

## **Annotation**

In this thesis project, a computer-integrated pyrometer with the function of data transmission to a user device in the form of a smartphone based on the Android operating system was designed.

The first chapter analyzes the theoretical foundations of non-contact temperature measurement. Different methods of temperature determination are considered. Ready-made models of pyrometers are collected and analyzed, and a comparative characterization is created. In the next section, ready-made sensor options are considered for use in this project. The parameters of the future pyrometer based on the selected sensor are also calculated. Creation of functional, structural and schematic diagrams. In the third section, a case for the device was designed based on the selected elements of the device, taking into account their installation by a person, not a robot.

*Keywords:* non-contact temperature measurement, pyrometer, visibility index, microcontroller, sensor.