



WATER METERING and Management Solutions

☎ +373 22 930012
✉ info@addgrup.com
🌐 www.addgrup.com

Marketing & Sales
36, Dragomirna str. Chisinau,
MD-2008, Republic of Moldova



ULTRASONIC WATER METER WITH INTEGRATED / EXTERNAL VALVE

ADR-V Series

Communication:

- WAN: NB-IoT, LoRa, WM-Bus, MlOTY
- LAN: NFC, BLE

Power Source:

- Internal / External

Metrology:

- Starting flow: 1 l/h
- Accuracy class: up to R1600

Sizes:

- DN15, DN20

Water Management:

- Integrated shut-off valve



ADR Series

Communication:

- WAN: NB-IoT, LoRa, WM-Bus, MlOTY
- LAN: NFC, BLE

Power Source:

- Internal / External

Metrology:

- Starting flow: 1 l/h
- Accuracy class: up to R1600

Sizes:

- DN15, DN20, DN25, DN32, DN40, DN50

Water Management:

- External shut-off valve



WATER MANAGEMENT

The ADR series provides precise water management with external or integrated shut-off valves. Its advanced architecture enables remote operation, flow limitation, and leak prevention, making it ideal for Smart Home and Smart City applications. The Addra Flow Track mobile app offers real-time control and management of water consumption.

- Remote disconnection – complete shutdown of water supply from a distance through the control system.
- Remote flow disconnection – partial limitation of water flow to manage consumption or prevent overuse.
- Detailed consumption monitoring – precise tracking of real-time water usage for analysis and billing.
- Valve operation for prepayment mode – automatic valve control depending on the user's prepaid balance.
- Valve closure – automatic shut-off in case of non-payment, leak detection, or emergency events.

Non-revenue water management

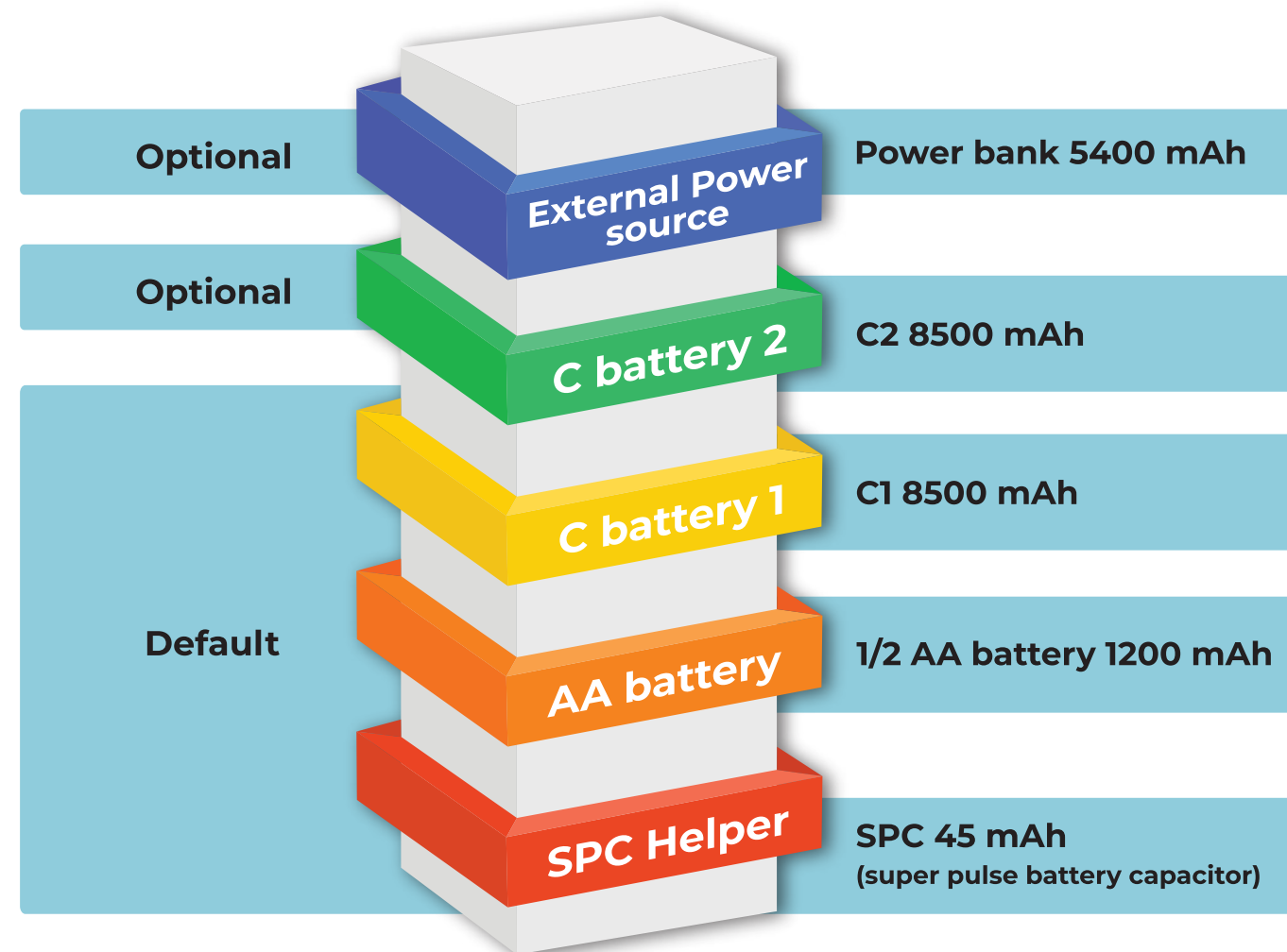
- Accelerometer integration – allows installation of the meter in any position (horizontal, vertical, or inclined) without affecting measurement accuracy.
- Acoustic leakage sensor – detects hidden leaks and pipe bursts through vibration and sound analysis.
- Reduction of Non-Revenue Water (NRW) – helps utilities identify water losses early, prevent damage, and optimize maintenance operations.



