Regarding Smart Meter data

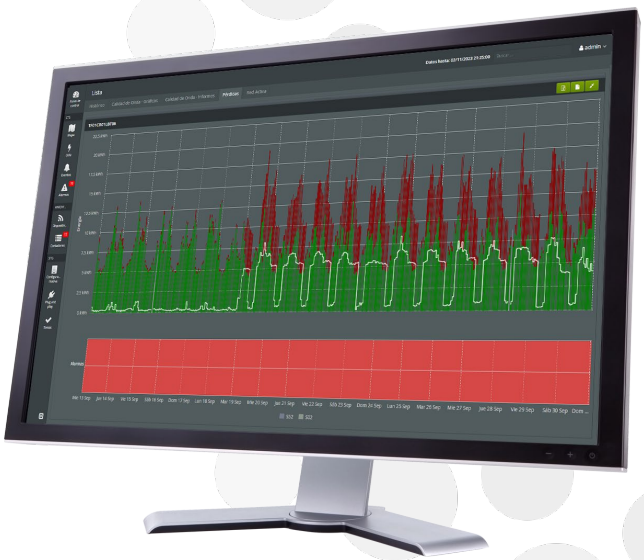
Why We Need Smart-Meter Data

Our LV-DNA platform unlocks full visibility and control of the low-voltage grid by leveraging data you already collect via your HES/AMI/MDM systems. We never connect directly to meters or data concentrators—only to the datasets your Distribution System Operator (DSO) uses for its own operations.

CASE STUDY

SPAIN AND PORTUGAL INTEGRATION MODEL

In Spain, we've successfully integrated with Enel's network via the Twobeat for Meters & More platform, and in both Spain and Portugal we integrate seamlessly with PRIME meter infrastructure from Iberdrola, Naturgy and EDP.



Moreover, we treat cybersecurity as a core pillar of our offering: our entire platform is certified to IEC 27001, ensuring your data is handled according to the most stringent international information-security standards.

Key Smart-Meter Use Cases

Automatic Topology Mapping

- Secondary Substation, Feeder & phase assignment for every meter is discovered automatically.
- This foundational step kick-starts any LV-grid digitalization effort.
- During an outage, you instantly know which end users are affected—accelerating restoration.
- For planned switching operations, you see exactly which customers will experience an interruption.

Multi-Source Correlation

Combine meter alarms with known DER installations.

For example, an overvoltage event coinciding with a nearby PV injection can be resolved faster.

Feeder-Loss Monitoring & Trending

- Calculate losses per feeder or panel and track their evolution.
- Pattern analysis pinpoints the likely source and its location within the LV mesh.

Automatic Fraud Detection

Identify unauthorized draws on the network and quantify energy theft in near-real time.

PV-Generation Detection

Flag behind-the-meter photovoltaic exports, even on the low-voltage side.

Grid-Edge Sensing

Treat each smart meter as a distributed sensor.

Detect end-of-line overvoltages invisible at the substation level.

Phase Balancing

Optimize per-feeder phase loading by accounting for both load magnitude and the number of connected meters.

What We Need from You

ariadna

Inventory

- A basic mapping of Secondary Substation/Smart Meter is sufficient to begin.
- If available, an extended mapping (Secondary Substation/ LV Feeder/Smart Meter) or Secondary Substation/Data Concentrator/ Smart Meter further improves accuracy.
- Imperfect or partially complete topology data is fine; our algorithms will complement and correct it.

Measurement Data

- Historical energy-consumption readings per Smart Meter (e.g. 15-min, hourly).
- File format is flexible (XLS, CSV, JSON…), and batching is up to you.
- We only require meter serial numbers (anonymized if preferred); no customer or contract details.

Alarms /Events
Optional

- Voltage sag/swells, tamper alerts, profile snapshots
- The richer the event stream, the faster we pinpoint and resolve anomalies.

SECURITY & PRIVACY

- IEC 27001 Certified: Our end-to-end platform design, development and operations comply with the international standard for information-security management.
- Data-Only Access: We interface solely with data feeds you already maintain—no changes to meter firmware, no direct device queries.
- Anonymization-Friendly: If you prefer to hash or pseudonymize meter IDs, our system integrates seamlessly.

By combining **smart-meter insights with our LV-DNA analytics**, you gain unmatched situational awareness, faster fault resolution, targeted loss mitigation and a clear path toward full LV-grid digitalization—all backed by rock-solid cybersecurity.