METER DATA MANAGEMENT SYSTEM (MDM)

Control billions of smart metering data. The IoT Platform provides processed meter data for upstream business applications, such as billing systems.

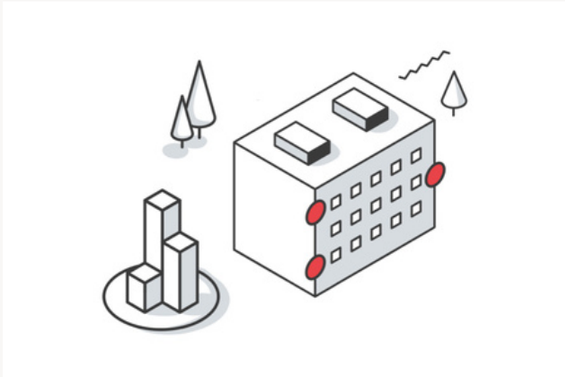
Our multi-utility ZONOS Meter Data Management System (MDM) validates, stores and makes pre-processed meter data available for upstream business applications, e.g. market communication and billing. It receives data from optional ZONOS Advanced Meter Management (AMM) or third-party Head End System (HES) and also communicates with these to allow automatic end-to-end Smart Metering processes.

USE CASES

ZONOS MDM requests or collects, validates and processes data (e.g. consumption data or events and alarms) and shares this with applications such as billing systems, customer care systems and solutions for data analytics like the ZONOS Module ReportPlus. Integrated with these systems the MDM is the core enabler of end-to-end Smart Metering processes. Data is made available for market processes or used for commercial propositions based on metering data. The modern system architecture and the use of the ZONOS IoT Platform allow high-speed data processing and low cost scaling of the overall solution.

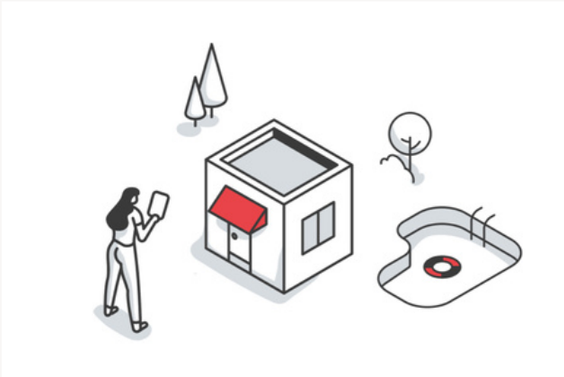
INDUSTRIAL METERING

We support the immense functionality required to configure, manage, and control meters used in industrial and commercial applications scenarios. Our solutions provide utility companies with high-grade security capabilities to protect critical resources.



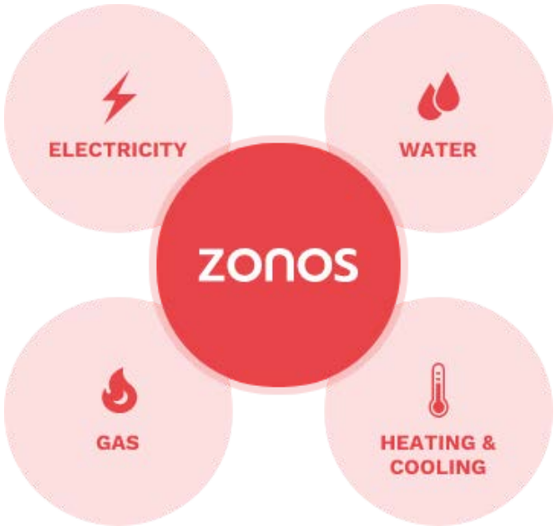
SUBMETERING

We provide end-to-end solutions with the capability to read and control meters – even beyond the utility company's operated meter. Our technology gathers the information necessary to create accurate invoices that the landlord can bill to his customers.



SMART RESIDENTIAL METERING

Utility companies must remain cost-efficient and avoid logins to certain meter vendors when managing large volumes of residential meters. We offer solutions that cover the management of meters, connectivity, and data and customer applications.

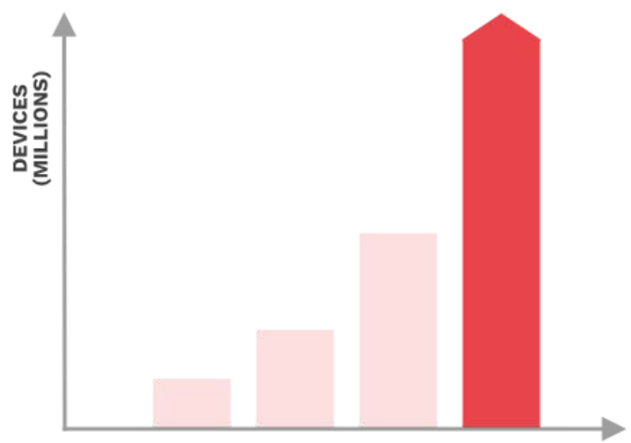


MULTI-UTILITY CAPABILITY

Supporting all smart meter types
The IoT Platform supports electricity, water, gas, heat, and cooling utilities — and has the ability to communicate to both residential and industrial meters.

A SCALABLE SOLUTION, USED FOR MILLIONS OF METERS

The IoT Platform supports several billion-meter readings a day, and can be processed and read in short intervals. Our product team continues to develop state-of-the-art system upgrades that will increase these daily meter readings further.



