

Review of Master Thesis:

Cooperation of Home Automatization Systems with Sensors in IoT Networks

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Reviewer: Ing. Martin Mudroch Ph.D.

Assignment:

The assignment has standard difficulty for master thesis and leads to an attractive and practically usable final product.

Technical level:

The final work contains mainly description of the KNX protocol and the network technologies. I would expect broader discussion about possible solutions. The original ideas are mentioned mainly in the chapters 3, 4.3 and 4.4, 5.3, Conclusion and Appendixes. It is not clear, why this particular solution with the KNX and the LoRa protocol has been chosen among other existing technologies. I am not sure about usability of proposed scenario when somebody introduces data collected from remote (kilometers) power meter into Home Automation Network – why would anybody wanted to do this?

Formal and language level:

The language of the thesis and the style of citations should be vastly improved. There is a lot of sentences which does not make sense because of typos (which may also be considered as grammar mistakes), redundant words in sentences etc. The selection of some English terms is not usual.

The bibliography does not conform to any standard. There are some errors in figure referencing. The quality of some figures (especially copied from another sources) should be improved and the source should be cited properly – almost all figures copied from external sources have no citation! The different aspect ratios of figures also does not look well.

Questions for the defense:

1. Why do the work deals only with LoRa networks when the assignment tells the solution should use SigFox technology?
2. Why is it used RT5350F board as an interface between meter and wireless transmitter? Is it enough power efficient solution for IoT? How is this solution powered?
3. Why is it used KNX and LoRa protocol? Have you considered also other existing technologies for wireless transmission and home automation?

The overall evaluation:

Based on the previous comments I evaluate the thesis with classification grade **D - satisfactory**.

Signature – Martin Mudroch