

ABOUT HOLOSYS

Holosys is a Croatian manufacturer of advanced electronic and ICT products and solutions in the field of AMR (Automatic Meter Reading). We've been producing and implementing AMR systems since 2005, and the quality of our devices and our knowledge, gained through many successfully delivered projects, made us a reliable partner in even the most difficult AMR implementations. Our AMR devices are based on international standards M-Bus and Wireless M-Bus (EN 13757), and are tested and certified according to EN 301489, EN 300220 and EN 60950 norms, and are CE marked. Our products belong to one of four delivery categories:

- implementation in Automatic Meter Reading systems for household meters and distribution companies (gas, electricity, water, heat,...)
- implementation in gas-infrastructure systems and monitoring of large gas consumers
- implementation in energy efficiency and energy management projects
- specialized AMR modules (for Elster, Itron and Sensus meters)

Apart from electronic devices, we also develop software packages for consumption monitoring, both for energy/water distribution companies, and for individual consumers or companies who want to monitor their internal energy consumption for energy efficiency purposes. Our HoloAMR energy monitoring system is delivered as a Software As A Service system.

Our Project delivery portfolio consists of consulting, design, implementation and maintenance of energy and water consumption remote reading systems.

Energy Efficiency

Automatic Meter Reading in City of Rijeka



In Croatian City of Rijeka in 2014, at that time the largest single remote meter reading project for energy management purposes, delivered by a single equipment manufacturer and supplier, was implemented. The goal of the project was to gain insight into consumption and production of energy and water in real-time, in order to answer the basic questions for planning improvements in energy efficiency: where, how, how much, when and why are we consuming energy and water, and exactly which energy sources are being consumed. The result of such an approach is the implementation of an energy management system which will give the parameters needed for further steps in improving energy characteristics of public buildings and introducing new technologies, in order to reduce overall energy consumption. Besides, this project enables the City of Rijeka to be compliant with Croatian law on energy efficiency, which states that all public buildings with yearly spending on energy and water that exceeds certain amount, must have a remote meter reading system installed and sending data on an hourly basis to the central governmental energy management software.

The automatic meter reading project in City of Rijeka is part of a larger project called „iUrban“, implemented by 9 partners from 6 European countries, and financed from EU's FP7 fund. Croatian project members are City of Rijeka and Energo (Rijeka's gas and heat distributor). The primary goal of the project is to create and test new energy services in 2 European cities: Rijeka (Croatia) and Plovdiv (Bulgaria). The scope of implementation in Rijeka included:

- installation of an AMR (Automatic Meter Reading) system in 26 public buildings (theatres, schools, kindergartens, heating stations,...)
- implementation of remote meter reading in real-time, with 1 minute resolution, for electricity, gas, water, heat and heating oil consumption
- software implementation of an energy management system
- creation of a database with historical data on energy consumption

The task of delivering the needed AMR equipment and information systems, as well as their implementation and integration, was assigned to Holosys. For AMR system implementation, Holosys M-Bus PulseReader, Wireless M-Bus PulseReader, Wireless M-Bus Repeater WREP, Wireless M-Bus Receiver WR and M-Bus Master M250GL devices were installed. At the end of the project, altogether 102 meters were under constant real-time monitoring:

- 25 x electrical energy consumption
- 5 x electrical energy production (PV and cogeneration)
- 25 x water consumption
- 16 x gas consumption
- 26 x heating energy consumption
- 5 x heating oil consumption.

As well as installing the AMR equipment in the City of Rijeka's and Energo's buildings, Holosys implemented and integrated 2 software solutions which consume and interpret the data from the AMR infrastructure:

- AMR infrastructure monitoring system
- Energy Management Information System

And apart from the two software systems mentioned above, the meter data is also forwarded to Croatian national energy management system (www.isge.hr), and iUrban project's energy consumption database. In this way, all expected functionalities are implemented, and now the system is ready to include the buildings which do not have AMR equipment installed yet – the architecture and scalability of Holosys solution make it easy and feasible.

