

Tekelek lowers IoT development costs by 50% using Kerlink Reference Design

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Tekelek – a leading developer and manufacturer of sensing and tank monitoring solutions for oil, gas, chemicals, ad blue, agriculture and water industries for more than 20 years – needed to quickly design and build a connected remote-metering solution to support high-growth sales opportunities. Tekelek required cost-effective Internet of Things (IoT) technology for its high performance tank monitoring sensors supporting transmission in difficult, remote, industrial locations. So Tekelek turned to Kerlink for best-in-class reference designs, hardware, LoRaWAN® IoT connectivity and technical services. With Kerlink's help, Tekelek rapidly created high quality, secure solutions and saved 50% in IoT development costs.



Company name: Tekelek
Headquarters: Shannon, Ireland
Year founded: 1995
Employees: 200
Size: 3 million tank monitoring sensors deployed
Countries: 24 countries with deployed devices
Offices: 4 locations worldwide

Tekelek leads with IoT

Tekelek is a 20-year old European manufacturer of sensing and tank monitoring solutions. By offering innovative IoT applications with its devices, Tekelek has become the number one supplier of ultrasonic tank monitoring devices in Europe with over 3 million devices in the field. Tekelek is a leader in its industry by combining communications technology and deep manufacturing knowledge to a set of innovative applications for monitoring liquids, liquefied petroleum gas (LPG), waste oil, water, chemicals, fuels, lubricants and more.

Tekelek has designed, tested and built many IoT-enabled products to support its customers' requirements for top-quality, affordable, secure

monitoring. However, the traditional design, testing and building of a connected product can take many months, especially when a customer has specific requirements associated with high-quality bi-directional communications protocols, complex implementations, battery longevity, device autonomy, rugged operating environments and more. To satisfy its growth opportunities, Tekelek needed a rapid way to design specialized tank remote monitoring devices. And it wanted to build the solution with a viable, well-supported, secure alternative to traditional cellular technologies.

Kerlink provides Reference Design and LoRaWAN® solution

So Tekelek turned to Kerlink to provide a solution of industry-leading tools and services. The combination of Kerlink's Reference Design, Wirnet™ Stations and LoRaWAN® IoT connectivity enabled Tekelek to quickly design and produce remote-monitoring sensors and assure customers they could cost effectively deploy networks for monitoring tanks. Kerlink also provided services to facilitate good knowledge transfer between the teams and offered regular, on-site design expertise and technical support to ensure successful implementations. The first two solutions launched by Tekelek were the TEK 766, a remotely configurable tank level sensor with measurement sensitivity to 2cm and a 14-year battery life, and the TEK 790, an LPG tank level device with sensors for measuring temperature, pressure, compression and more. The TEK 790 is fitted with Kerlink's Wirnet™ Station 868.

"Kerlink's Reference Design dramatically shortened time to market for our new remote-monitoring

devices, and significantly reduced Tekelek's development costs and the number of personnel needed for the project," said Mr. Oliver McCarthy, Tekelek's General Manager. The Reference Design from Kerlink allowed Tekelek to quickly develop its monitoring solution to meet customers' requirements of high performance, security and cost effectiveness.

Tekelek was impressed with the best-in-class reference designs, broad range of hardware and technology expertise of Kerlink. "Kerlink was the right fit for us, because they are the leading experts in LoRa® communication technology, while Tekelek's core expertise is in applications that measure content levels in containers. Combining these essential strengths made the decision to work with Kerlink the obvious choice," continued Mr. McCarthy. Tekelek had several choices of IoT partners, but Kerlink's excellent technology services, deep implementation expertise and industry knowledge made a big difference.



**TEK 766 Ultrasonic
LoRaWAN® Tank Sensor**

Tekelek continues to grow

Tekelek believes that IoT solutions will continue to drive its business growth. It expects that future products will feature remote configurability, long battery lives and conformance with various industry regulations. To ensure Tekelek's position of being a leading global supplier of smart monitoring solutions, Tekelek plans to continue working on new products and applications in industries including chemicals, fuels, additives, water, waste and more by integrating excellent hardware with communication services and platforms.