Qualcomm

IoT Segment
Electric Utilities

Gridspertise, fully owned by Enel, focuses on innovation, development, industrialization and operations of grid solutions to accelerate the electric future and the transformation of distribution grids worldwide, by building sustainable and reliable smart grids together, providing benefits for the entire electric ecosystem: utilities, Grid players, and, in particular, final customers. Gridspertise portfolio presents leading platform, IoT and edge computing solutions for the transformation of electricity distribution networks in three main areas: metering and grid edge digitalization, networks infrastructure digitalization, field operations digitalization.

Business Challenge

The energy transition is defined by two major trends, decarbonization and electrification. Moreover, climate change is posing serious challenges in terms of severe climate events and resilience of the electric infrastructure. In order to tackle these challenges, the power distribution grids need to go through a digital transformation to increase its flexibility, grid resilience and quality of service. This requires more digitalization and smarter grids.

Solution

Gridspertise developed the QEd - Quantum Edge® device, a revolutionary all-in-one solution that virtualizes key grid functionalities through customizable applications. Thanks to a multi-purpose platform and edge computing, the required components in the secondary substation as well as the number of field interventions can be reduced, making networks more efficient, sustainable and reliable. QEd is designed to progressively enable new functionalities way beyond grid automation.

Gridspertise chose to power the QEd with Qualcomm Technologies' latest IoT solution with a powerful Octa-Core ARM 64-bit processor, state-of-art connectivity including 5G and fiber optic, and cutting-edge compute and security capabilities. With Qualcomm Technologies' built-in AI engine, the device supports edge AI inferencing applications.

Impact

The QEd meets the evolving needs of distribution grids, which require higher levels of flexibility, also at the secondary substation level, to keep pace with energy and grid transition. Thanks to its distributed computing power, QEd processes data with lower latency directly in the secondary substation, performs on the edge network automation functions that extend the central IT platform enabling new use cases.

gridspertise
accelerating your electric future

Client

"Quantum Edge device represents a leap forward in network infrastructure digitalization, combining the most advanced technologies designed by Gridspertise with those developed by its ecosystem of partners.

We are proud to bring together our expertise with Qualcomm Technologies' leadership in wireless technology, to integrate QEd with the most up to date, secure, scalable industrial grade IoT solutions."

Robert Denda
CEO of Gridspertise