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«Development of a module for broadband detection of digital
transmissions for a radio broadcast monitoring system using parallel
computing means»

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Problem statement

- Problem statement
- Task 1
- Task 2
- ...
- ...



Solution methods

- The main problem is the search for digital modes of transmission in the entire shortwave band.
- The purpose of the study is to develop a module for broadband signal detection operating in real time and integrate it into an operating radio monitoring system.
- The methodology of the work includes an analysis of the literature of foreign and domestic authors on solving monitoring problems, methods for detecting signals in the short-wave range; method of systematization and generalization of facts about the problems of choosing software and hardware for broadband signal detection.



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Conclusions

Results, implementation

- The features of short-wave communication have been studied, and the choice of comparison of signals has been made in this paper.
- The choice was made taking into account the computational complexity of the algorithms.
- Modules of broadband and narrowband signal detectors have been developed, the places of their integration into the existing radio monitoring system, as well as interfaces for their interaction, have been determined.
- During the pilot industrial operation the developed modules effectively coped with the solution of the problems of radio monitoring of the short-wave range in real time, so appropriate conclusions are formulated.

Contacts

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