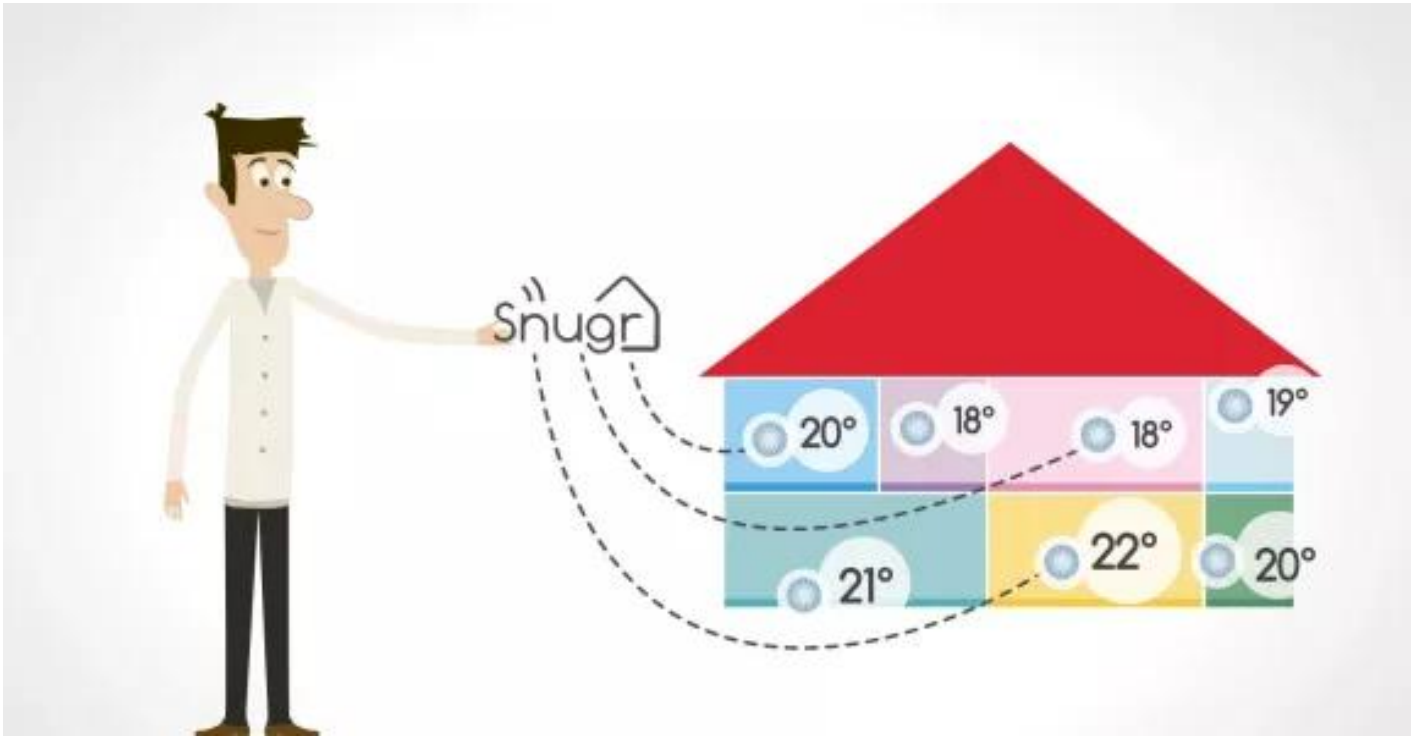


Home and building automation provider 4INCH reduces heating consumption with intelligent thermostatic valve SNUGR

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4INCH's SNUGR product range makes it possible to easily reduce heating consumption of large buildings. The system makes use of connected motorized radiator valves and a central software application to allow each room to have the right temperature at the right time.

This case is one of the 15 smart product examples we have compiled for you in the Smart Product Inspirator

Discover all 15 examples

4INCH is a Belgian company active in the field of home and building automation, specialising in the management and optimisation of heating in large buildings. The SNUGR product range makes it possible to reduce heating consumption, which in turn reduces heating costs, reduces the

environmental footprint and increases comfort in the buildings equipped with it.

Why this smart product

With soaring heating bills and current climate issues, it seemed clear to 4INCH that technology had a role to play and could be used for more than just creating luxury products or gadgets. Solutions do exist, but optimal management of the heating of a building is often expensive, complex to use and often major works are required to equip old buildings. 4INCH wanted to create an easy-to-install and easy-to-use solution that would allow anyone to reduce their energy bills and carbon footprint while increasing their comfort with an easy to use solution.

Value for the customer

Conventional centralized heating management based on one single thermostat does not take into account the needs of all the rooms. SNUGR makes use of connected motorized radiator valves and a central software application to allow each room to have the right temperature at the right time, depending on its real use and occupancy.

Customers who installed SNUGR in their buildings typically benefit from a reduction in heating consumption of between 20% and 40%, a return on investment of between 2 and 4 years thanks to the savings made, increased comfort thanks to room-by-room temperature management, adapted to the use and occupancy of each room. In addition, the system helps to reduce the ecological footprint of the buildings in which it is installed.

Technology behind smart product SNUGR

SNUGR is a work-free heating management and optimisation solution, compatible with most heating systems, that integrates hardware (connected thermostatic valves, temperature sensors, etc.) and software (user interface and optimisation algorithms). 4INCH has developed all the software (user interface, control algorithms, backend) and most of the hardware components of the solution. The hardware consists of gateways, valves (energy self-sufficient thanks to the Seebeck effect), temperature sensors, underfloor heating control boxes, circulators, unit heaters and boilers. The devices use EnOcean wireless technology for low-power communication with the gateway. The gateway communicates with the cloud, which also hosts the user interface. The user interface is a web application that can be accessed from anywhere using a computer, tablet or smartphone.

Capturing revenue

The Snugr solution attracts customers who are convinced of the benefits of an integrated solution over a less integrated and less connected alternative. It also builds customer loyalty through the experience of user comfort and energy savings. Finally, all the data collected and customer feedback provides guidance for the development of future products and services. The initial cost of the solution is for the necessary equipment and installation. In the B2B sector, additional functionalities are offered through subscriptions.

Next steps

4INCH continues to research and develop new features, increase the number of devices that can be managed by SNUGR, and launch new products such as a smart metering and energy billing

solution.

Smart Product Scenarios

To enhance your chances of success and guide your smart product innovation, Sirris offers you practical tools and guidelines. Our **Smart Product Inspirator** provides you with a framework for identifying valuable smart product ideas based on the 5 most common scenarios and 15 smart product examples illustrating these scenarios. With these carefully analysed scenarios we help you uncover the potential for success . The key scenarios for 4INCH's SNUGR product are: '**Smart autonomy** ' and '**Digital user interface** .

Authors



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