Intelligent power supply

A new development by ADD GRUP, the Intelligent Power Supply ensures reliable and adaptive operation of meters under all conditions. It combines internal and optional external power modules to deliver:

- Long-lasting performance with battery life up to 30 years
- Backup support to maintain operation if the main battery is discharged
- Energy efficiency and reduced maintenance needs



MULTIRAT Communication

WAN interfaces : NB-IoT, LoRa, WM-Bus, MlOTY

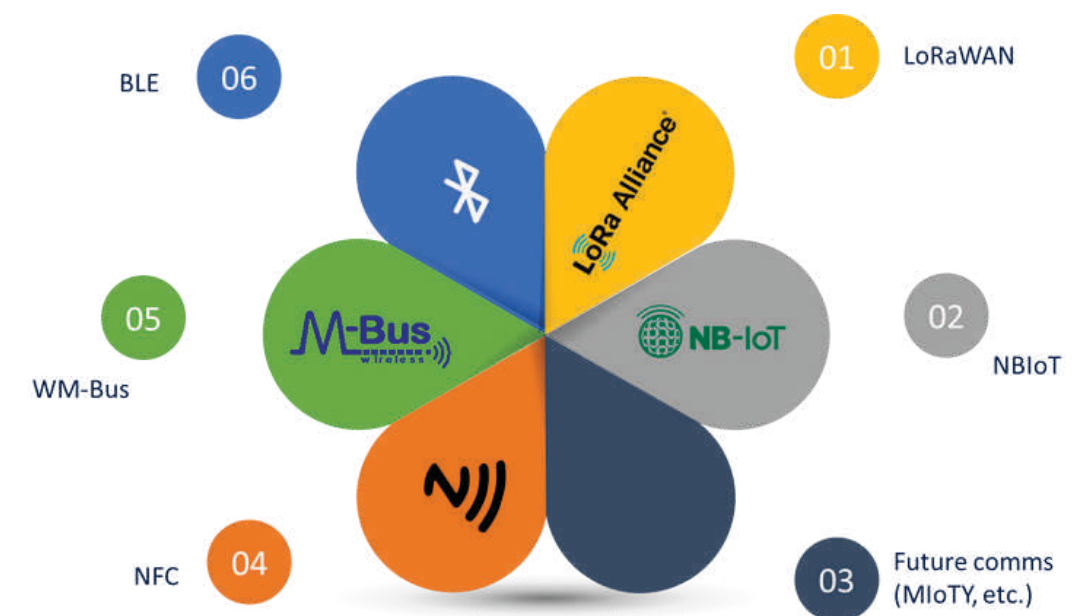
The new ultrasonic water meter from ADDGRUP automatically connects to the best available communication channel, supporting multiple technologies: Thanks to MultiRAT technology, the meter automatically selects the optimal channel where the signal is stronger, more stable, and faster. Utilities no longer need to guess or choose: one universal meter works for all regions.

