ADVANCED METER MANAGEMENT (AMM/HES)

Manage millions of smart meters efficiently. As a multi-utility Head End System (HES), the IoT Platform enables the management and control of large and complex smart metering infrastructures.

ZONOS Advanced Meter Management (AMM) is a high-performance system that manages and controls smart meters and their communication infrastructure with interfaces to Meter Data Management (MDM), any Operations Support Systems (OSS) and others.
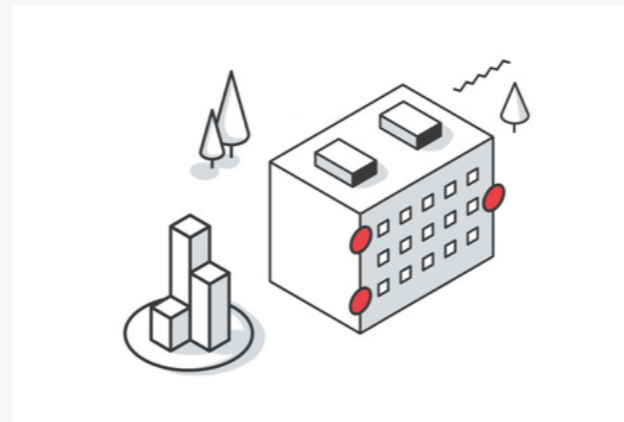
USE CASES

ZONOS AMM is capable of managing smart meters and communication devices from various vendors in the same installation.
The system unifies data formats and structures before sending them to applications such as Meter Data Management (MDM) systems. Next to meter data (consumption & production) the system also registers and processes other data such as grid quality parameters, battery status of communication modules or radio signal strength. ZONOS AMM seamlessly integrates the management and control of the communication infrastructure.

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
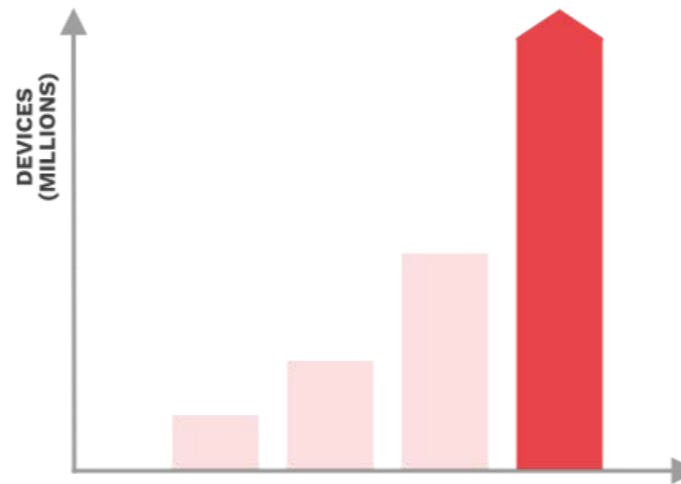to both residential and industrial meters.

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.

MULTI-VENDOR AND MULTI-COMMUNICATION
TECHNOLOGY SUPPORT

Complete multi-vendor and multi-technology
integration. We provide out-of-the-box capabilities
for more than 200 different types of smart meters
and other devices. Benefit from an open solution
that supports any kind of communication technology.

ZONOS Advanced Meter Management (AMM/HES)

AMM/ HES FEATURES

- Multi-utility support (power, gas, water, heat, etc.)
- Native support of meters and concentrators without third party Head End System (HES)
- Support of a wide range of Head End System (HES) (Open API and WebHook, but also CIM/ Standard IEC 61968-9)
- Quick and flexible expansion through connectors for new meters, gateways and Head End System (HES)
- Extensive device management and synchronization features with asset management
- Remote configuration for meters and other devices
- Execution of command per single device or for groups (e.g. on demand meter read, disconnection, load limitation, time of use (TOU) configuration, prepayment)
- Network Management Functionality (NMS) for meters, communication modules, gateways, concentrators, repeaters, etc.
- GIS - devices location management and various maps
- Management of security keys and certificates of devices
- Centralized and uniform event and alarm management
- Technical validation and pre-processing of incoming data
- Flexible mapping and transformation of incoming and outgoing data streams for easy integration
- Unlimited number of OBIS codes or channels
- Transparent process management/interfaces for process monitoring
- Extensive reporting, dashboarding and statistics
- Secure access and rights management for users and all APIs

COMMUNICATION SOLUTIONS

- Point-to-Point - P2P (GPRS, 3G, 4G, NB-IoT, LTE-M)
- Fixed Line (Fiber)
- Radio Frequency Mesh - RF Mesh (WiSUN, Zigbee)
- Radio Frequency - RF (LoraWAN, Sigfox, Wi-Fi)
- Powerline Communication - PLC (narrowband, broadband)

COMMUNICATION PROTOCOLS

- DLMS (idis, IS15959, 3G-PLC, DSMR, FAHAM, ...) / IEC 62056
- ANSI 12.22
- MBUS/ wireless MBUS
- MODBUS
- DNP3
- MQTT
- LwM2M
- WebHooks
- OCPP
- REST
- CoAP
- SML
- many others, also vendor specifc protocols

PREPAYMENT

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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