



"Green Label" Technology for a More Sustainable Pig Farming

Greenhouse gas emissions have increased year after year and resulted in some worse consequences in our ecosystem. To reduce greenhouse gas emissions and create a more sustainable development environment, the Dutch government published a certification scheme of "Groen Label Kas" (Green Label Greenhouse), which aims to encourage farmers to develop the sustainable agriculture.

KEY WORDS

- Air Quality Control (CO, NH3, NO2, CH4, etc)

HARDWARE LIST

- Ursalink UG87 LoRaWAN Gateway (Indoor)
- (What is LoRa Gateway?)

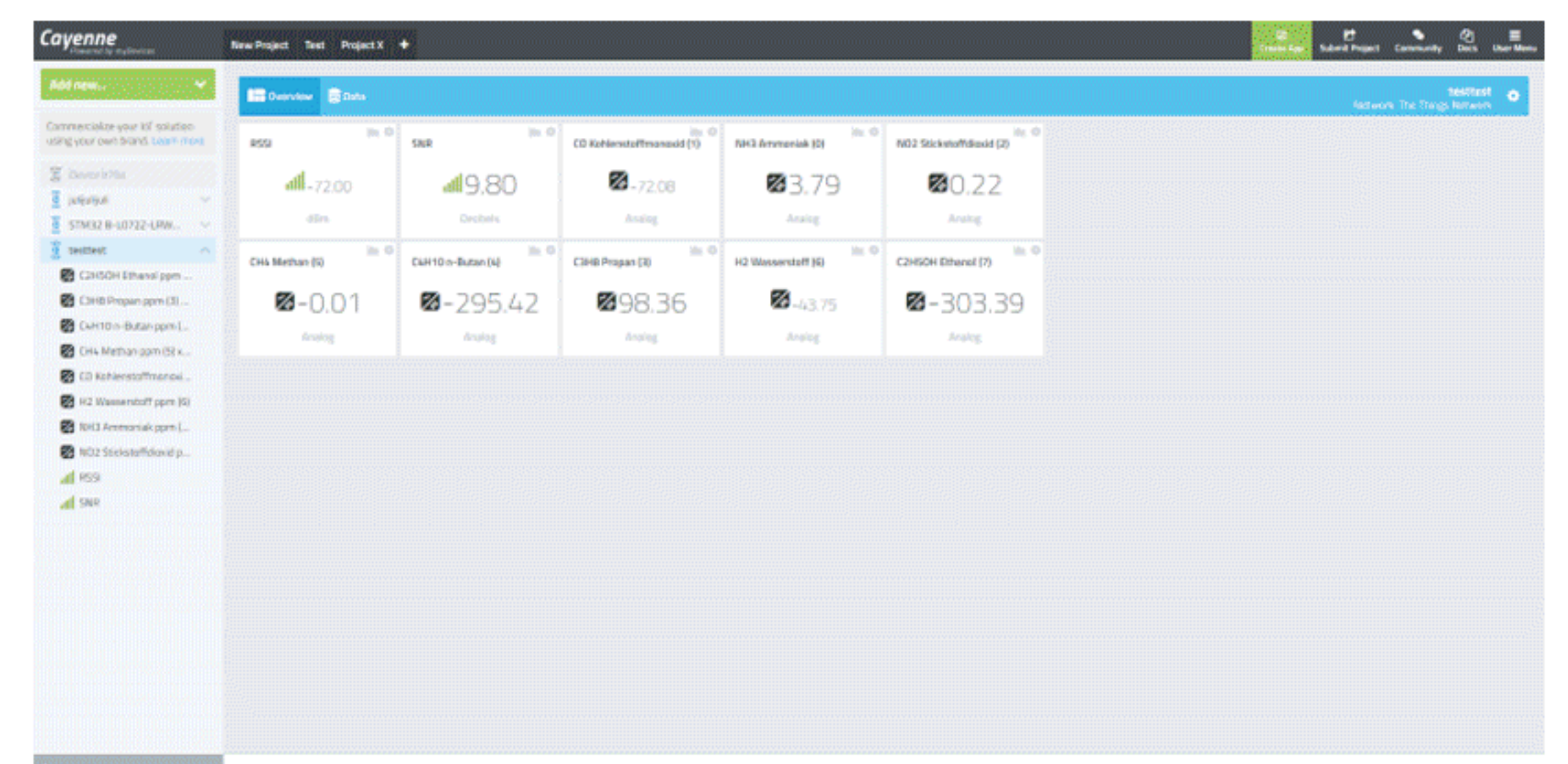


SOLUTION

Recently, our partner Het Internet Huis has helped the Dutch farmers to retrofited a traditional pig farming into an IoT-based one. The refinement ended up with getting the "Green Label" certification from the Dutch Government and contributes to the sustainable development of agriculture.

