NAS Nordic Automation Systems

Press release

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The first LoRaWAN remote energy monitoring solution in Estonia, implemented by Nordic Automation Systems and Fortum

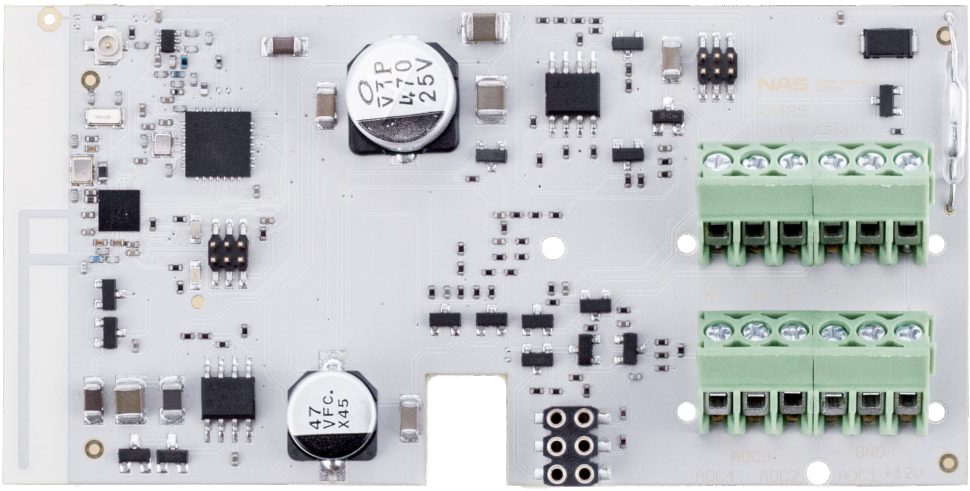
The Internet of Things (IoT) technologies will continue to grow in 2017 with the utility sector to drive the highest adoption of IoT applications. Smart meters are becoming the top IoT device among utilities, allowing easy monitoring and managing the energy usage on a daily basis.

According to the report by Grand View Research, the global market of Smart meters in IoT applications will reach 165.5 million units by 2020, while global energy demand will increase by 37% by 2040.

In the utility sector, the increasing demand for eco-energy solutions will put a pressure on utility companies to find better solutions for their consumers, which likewise add a growth to the smart meter market.

Together with the leading international clean-energy company Fortum, the IoT product developer and solution provider Nordic Automation Systems has developed the first LoRaWAN sensor to transfer consumption data, where remote reading modules are installed to the existing heat meters.

“LoRaWAN modules for Kamstrup enables us to read beside energy also temperature, capacity and pressure,” says Indrek Hagu, the representative of Fortum Tartu.



LoRaWAN modules for Kamstrup heat meters

In addition to the fact that customers do not need to record their readings every month manually, Fortum can also analyze the district heat substation parameters and act instantly when needed. It is also essential to bring out the network monitoring ability through consumer measuring point.

“LoRa technology allows similar remote reading as we are already using (Ethernet, GSM). However, the key factor to LoRaWAN use is the independence of external power supplies. This means that the readings are documented to the remote reading module, which guarantees almost 100% accessibility to data,” adds Mr. Hagu.

Furthermore, it is important to mention the cost-efficiency that LoRa technology provides, since there are no network fees as in the GSM connection.

Nordic Automation Systems founder Viljo Veesaar said, “We are glad to collaborate with Fortum to develop a LoRaWAN-based heating energy monitoring solution, which will make energy consumption more efficient and allows consumers and companies to have a clearer understanding of their energy usage.”

LoRaWAN Multical Reader provides real-time consumption data and a detailed usage overview, which is gathered wirelessly and processed automatically. The sensor enables the acquisition of heat consumption data from Kamstrup Multical series heat meters and is meant to be attached to the exisiting heat meter as an internal module.

At the end of the year there will be installed 300-400 sensors to Fortum customers heat meters in Tartu, Estonia.

About Nordic Automation Systems

Nordic Automation Systems (NAS) is an industrial automation company, creating sensor technologies, data analysis and monitoring solutions. NAS is one of the world’s leading provider of full vertical LoRaWAN solutions: sensors, gateways and Cloud – plug & play. LoRa technology enables them to provide end-to-end LoRaWAN – smart metering, smart monitoring, smart city and industrial IoT applications. The company is operating in Norway and Estonia, employing 25 specialists in its production and development units. NAS is the technology partner for telecom and IT infrastructure provider Levira to offer IoT services in Estonia.

Nordic Automation Systems is a member of LoRa Alliance, an open non-profit association of members who will collaborate to drive the global success of the LoRa technology. For further information, please visit NAS website at www.nasys.no.

About Fortum

Fortum is international clean-energy company that provides its customers with electricity, heating and cooling as well as smart solutions to improve resource efficiency. Fortum wants to engage their customers and society to join the change for a cleaner world. They

employ 8000 professionals in the Nordic and Baltic countries, Russia, Poland and India, and 62% of our electricity generation is CO2 free. More information www.fortum.ee.

About LoRaWAN

The technology used in a LoRaWAN network is designed to connect low-cost, battery-operated sensors over long distances in harsh environments that were previously too challenging or cost-prohibitive to connect. With its unique penetration capability, a LoRaWAN gateway deployed on a building or tower can connect to sensors more than 10 miles away or to water meters deployed underground or in basements. The LoRaWAN protocol offers unique and unequaled benefits in terms of bi-directionality, security, mobility and accurate localization that are not addressed by other LPWAN technologies. These benefits will enable the diverse use cases and business models that will grow deployments of LPWAN IoT networks globally.

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