

ABSTRACT

The purpose of the master's dissertation is to develop a thermal imaging system and application for smartphones, which can be used not only in the audit of heat consumption of buildings, but also practically used in various fields.

The content of the master's dissertation contains an introduction, four sections, conclusions, a list of sources used in the study and appendices. The work is presented on 73 pages, contains 28 figures and 28 tables.

Within the framework of this master's dissertation the research of theoretical bases of thermography was carried out, the functional scheme of the device was developed, the thermal imaging system was constructed and the mobile application for convenient control of the device was developed, ordinary users in everyday life.

Keywords: thermal imaging system, thermal imager, heat loss, mobile application, thermal imaging vision