




Future-proof solutions  
to accelerate  
the digitalization  
of power grids

Ecosystem  
of Solutions  
for Grid  
Digitalization



## Ecosystem of Solutions for Grid Digitalization, Automation and Virtualization

For the entire  
network ecosystem  
from cities, to  
neighborhoods,  
homes and  
isolated areas.

## THE CHALLENGE

Electricity demand is growing fast, while new charging loads, as well as distributed energy resources, are making the grid more complex. The resulting bidirectional power flows and fluctuating demand patterns require advanced performance in smart grids visibility and control.

Edge devices and new generation smart meters are essential to improve the visibility of the LV network, as they act as distributed intelligent sensors providing for real-time data on energy consumption and enabling remote monitoring across the entire grid.

We offer an ecosystem of solutions that enable full visibility and control of the MV and LV grid.

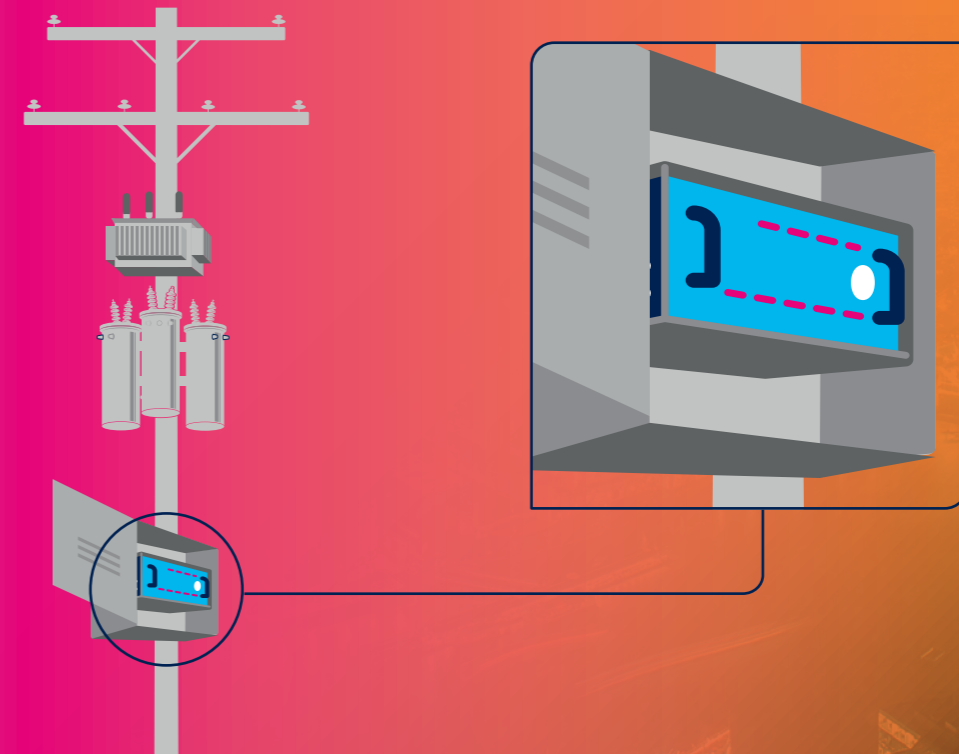
# Virtual Protection Automation and Control (vPAC)

## Improve power availability, reliability, and SAIDI with advanced FLISR

Fault Location, Isolation and Service Restoration are the main smart grid automation functionalities, and became more necessary as the complexity of the electrical distribution grid is increasing.

We offer a one-stop-shop solution that digitalizes the grid with:

- A revolutionary all-in-one solution, the Quantum Edge® device (QEd), to run key grid functionalities directly on the edge, virtualize key network automation functions through customizable applications and reduce the amount and size of equipment in the network.
- A software module for medium voltage grid automation that is agnostic to any legacy SCADA and provides either fast or slow Self-Healing Automation. Combined with QEd it enables grid operators to benefit from greater control, faster response times (up to less than one second) and the provision of uninterrupted power.



