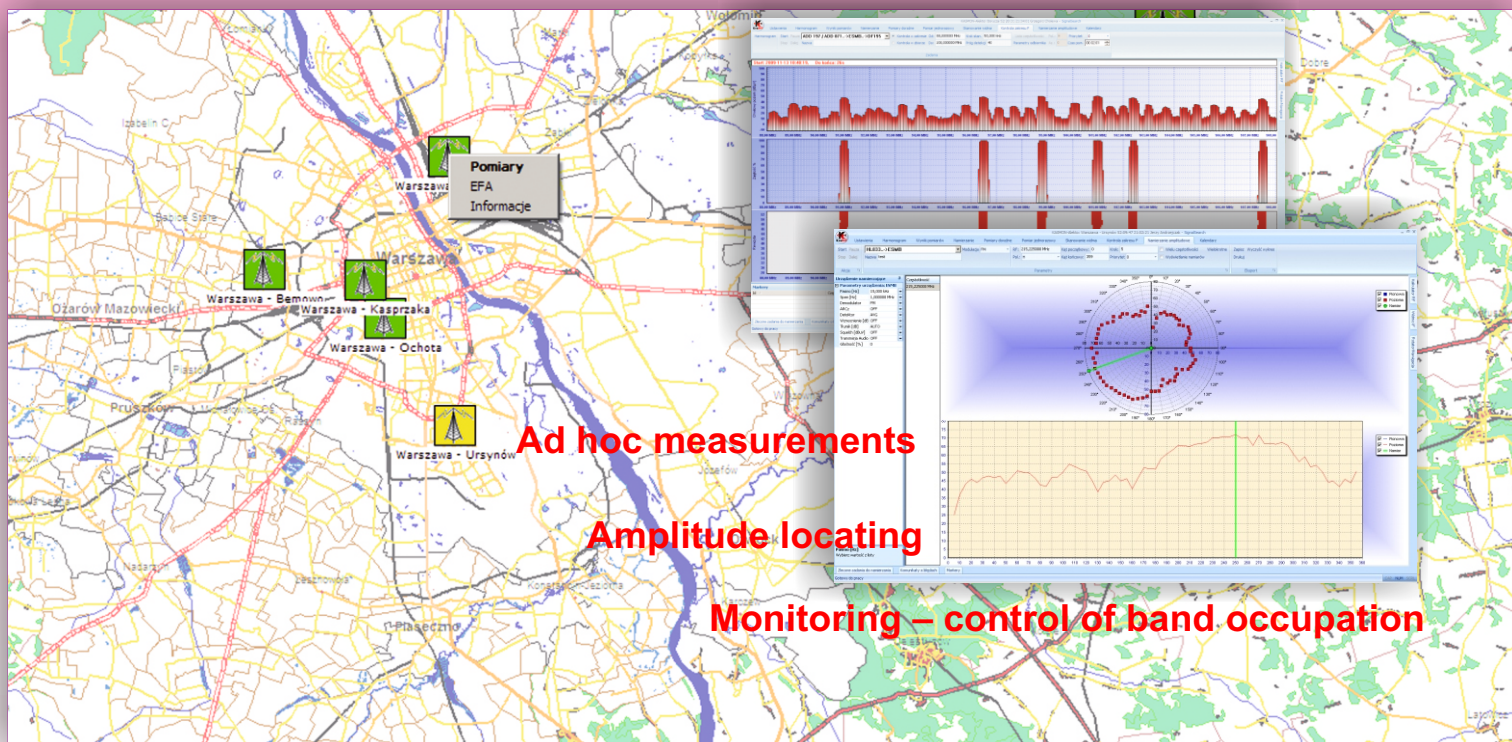
Software stucture

The software controlling KASMON is built in a multilayer architecture. Three components may be running implemented at each control position of the monitoring station: local data base, remote access (*server application*) and, if required, the client application. This architecture is applied both to work on-site and for remote work.

FEATURES

- Tool for checking of radio spectrum.
- Radio station direction finding.
- Automatic measurements of radio emission.
- Client-server architecture.
- Dispersed data base.
- Measurements in real time.

**1ST Industrial Security Certificate
License MSWiA #: B-008/2006
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NCAGE 1167H

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

AC 057
QMS

ZJZ

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CERTYFIKACJA SYSTEMÓW ZARZĄDZANIA

Ad hoc measurements

Amplitude locating

Monitoring – control of band occupation

Software functions

- Manage permissions and access to the station.
- Station configuration management.
- Management of defined measurement procedures.
- Executing and scheduling of measurements.
- Detection of illegal emissions.
- Monitoring and analysis of the bandwidth occupation and frequency.
- Radio direction finding and location of emission sources.
- Amplitude radio direction finding by the antenna rotation.
- Direction finding scheduling of emission sources.
- Registration of received signals and binding of records with measuring and locating tasks.

Measuring function

- Width measurement of the emitted spectrum.
- Measurement of frequency carrier and permissible deviations.
- Electro-magnetic field strength measurement.
- Measurement of averaged signal level.
- Modulation parameters measurement.
- Measurements using the mask.
- Preliminary classification of the measurement results.
- Visualization of data from measuring devices (*also remote*).
- Preview and subjective evaluation of measured emissions (*also from remote receivers*).
- Reports generation with the results of the measurements.

Functions of the client application

- Interaction with user (*tasks commissioning, data input*).
- Visualization of results and equipment operation –reports printouts.
- Application server functions (*remote access*).
- Supervision of the multi-access to the equipment and settlement of conflicts in access to devices.
- Implementation defined schedules.
- Recording of results to files and data base.
- Required data transfer to the client application.
- Data replication to a central database.
- Configuration data replication from the central database.