

Sontay System is a Success at Maltese School

A primary school in Malta is now benefitting from closer control and improved energy efficiency through a sophisticated Building Energy Management System (BEMS). The new system features 60 innovative ModBus Smart Communication Sensors from Sontay, which were installed by Engineering Science and Industry (ESI Malta), one of Malta's leading systems integrators.

The objective of the project was to install a BEMS that could accurately monitor performance and apply predefined operational rules, automatically. It is extremely important for the primary school to have a fully connected system that is able to communicate across all platforms. The installation was done throughout the building and the school management team is using the project as a pilot scheme.

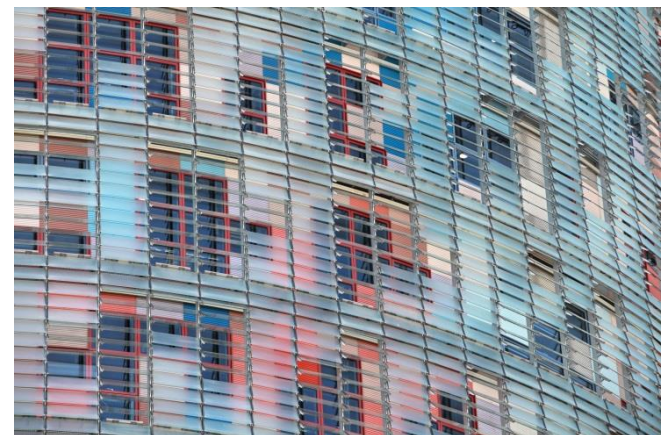
"The Sontay Smart Communication Sensor was the ideal choice for this project," comments Trevor Buhagiar, Business Development Manager at ESI Malta. "First of all, the room sensor offers total environmental sensing in just one single product, which made the installation process simple and cost-effective. Its ability to send data back to the BMS controller over a BUS network was also an important factor and resulted in eliminating a lot of cabling."

The sensor monitors air quality in real time and, when it goes beyond acceptable levels, it automatically starts the ventilation system, which forces fresh air into the room. The system will then continue to fill the room with fresh air until the quality of air returns to an acceptable level.

In each room, temperature and humidity are also monitored by the sensor. In the winter when the temperature decreases, the system recognises that the room is occupied and will then turn on the heaters in order to maintain a warm, comfortable



Example School Classroom



Example Louvered Windows

The Sontay Smart Communication Sensor



environment. During the summer, when the sun shines directly into the room, the BEMS will move the external mounted louvers. This will mean that the room is shaded from direct sunlight and can be kept as cool as possible. The sensors are also communicating with the lighting system to inform about occupancy and light levels within a classroom.

Thanks to the Smart Communication Sensor, the school management team is aware of the conditions and status of every classroom. They know the energy being produced by the PVs installed on the roof and on the inner yard walls. It also gives them the ability to compare this to the energy being consumed, by each system. The BEMS will provide essential information to the building engineers, which will be able to create an energy performance profile for different periods of the year. This will be the tool to manage and control our schools and buildings in the future.

Trevor continues, "Reports show that since the installation in December 2015, the Smart Communication Sensor is performing very well. With the 24/7 control, it means that if we come across another application where we need to measure temperature, relative humidity and CO2 within an area, we will definitely use the Smart Communication Sensor again, along with the same approach."

The Smart Communication Sensor operates over either BACnet or ModBus protocol. It can monitor temperature, RH, CO2, CO, air quality, light level and occupancy, therefore demonstrating that its all-round ability is perfectly suited to school and commercial buildings. The Smart Communication sensor also offers user interface options such as setpoint, fan speed and momentary switches, with both LED and LCD indication also available.

“

The Sontay Smart Communication Sensor was the ideal choice for this project ... the sensor offers total environmental sensing in just one single product, which made the installation process simple.”

Sontay ... project key facts

The Project

- Primary School in Malta
- The installation need to be done throughout the building
- The school management team is using the project as a pilot scheme.

The Requirement

- A BEMS that could accurately monitor performance and apply predefined operational rules automatically
- A fully connected system that could communicate across all platforms

Sontay Products Used

- 60 ModBus Smart Communication Sensors

For further information, please contact:

Anne Avis, Marketing Assistant
Sontay Ltd
Four Elms Road
Edenbridge, Kent TN8 6AB
Tel: +44 (0) 1732 861200
Fax: +44 (0) 1732 861201

Jeff Hayward, Director
Wildwood Public Relations Ltd
The Stables, Meadow Court, Faygate Lane
Faygate, West Sussex RH12 4SJ
Tel: +44 (0) 1293 851115
Fax: +44 (0) 1293 852448