



OuroPlatform

Scalable, Kubernetes-Native Platform for the Full Smart Metering Lifecycle

OuroPlatform is a comprehensive smart metering platform for advanced metering infrastructure (AMI), designed for businesses that require high-performance data acquisition head-end system and top-tier security.

With cutting-edge security and ultra-fast performance, **OuroPlatform** provides a full stack of tools for remote meter reading, device management, and energy data collection across multiple meter manufacturers — all within a unified, cloud-native, Kubernetes-ready system.



Affordable Scalability

- From small deployments to national infrastructure — flexible growth without excessive costs.
- Any utility: electricity, gas, heat, and more, ensuring broad industry compatibility
- From legacy meters to modern smart devices, enabling seamless support across all technologies.



Inherent Assistance

- Full-spectrum support, from basic maintenance to custom integrations and new driver development.
- Proactive monitoring to ensure performance, reliability, and uptime.
- Future-proof architecture designed to adapt and optimize over time.



Future-Ready Security

- Continuously evolving protection against emerging threats.
- Supports DLMS Security Suite 2 for secure smart metering communication.
- Aligned with FIPS 140-3 cryptographic security standards.
- Ready to adopt FIPS 203/204/205 to ensure security in post-quantum era.

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Platform Components

- **OuroPlatform** provides key components across the full metering lifecycle.
- **OpenHES** — Head-End System engine for device communication, data acquisition, and protocol translation.
- **Collector Mobile Client** — mobile app for field meter reading, installation, and configuration.
- Continuously evolving with new modules and integrations.

Deployment

- Designed for Kubernetes and rigorously tested on RKE2.
- Helm Chart available for seamless deployment via ArgoCD in GitOps mode.
- Collector Mobile Client deployed as an Android app via Google Play.

Northbound Interface (External Integrations)

- HTTPS/ConnectRPC API for web-based management, third-party integrations, and platform interoperability.

Key Architectural Highlights

- **Cloud-Native by Design** - Fully Kubernetes-native — built for cloud environments from the ground up, deployable across on-premise and cloud infrastructure.
- **Modular Architecture** - Independently deployable, loosely coupled components that scale and evolve on their own terms.
- **End-to-End Data Pipeline** - From remote device collection through processing and transformation, to delivery-ready output for billing, analytics, and third-party systems.
- **Multi-Tenant Ready** - Isolated namespaces and resource quotas allow multiple organisations or utility types to operate securely within shared infrastructure.
- **Unified Integration Layer** - A single, standardised API surface across all components — simplifying connections to external MDMs, ERP, and billing systems.
- **Mobile-Ready Field Operations** - Field technicians can use a native Android application to initiate and manage data readings on-site.