Group Metering Communication Scenarios

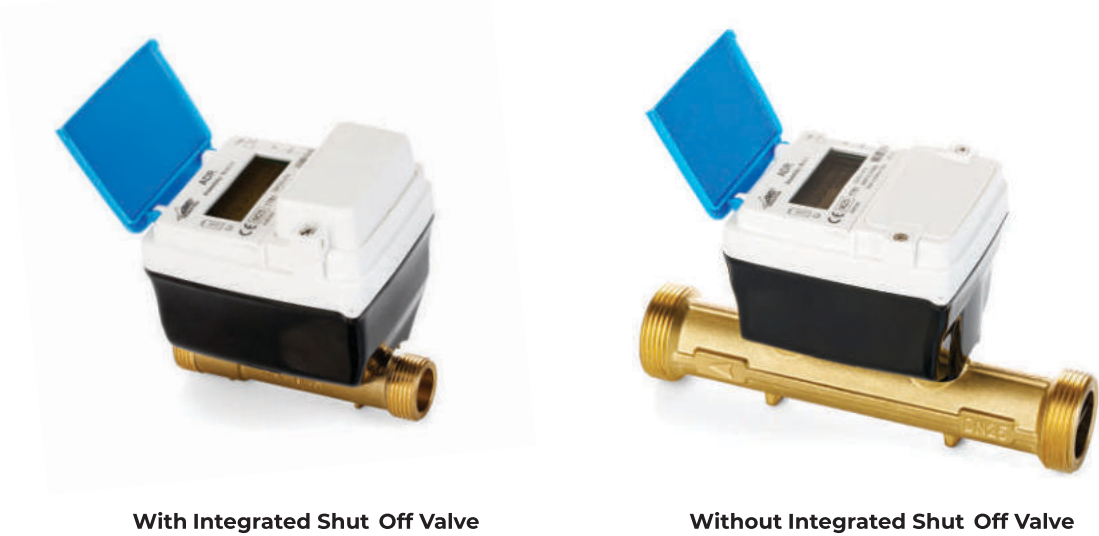
In multi-story buildings where meters are installed as a cluster in a single location (for example, in a basement), ADDRA offers a solution based on a master meter equipped with NB-IoT, LoRa, or MlOTY modules. All other meters communicate with the master meter exclusively via BLE, which significantly reduces both meter costs and communication expenses. The master meter can be equipped with a replaceable PowerBank module to extend its service life.

LAN Interfaces: BLE, NFC

The presence of a BLE interface, in addition to NFC, provides a clear advantage for local access to the meter, especially when physical access is impossible or limited by infrastructure constraints. BLE enables connection to the meter via a smartphone application for both utility personnel and individual consumers, and also allows an external valve to be connected to the meter.



Specifications of residential smart water meter with and without Integrated Shut-Off Valve



Specifications of residential smart water meter with and without Integrated Shut-Off Valve

Parameter	Specification					
Model designation (variant)	ADR, ADR-V					
Nominal Diameter (DN)	15		20		25*	
Q3	1,6	2,5	2,5	4	4	6,3
Ratio R (Q3/Q1)	250; 400; 800	250; 400; 800; 1600	250; 400; 800	250; 400; 800; 1600	250; 400; 800	250; 400; 800; 1600
Q2/Q1	1,6					
Q4/Q3	1,25					
Maximum admissible pressure MAP	16					
Measuring principle	Ultrasonic					
Accuracy	2					
Length (mm) brass body	110-165		130-195		190-225	
Orientation limitation	Horizontal dial up (H↑), Horizontal dial side (H→) Vertical up (V↑), Vertical down (V↓)					
Reverse flow	Design to measure					
Temperature class	T30 or T50					
Pressure loss	Δp 40		Δp 40		Δp 40	Δp 63
Flow profile sensitivity	U0D0					
Measuring ability	starting flow 0.001 m3/h					
Mechanical environments	O, M1					
Climatic environments	From -25°C to 70°C					
Electromagnetic environments	E2					
Protection degree	IP68					
Wireless communication	NB-IoT+ LoRAWAN +,WM -BUS, NB-IoT +,WM-BUS LoRAWAN +,WM-BUS Bluetooth, NFC,.					
Connection type (screw thread)	G3/4"		G1"		G1 1/4"	
Type power supply	Combination - Non replaceable battery and replaceable battery, Umax(V)-3.6, Umin(V)-2.9 > 8500 mAh					
Life time (years)	16					

*- nominal diameter available for meters without integrated shut-off valves only

TECHNICAL SPECIFICATIONS FOR INDUSTRIAL ULTRASONIC WATER METER



The new ultrasonic water meter (DN32, DN40, DN50) will be developed in compliance with market requirements.

Specifications of the Ultrasonic Water Meter (DN32, DN40, DN50)

Parameter	Specification		
Model designation (variant)	ADR		
Nominal Diameter(DN)	32		
Q3	10		
Ratio R (Q3/Q1)	250; 400; 400		
Q2/Q1	1,6		
Q4/Q3	1,25		
Maximum admissible pressure MAP	16		
Measuring principle	Ultrasonic	40	50
Accuracy	2	16	25
Length (mm) brass body	260	250; 400; 400	250; 400; 400
Orientation limitation	Horizontal dial up (H↑), Horizontal dial side (H→) Vertical up (V↑), Vertical down (V↓)		
Reverse flow	Design to measure		
Temperature class	T30 or T50		
Pressure loss	Δp 63		
Flow profile sensitivity	U0D0		
Measuring ability	starting flow 0.001 m3/h	300	170 THREADED), 200(Flanged), 300(Flanged)
Mechanical enviroments	O, M1		
Climatic environments	From -25°C to 70°C		
Electromagnetic environments	E2		
Protection degree	IP68		
Wireless communecation	Nb_IoT, Bluetooth, NFC, LoRA, WM-BUS.		
Connection type (screw thread)	G1 1/2"		
Type powe supply	Combination - Non replaceable battery and replaceable battery, Umax(V)-3.6, Umin(V)-2.9		
Minimum life time (years)	16		