



Heat Metering

Business Sector: Education

**Project Implements
heat network regulations**

Northumbria University

“The wireless heat meter proved itself simple to install as we didn’t need any specialist skills or tools. It just clamps onto the pipe then we connected the power.”

Excessively high energy consumption and environmental considerations, induced Northumbria University to monitor all campus boilers. It was important to know how much energy was required to heat individual campus buildings plus reduce downtime of the heating and water systems.

Project Objectives

Customer needs:

- ✓ Understanding consumption
- ✓ Reduce high utility costs
- ✓ Optimise efficiency
- ✓ Identify waste

Project Outcomes

Utility £'s
cost reduced

Consumption
visualised and reported

To that end, University estates staff called in Invisible Systems Ltd. Using a combination of RF wireless transmitters and simple clamp on flow and heat meters, kWh consumption along with flow and return temperatures, is displayed allowing the separate buildings to operate in an efficient and environmentally friendly way.

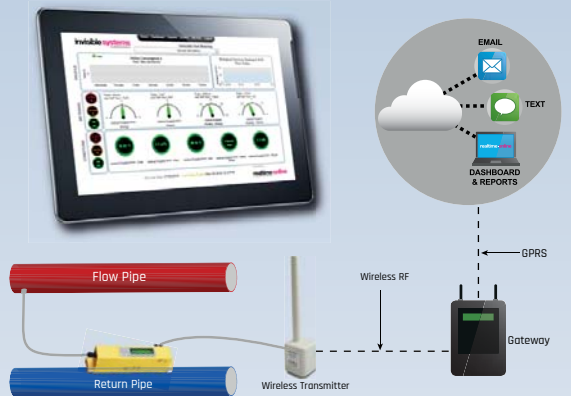
The site's operational consumption is now visible, highlighting where energy use can be reduced and where costs can be saved. If individual buildings were not in use, the flow of gas or water could be shut off and considerable savings made.

“With just 2 heat and flow meters installed, the site now has full visibility of gas use and has significantly reduced utility costs.”

System Solution

The installation comprises of clamp on Heat Meters, Modbus transmitters and Realtime-Online cloud software. By using the existing GPRS Gateways, already in place at the University, this provided a simple and cost effective project.

The solution provided implements the Heat Network (Metering and Billing) Regulations 2014, required in the Energy Efficiency Directive (EED) with respect to the supply of distributed heat, cooling, hot and cold water.



Benefits

- Flow rates
- kWh consumption
- Flow & Return Temperature
- Continuous reporting
- Realtime reporting

Compatibility

- Wireless RF sensors
- Condition Monitoring
- Energy monitoring
- Realtime-Online™ web browser

Invisible Systems is a software & electronics design manufacturing company that focuses on Energy Saving, Compliance and Asset management via robust RF wireless Monitoring and Energy solutions with our Realtime-Online software management portal.

Our solutions include Energy metering, Critical Asset management, Boiler Control, Water Hygiene & Food temperature compliance, plus general condition monitoring and control.

