Annotation

The final qualification work of the bachelor in the field of «Radio-engineering, Electronics and Telecommunications» on the topic « Transmission of IP video surveillance information via communication radio-channels» solves the task of ensuring the safety and protection of facilities starting from large enterprises and ending with the protection of private perimeters. This has become one of the most effective types of protection, which includes various means of protection and security.

This graduation project involves the design of wired / wireless information transfer via IP-video surveillance. The designed project is not tied to any particular place and can be used both in the office and in production. A typical case of equipment placement at the facility will be considered and may change depending on configuration of the office space. Example: IP-video surveillance solution in the office of the city of Almaty. For the implementation of the project, the choice was made in favor of a digital video surveillance system. Since they are most often implemented in more complex security systems.

In the course of the thesis, many different methods of communication transfer were used, as well as special equipment were selected and their compatibility with each other for the implementation of the project was examined. In addition, calculations were made of the probability of errors in the communication radio channel and the noise immunity of the channel itself. When developing the project, economic data was calculated, which, together with technical indicators, demonstrated the profitability of the project in the domestic market. A study was also conducted on the life safety of working conditions of workers inside the office building, which made it possible to minimize the risks to the health of workers and provide a favorable environment for safety in the room.

This project will remain relevant for a very long period of time, with an increase in demand not only within Kazakhstan, but also in the global market as a whole.