THE SOFTWARE MODULES YOU NEED FOR PROJECT FLEXIBILITY

As an extension of the ZONOS IoT Platform, our modules provide seamless integration with existing system landscapes and allow you to gain additional functionalities on your project. The ZONOS Modules enable you to provide a complete end-to-end solution to customers while also ensuring easy adaption to new requirements and future business goals.

MDM FEATURES

- Support of smart meters and legacy meters
- Multi-utility support (power, gas, water, heat, cooling, etc.)
- VEE: validation, estimation based on customizable algorithms and manual editing
- Processing of time series based on interval data
- Creation of time series based on meter reads incl. analytics
- Customer and contract management (also via SAP or Oracle CCMB)
- Calculation of Billing Determinates - Support of simple to very complex tariffing schemes
- Important commands (e.g. on demand meter reads, disconnection, load limitation, prepayment)
- Customer API for interfacing with customer portal solutions or Apps; alternatively, our ZONOS Module PortalBasic can be used
- Metering of consumption and production with flexible hierarchical configuration through sub- and virtual meter functionality features
- Centralized and uniform event and alarm management
- Various market conformant communication formats and protocols
- Extensive process management via ZONOS API and easy interfacing with Business Process Management (BPM) solutions
- Powerful data analytics via our ZONOS Module ReportPlus
- Connectors for billing and asset management systems such as SAP MDUS
- Direct integration of ZONOS AMM or other Head End System (HES) but also Third Party HES
- Import and Export: wide range of web services and file formats
- Energy Management and Smart Grid applications (including non-technical losses) through sub- and virtual meters
- Flexible roles and rights management

INTERFACING

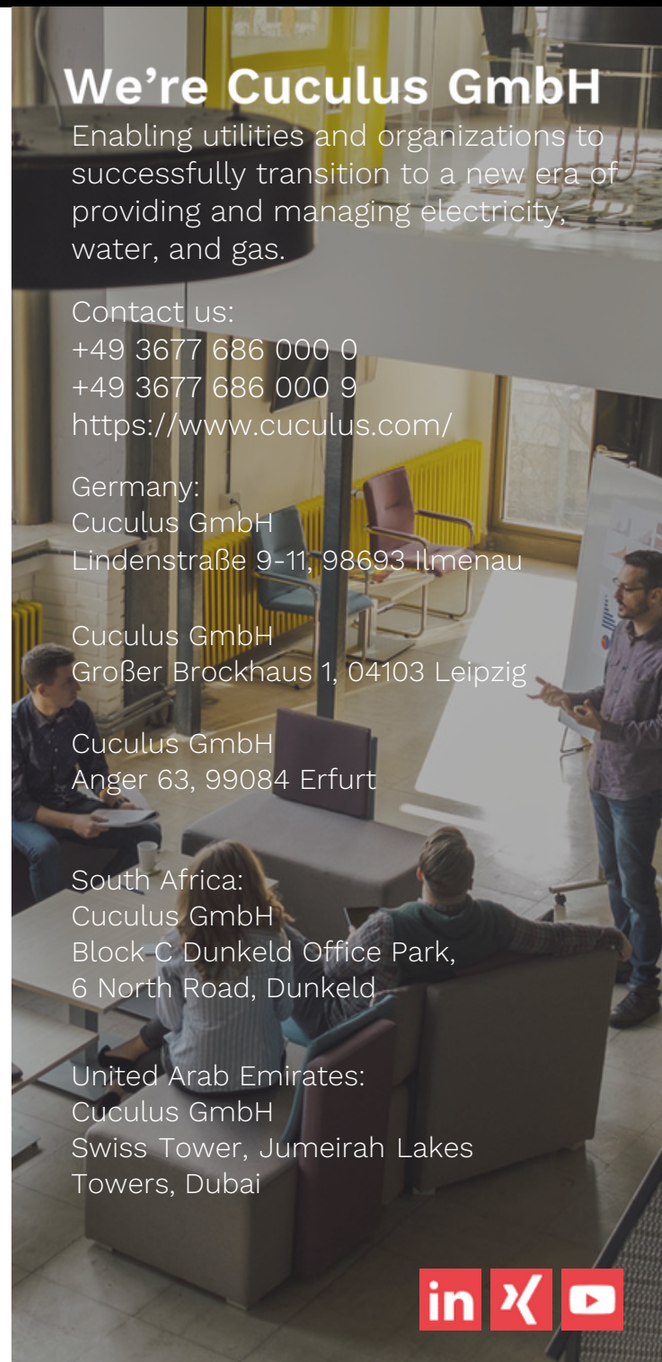
- OpenAPI / REST based communication
- Webhooks (real-time push)
- Streaming Interface (real-time push)
- CIM connectores
- SAP MDUS connector
- and many more

INTEGRATIONS

- Billing/ ERP
- Customer Information System (CIS) / Webportals / APPS
- Customer Relationship Management (CRM)
- Outage management
- Business Process management (BPM)
- Geospatial Information Systems (GIS)
- Workforce Management system (WFM)
- SCADA (gas, electricity)
- various third party Headend solutions (HES)
- Business Intelligence (BI) / Reporting solutions
- Asset Management
- many others utility applications

PREPAYMENT / VENDING

ZONOS is supporting prepayment functions for STS-based meters as well as backend-based prepayment implementations. More details in ZONOS module CollectAll.



We're Cuculus GmbH

Enabling utilities and organizations to successfully transition to a new era of providing and managing electricity, water, and gas.

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