

Customer Success Story: tiko

“Taoglas has proven to be a great partner for tiko in helping us to select and refine our antenna solution on a very tight timescale. Taoglas’ team were extremely responsive, clear in their communication thorough and resourceful in the investigations and fast in responding to tiko’s needs.”

Colin Howlett
CTO at tiko Energy Solutions

About tiko

With rising energy prices and a heightened awareness of the importance of air quality and reducing carbon emissions, property owners are seeking innovative IoT solutions for their building management systems, and tiko provides this.

tiko envisions a future where cleantech will have a lasting positive impact on our planet. Their technology seamlessly connects to existing electrical devices, such as electric heaters or heat pumps, and adapts them into internet-ready building management solutions. Thus, property owners can efficiently manage their assets, save on costs, and contribute to a greener future worldwide.



The Challenge

tiko’s solution delivers the benefits of convenience and energy savings to its end customers, while at the same time tiko provides grid stabilisation services to the grid operator ensuring the stability of the European electricity grid with its Virtual Power Plant technology by controlling the demand of connected appliances.

To create an energy management solution that was secure, low-power, and reliable, tiko looked to harness the power of cellular IoT. They wanted their solution to provide real-time monitoring and control of energy consumption, alongside detailed reporting, and analysis, to help users better understand their energy usage. All the while remaining at a cost-effective price for consumers. Cellular IoT answers these requirements, coupled with comprehensive coverage, and robust security that is backed up by expert network management.

This task required a host of hardware design and deployment considerations, so the tiko team worked with world-class IoT continuum partners, Orange, Sierra Wireless, LACROIX, and STMicroelectronics for an integrated, all-inclusive approach to LTE-M connectivity - a network technology dedicated to connected objects.

During their tests, the IoT continuum alliance found that the initial antenna placed in the device was subpar, with poor performance. They turned to their trusted RF and antenna partner Taoglas for a reliable and swift solution to the problem.

The Solution

Through Taoglas' extensive portfolio of advanced IoT antennas and world-class engineering, Taoglas quickly provided the IoT continuum with the antenna support they needed.

Following a series of EMC tests and technical engineering, Taoglas replaced and repositioned the previous antenna with the FXUB63 4G/LTE flex antenna, as it is highly efficient, wideband, lightweight, and ultra-compact. Additionally, it operates on greater than 45% efficiency on LTE bands from 698 – 3000MHz, so it is the ideal solution to offer reliable, fail-safe connectivity coverage on the 4G network.

“When the IoT continuum approached Taoglas, their Engineers were quick to understand the problem and gave a solution and resolution on time,” said Yigal Dadoun, Senior Sales Manager, EMEA, Sierra Wireless. “This, coupled with the IoT Cellular expertise that Sierra brought in with the IoT Continuum alliance in a single partnership aimed at accelerating Industrial IoT projects in general, reduced the inherent complexity and risk associated with the project.”



The Outcome

Working together and leveraging their respective expertise and technology to build the tiko energy management solution was a success. The IoT continuum, with the support of Taoglas, provided an end-to-end IoT solution that helped to integrate the various components and technologies into a seamless and easy-to-use solution. The partner's smooth collaboration ensured tiko had the space and time to focus on developing their unique, award-winning software.