

*“To build robust solutions you must ensure the antenna is optimized and that it’s never the weak link. Working with Taoglas as our antenna manufacturer gave us the confidence that our RF performance was as efficient as it could be. There has been a lot of synergy in the relationship. We were looking for high-quality, reliable antennas and we found them with Taoglas.”*

**Paul Mignot**  
Co-founder and CEO  
of Withthegrid

## Taoglas Helps Withthegrid Make Utilities Smarter

### About Withthegrid

As temperatures continue to rise and the effects of climate change become increasingly apparent, we know one of the biggest drivers of positive, sustainable change is IoT driven technologies. One of the areas IoT has the ability to completely transform is energy networks. To achieve a fully sustainable energy system, utilities need to provide a safe and efficient energy grid. Based in The Netherlands, Withthegrid has launched a low code asset monitoring platform to help utility customers transition to a fully integrated, intelligent grid. Through the use of connected devices, the company monitors critical infrastructure to detect anomalies and create follow-up actions for the technical personnel. “Our mission is to improve the efficiency and effectiveness of grid operators, as we see them as an important part of addressing climate change,” said **Paul Mignot, co-founder and CEO of Withthegrid**. “To do that, we ensure they are always in control of their grid by providing real-time insights of what’s occurring. Being able to monitor the grid constantly and consistently helps them become more efficient and reduce their operational costs. It also addresses the challenge of a quickly ageing workforce and lack of technical personnel.”

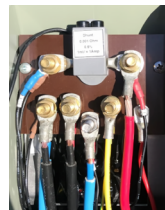
### The Challenge

To ensure its IoT solutions are reliable and able to help utilities detect issues more quickly, Withthegrid required a high-performance yet ruggedized cellular antenna to handle a wide range of environmental conditions, often found in metering applications. Withthegrid currently serves several utility customers in the Netherlands including Eneco, Stedin and Rotterdam District heating company and goals to further expand across Europe. Its current customers, which include utilities that manage energy grids, gas grids and district heating grids, rely on the company to monitor their grids for issues such as corrosion and leaks, transmitting the data back to Withthegrid’s cloud solution, where it’s analyzed. Sensors are spread throughout the country on various types of infrastructure, in areas with both strong and weak reception. Although the Netherlands is one of the most advanced mobile markets, with 4G connectivity in more than 90% of the country, there are still spots where coverage is weaker, and a robust antenna is a key requirement.

### The Solution

“Our main strategy in selecting an antenna was to choose the very best in the market, in order to strive for always-on connectivity,” Mignot said. Withthegrid tried other antenna solutions, ultimately selecting **Taoglas’ GSA.8822.B 4G/3G/2G LTE T-bar adhesive antenna** for the range of options available, and its suitability for both indoor and outdoor

applications. The low-profile antenna is IP67 waterproof, with 3M adhesive for easy installation and is available with any cable type and connector. Flexibility was key, as Withthegrid sensors are located in small buildings or on metal poles, and can be exposed to wind, snow, rain and other potential environmental issues.



### The Outcome

With Taoglas antennas, Withthegrid sensors are better able to collect and report data at varying frequency, from every five minutes to every four to six hours, depending on the application and location. Defined thresholds set by the utility determine if the grid is acting properly. If thresholds are exceeded, the utility is alerted if repairs or a manual inspection are needed. “Being alerted to a malfunction, such as a leak, means utilities can respond in real-time,” Mignot said, “but it’s also helpful for ongoing maintenance of assets. Instead of doing an annual check of assets, they are monitored consistently and in real-time. Utilities can use the data to monitor trends, to detect and predict future failures. Overall, the health of the grid is better.” Mignot said the process of working with Taoglas was seamless due in part to Taoglas’ global design including a lab, design and manufacturing presence in Taiwan, where Withthegrid sensors are also manufactured. “Utilities are continuously looking for ways to become more efficient and better manage their resources,” said **Samuel McCarthy, EMEA Sales Manager, Taoglas**. “By utilizing world-class antennas from Taoglas, Withthegrid is finding significant success in helping utilities achieve their goals.”

For further information about Withthegrid visit:  
<https://withthegrid.com/>