The solution is composed of Ursalink UG87 LoRaWAN Gateway (Indoor), LoRaWAN gas sensors (CO, NH3, NO2 ...), The Things Network (TTN) and myDevice Cayenne. In this application, gas sensors collect all kinds of air quality data and send it to UG87 gateway through LoRa technology. The UG87 works as a packet forwarder and delivers all data to TTN directly. Users can browse the data on Cayenne dashboard then.

DEPLOYMENT



Benefit

Cost Reduction

Farmers can receive subsidy from the federal department, reduce business overheads and deploy more sensors and end nodes to the legacy system for further large-scale development.

24/7 Pig Health Analysis

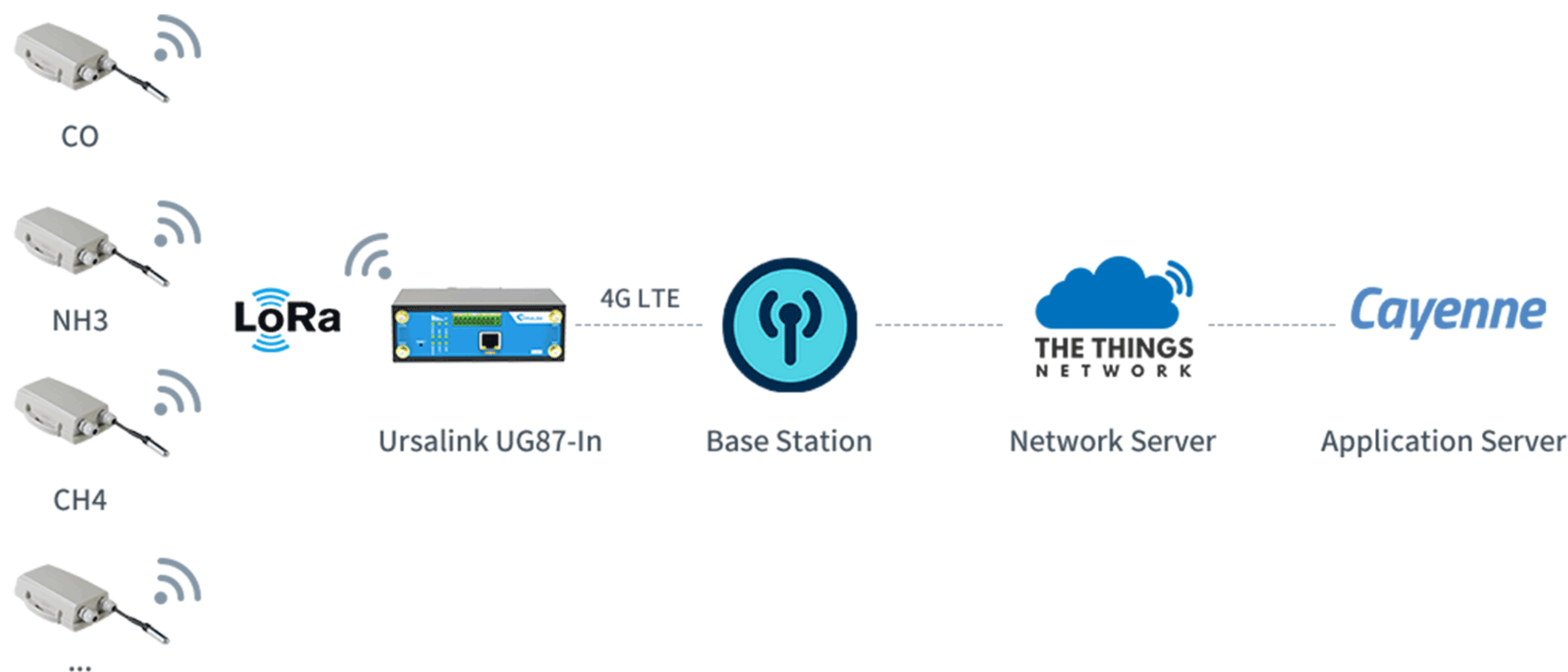
With the lorawan-based monitoring system, farmers can keep accurate records of air quality inside pig farm, reduce greenhouse gas emissions to an appropriate range, and get pigs' health under control at affordable price.

Real-Time Air Quality Control

Air quality is a critical component of managing agricultural businesses. The high level of CH₄ and CO can be harmful to pigs' survival and needs to be eliminated in time to prevent losses.

Standard Operating Procedures under "Groen Label Kas" Requirement

The system has been certified by the Dutch government as Green Label Technology considering its prompt assessment and real-time response to the changes of air quality.



About Het Internet Huis

Technology has a major impact on the lives of citizens and on companies. Everything is connected or will in the near future be connected with the internet. Het Internet Huis is an R&D company supporting companies and farmers to connect things to the internet and help them to optimize processes based on data.



Ursalink Technology Co., Ltd.

Tel: 86-592-5023060

Fax: 86-592-5023065

Web: www.ursalink.com

Email: sales@ursalink.com