

Wireless control for high-end London property

With **cns-enocean**™, the wireless energy harvesting device network solution for Niagara, Control Network Solutions (**CNS**) brought extra control to a high-end residential property in the borough of Kensington & Chelsea in London. Imperium Building Systems Limited used this innovative solution to install an EnOcean wireless control system that fully integrates with the existing building systems into a seamless control solution.

By Mike Welch, Managing Director, Control Network Solutions Ltd.





EnOcean wireless temperature and humidity sensor



EnOcean wireless valve actuator



cns-enocean connectivity kit

Imperium Building Systems Limited, a specialist building technology contractor, was tasked with designing and implementing a system to take control of the radiator heating and air conditioning control throughout the property. The new system was also required to link to an existing AV home automation system, all whilst causing minimum disturbance to the building owners and the fabric of the building.

Request for integrated control

Before Imperium upgraded the system, the high-end residential project with twenty rooms across five floors had multiple control solutions: a Niagara system controlling the base HVAC plant, an air conditioning control system and an AV/Home Automation solution with none of them interacting with each other.

The new system was required to link all the elements together so they could communicate as one. The solution also needed to be wireless so it would cause minimal disruption to the homeowner and the building.

Seamless connection

Imperium chose solar-powered EnOcean Wireless Mini Temperature/Humidity Sensors, which accurately sense the temperature and humidity within a room space and report back to the Niagara system with minimal maintenance requirements. Battery-powered Thermokon Wireless Actuators were also

installed, which communicate directly with the Niagara system and control the heating system. The cns-enocean wireless connectivity kits for Niagara provide seamless Ethernet connection between the EnOcean wireless device network and the Niagara control system.

“Once the cns-enocean connectivity kits were adequately positioned, the thermostatic radiator valves on every radiator were replaced with the EnOcean wireless control actuators. The Niagara system was then updated so the room temperature could be accurately controlled. The air conditioning and AV system was also interfaced into the existing Niagara solution at the same time using BACnet, so everything could work in harmony,” says Steven Crocombe, Director at Imperium Building Systems Limited.

Savings in cost and energy

Now the property operates as one seamless system. By using a Niagara native wireless solution, an estimated £25,000 has been saved compared to using a traditional wired system. The homeowner has saved on the installation cost as well as reaping the energy and cost savings associated with an integrated control system.

www.control-network-solutions.co.uk
www.imperium.systems

