

Diehl Metering

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HYDRUS 2.0 BULK: Diehl Metering's first ultrasonic bulk meter

By combining ultrasonic measuring technology with smart functions, HYDRUS 2.0 BULK not only provides extreme accuracy over its lifetime; it also delivers powerful connectivity. When used for the district or zone metering of water networks, it offers multiple benefits for water utilities, including reductions in Non-Revenue Water (NRW) and a more sustainable network. When used for billing, it also delivers extremely precise and reliable readings.

Lasting accuracy under tough conditions

When it comes to metrology, HYDRUS 2.0 BULK is designed to the highest standards. This is the first bulk meter of the HYDRUS series to integrate Diehl Metering's ultrasonic measuring technology, meaning it is equipped with four transducers offering two measuring paths for extra precision.

The meter is capable of measuring extremely low and high flow rates, and has an approved dynamic range of up to R1000. It can therefore register the volume of water supplied much more accurately, making it a key part of an AMR (Automated Meter Reading) solution, and an AMI (Advanced Metering Infrastructure) solution to help utilities improve billing and detect water loss.

Furthermore, HYDRUS 2.0 BULK is built to maintain its exceptional accuracy in the long term. The static free-flow design means the meter has no moving parts, ensuring unobstructed access to water. It is resistant to particles such as sand in the pipe, pressure surges, magnet manipulation and UV radiation. Furthermore, its IP68 classification means it is also resistant to flooding and dust. This robustness combines with a battery life of up to 16 years to ensure the meter's longevity while also limiting the need for maintenance. For utilities, this translates as peace of mind and cost savings over the meter's entire lifetime.

Water network insights through digitalization

The other flagship feature of HYDRUS 2.0 BULK is its integrated connectivity. As a smart meter, it provides consumption and service data with high granularity. When integrated into a fixed network metering structure, it supports water network monitoring in real-time. HYDRUS 2.0 BULK permanently monitors consumption in order to detect leakage, backflow or overflow, and even comes with a self-check feature that instantly generates alert codes if implausibly different values are measured in the two measurement paths.

The full potential of HYDRUS 2.0 BULK is best exploited when it is connected to a system infrastructure using IZAR radio technology. Based on the Open Metering System standard, it offers optimal flexibility and data security, and is capable of exceptionally long-range radio performance, as well as transmitting data from challenging locations such as pits. Furthermore, it supports a wide range of technologies, including wired M-Bus, L-Bus and Pulse.

In a fixed network, multiple types of data are transmitted by HYDRUS 2.0 BULK in tandem with smart domestic meters. This enables real-time information about flow rates, device status, and water losses in zones or leakages in houses. As a result, IZAR software can build up a comprehensive overview of the overall distribution network, with highly accurate monitoring and analysis. This empowers water utilities to make smart, sustainable and fast decisions in order to optimize costs and resources, and reduce Non-Revenue Water.

About Diehl Metering

Diehl Metering is a worldwide leader in the design, manufacture and supply of smart metering solutions. With over 150 years of experience, we empower utilities, municipalities and industries to take control of their infrastructures, bringing new efficiencies to the way they manage water and energy.

Our extensive range of services and solutions includes data-driven insights, IoT connectivity, fully-flexible software, and seamless intelligent metering. We also utilise artificial intelligence to boost performance and deliver cost savings for our customers.

Headquartered in Germany, we are a family-owned business with an international reach. We are proud to maintain our founding principles of quality, reliability and customer proximity while proactively shaping a better future for our customers and the communities they serve. Our approach is to think global and act local. By anticipating trends and remaining agile, we adapt and develop our strategy with our customers and for them.

In supporting their long-term growth, we also contribute to the sustainability of the planet, crafting innovations that enable our customers to make ever better use of the natural resources we all rely on.