

ADD GRUP introduces a new generation of intelligent water metering based on the ADDRA ultrasonic meter

Modern intelligent water metering projects increasingly face not technological, but operational limitations. Key challenges include autonomous power supply, communication reliability, installation constraints, and total cost of ownership over a long lifecycle.

Even with a declared battery life of 15–20 years, the real reliability of autonomous devices can decrease due to temperature fluctuations, high humidity, intensive data transmission, and unstable operating conditions. Power source failure leads to data loss, unplanned service visits, and increased operational costs. Warranty obligations do not compensate for the key risk — reduced system reliability as a whole.

At the same time, operators face infrastructure constraints: lack of space for installing external valves, uneven wireless network coverage, and the inefficient use of high-tech communication channels in group installations of meters in residential basements.

ADD GRUP, an international manufacturer of intelligent electricity and water metering systems, presents a new generation of the ADDRA ultrasonic water meter, developed as a unified engineering platform designed for long-term operation in real-world conditions.

Intelligent power management

The new ADDRA is built on a multi-level power management architecture that ensures predictable and stable operation throughout the entire lifecycle.

In its standard configuration, ADDRA uses an internal C-type battery pack as the primary power source. Thanks to energy-efficient electronics and intelligent power control, battery life in certain configurations can reach up to 30 years.

When the main battery is depleted, a backup ½ AA battery is automatically activated, allowing measurement functions, display operation, and NFC access to continue. WAN data transmission is temporarily limited, enabling a controlled degradation mode without loss of metering data.

Peak power operations, including control of the integrated valve, are supported by a built-in super-pulse capacitor. ADR models can be equipped with an additional parallel battery to extend energy capacity without changing the meter design.

For high-load projects or harsh climatic conditions, ADDRA supports an external removable power supply. It can be installed or replaced at any stage of operation without removing the meter or compromising housing tightness.

Universal Wireless Connectivity – MultiRAT

ADDRA implements MultiRAT technology, simultaneously supporting NB-IoT, LoRaWAN, and Wireless M-Bus within a single device. The meter automatically selects the optimal communication channel based on signal quality and network coverage.

This approach enables the use of a single device type across different environments, simplifies network planning, reduces logistical and operational risks, and ensures scalability.

Optimization for group installations and basements

For group meter installations, ADD GRUP offers a local Bluetooth network architecture with a single master meter. All meters form a local network, while centralized data transmission to the operator is performed via NB-IoT, LoRa, or Mioty from only one device.

This solution reduces CAPEX and OPEX, simplifies maintenance, and improves data transmission stability in dense basement installations.

Integrated valve without installation changes

The new ADDRA version with an integrated valve is designed to meet strict installation constraints. The design does not increase pipe length and fully complies with standard mechanical meter dimensions:

- DN15 – 110 mm
- DN20 – 130 mm
- DN25 – 195 mm

This enables water consumption control without modifying existing pipeline infrastructure.

Digital interaction and control

The ADDRA ecosystem is complemented by the Addra Flow Track mobile application, providing access to meter data and simplifying interaction for users and operators.

Architecture designed for decades

ADDRA is engineered as a unified system where power supply, communication, control, and installation form a single architecture. This ensures system resilience, reduced total cost of ownership, and predictable long-term operation.

The new generation of ADDRA is designed for utilities, infrastructure operators, and system integrators who prioritize reliability, scalability, and technological stability in intelligent water metering.

To participate and register at the ADD GRUP stand, please contact us at: info@addgrup.com