ENABLE

gridspertise

QEd 1000

Intelligence for your low-voltage grid.

Enabling real-time grid visibility and remote control

The **energy transition is redefining grid operations**. Utilities face **growing complexity** from **distributed resources**, **climate uncertainty**, and **limited visibility beyond the transformer**.

To stay ahead, they need **scalable**, **future-proof solutions** that enable **real-time awareness**, **faster decisions**, and **reliable performance** across the low-voltage grid.

Modular architectures and **edge intelligence** make it possible, **turning data into action**, and **visibility into control**.

Discover the Solution

Compact, modular, and powered by edge intelligence, **QEd 1000 captures the pulse of your low-voltage grid**.

Its embedded **virtualization technology** enables **multiple use cases within a single device**, by running **edge applications** that support **monitoring and control**, helping utilities **enhance reliability** and **reduce operational costs**.

By **capturing data from sensors**, **smart meters**, and **field devices**, QEd 1000 acts as the bridge between the grid and the central platform, turning raw information into **real-time awareness**.

Integrated with the **Smart Infrastructure Enabler**, it becomes part of a connected architecture enabling **centralized management of devices** and **edge applications**.

Modularity by design

Built to scale with your grid to match your evolving needs

Built-in Virtualization

Multiple Apps running on a single unit, saving space and cost while maximizing performance

Interoperability

Leveraging on standard communication protocols, it ensures compatibility with central systems and other field devices

Covered use cases

Where **edge intelligence** meets **real impact**. Powering a **smarter**, more **reliable grid**, **today**.

What it enables...

Real-time transformer supervision

Monitoring of transformer performance (temperature, load, condition) enabling early detection of overloads or overheating, **extending asset lifetime** and **reducing** unplanned **outages**

Low-voltage feeders monitoring

Continuous **visibility on LV grid parameters** (voltage, current, energy, breaker status) collected from circuit breakers and CT sensors, **enhancing fault detection and breaker status monitoring**, while improving SAIDI performance and grid stability

Smart Meter Data Concentrator

Aggregates and transmits data from smart meters to the central platform, offering a **unified view of energy flows and grid behavior**. Enables data-driven analytics, provides historical performance insights and supports optimized maintenance planning across the network

...and more

Low-voltage Remote Control and Automation

Combined with Universal RIO **allows to remotely operate low-voltage breakers** and **automate grid reconfiguration** for fault isolation and service restoration. Boosts operational efficiency, reduces field interventions, and enhances grid resilience.

IoT based Environmental Monitoring

Tracking humidity, flooding, and temperature inside substations, ensuring safe and reliable operation even in harsh environments. **Enables proactive maintenance and incident prevention** through remote diagnostics.

Power Quality Monitoring

Monitoring voltage and frequency stability across the LV network to ensure clean, reliable energy for all connected users. **Improves service quality**, customer satisfaction, and supports data-based optimization of grid assets.

Business Impact

Capex Optimization

Up to **20–50%** optimization through extended transformer lifetime and data-driven investment planning

OPEX efficiency

Up to **20-40%** OPEX efficiency through monitoring for ordinary/emergency maintenance

Revenue protection

Up to **2-5%** technical losses reduction