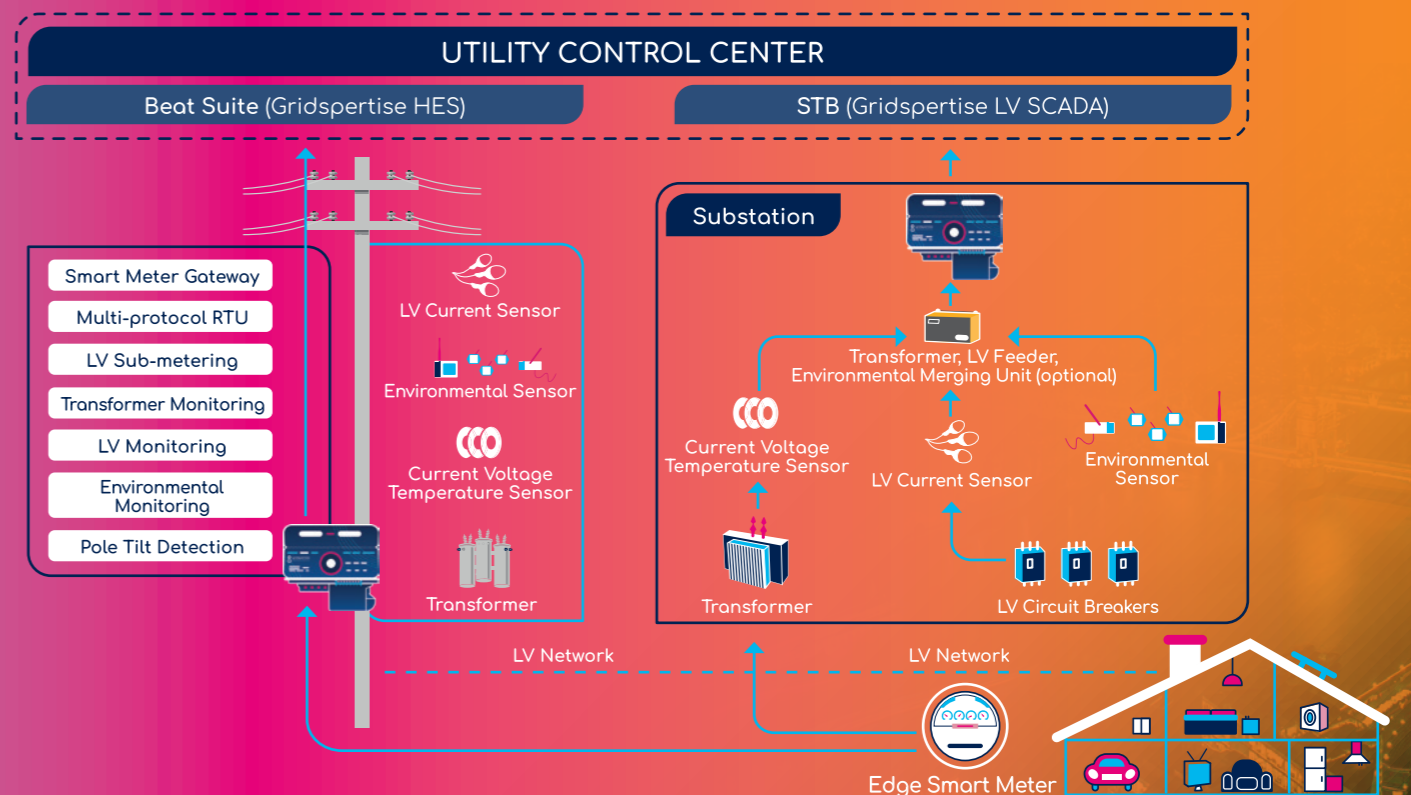
# MV and LV Monitoring and Control

## Unparalleled reliability with increased visibility of the LV grid

Our suite of hardware and software products for MV and LV grid monitoring and control includes a new smaller version of Gridspertise's iconic Quantum Edge® device, which integrates in one single solution several use cases related to the MV/LV distribution substation. Its virtualization technology allows it to act as an interoperable meter data concentrator, an RTU and a virtual router.

The solution integrates several merging units to monitor the status of the transformer and LV feeders, as well as other environmental parameters.

It can be integrated with our Low-Voltage Supervisory Control and Data Acquisition (LV SCADA) platform that improves visibility on the real-time status of the LV grid and enables performing remote control functions without field intervention.



# Metering as a Service (MaaS)

## Management of data and services through end-to-end AMI platform

We offer interoperable smart meters developed by Gridspertise and selected partners, HES & MDM systems, as well as services, and will accompany you throughout the entire project end-to-end, from design, delivery, installation and configuration up to supporting you in the entire system operation.

This includes reading of meters at a fixed rate, communication technology management, data analytics reporting, field services, billing and many other activities.



>100 utilities served under MaaS agreements  
>99.5% data collection

### Managed Services

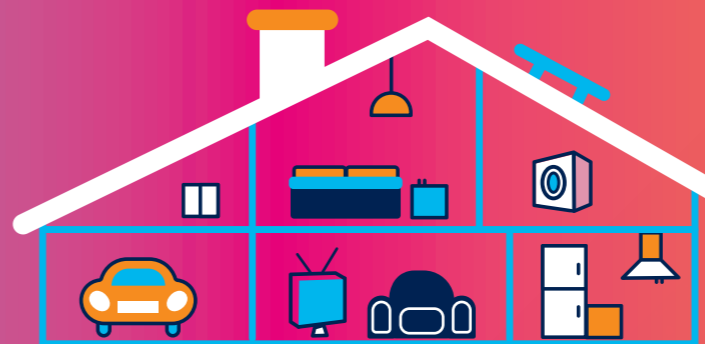
Our services set utilities free from managing field operations, maintenance and other financial services, allowing them to focus on their main business.



>30M smart meters operated

### Software as a Service

We offer a cloud platform that includes all applications with which utilities can manage their own business including HES, MDMS and workforce management services that can be integrated with any GIS.



### Edge Smart Meter



>100M meters delivered

### Smart Meters & Accessories

We offer a range of Meters and accessories that support various communication technologies (including RF, P2P & PLC).



17 AMI 2.0 use cases already performed by our latest advanced meters

### AMI 2.0

Our edge computing application promote an efficient and sustainable behavior and customer engagement.

# DER2Grid Management

## Manage the integration of DER into the distribution grid

The solution is designed for all clients with the need to balance DER and traditional generation within microgrids (islands, energy communities, etc.), and allows to:

- Balance DER generation with traditional generation in geographical islands.
- Control multiple power sources, including conventional and renewable generation units, storage units and controllable loads.
- Monitor and control operational active and reactive power reserve to operate the microgrid in safe mode and to counteract any sudden power imbalance caused by load and generation fluctuations.
- Interface, via standard communication protocol, with intelligent devices associated with the controllable units, to collect measurements, data and states and to send setpoints or control commands.
- Communicate operating states and actions, receive commands for remote settings or force commands on operators in particular conditions with remote SCADA (STB), directly connected via standard communication protocols.



### QED

#### USE-CASES

- Microgrid controller
- DER Monitoring and Control
- vPAC

#### UTILITY BENEFITS

- Manage (un)intentional islanding and reconnection
- Fine dynamic control/monitoring of voltage/frequency
- Proper balance between DERs and traditional generation

Are you ready  
for the electric future?

[www.gridspertise.com](http://www.gridspertise.com)



For information about our  
products scan the QR code

