## TECHNICAL DATA

| Inner diameter: | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|---|---|---|---|---|---|---|
| **Thread size:** | ¾" | 1" | G 1¼" | G 1½" | G 2" | G 2½" / Flange 2" |
| **Lenghts (in mm)** | 110, 165 | 190 | 260 | 260 | 300 | 300 / 200 |
| **Q3 Flow ($m^3/h$)** | 2.5 | 2.5 or 4 | 6.3 or 10 | 10 | 10 or 16 | 16 or 25 |
| **Accuracy Class** | class 2 | | | | | |
| **Dynamic Range R, Q3/Q1** | up to R1000 | | | | | |
| **Max Pressure** | 16 bar | | | | | |
| **Maximum Pressure Loss @ Q3** | < 0.4 bar<br>< 0.63 bar w/ valve | | | | | |
| **Ambient Operating Temperature Range** | 1°C to +70°C / 34°F to 158°F | | | | | |
| **Water Operating Temperature Range** | 0.1°C to +50°C / 32°F to 122°F | | | | | |
| **Display Alerts** | Battery level, Firmware update, Internal alarms, Valve status, RF status, Bluetooth, Tamper, Frost, Dry, Leakage, Burst, Reverse Flow | | | | | |
| **Data Storage** | Meter information and alarms are stored periodically up to 20 years | | | | | |
| **Communication** | Remote: LoraWAN, Wireless M-Bus, Wired M-Bus, NB-IoT, Bluetooth BLE<br>Coming up: Mioty, Sigfox<br>Local: NFC, Pulse | | | | | |
| **Options** | Standard (M1) or w/ Valve (M1V) | | Standard (M1) w/o valve | | | |
| | Brass or Composite pipe | | Brass pipe | | | |
| | Pressure sensor, Water quality sensor | | | | | |
| **Customizations** | Battery size: 1x C cell or 1x D cell or 2x D cell<br>Private brand logo, Customer serial number | | | | | |
| **Lifetime** | > 16 years @ 25±5°C | | | | | |
| **Environment** | Lead-Free & RoHS compliant, Recyclable design, Replaceable battery | | | | | |
| **Certifications** | MID (OIML R49:2013)<br>EN14154, ISO 4064:2014<br>IP68<br>WRAS<br>ACS<br>LoRaWAN Certification<br>OMS Certification | | | | | |

Full datasheet available.
Contact us for more information.

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Hidria Gonvarri Industries

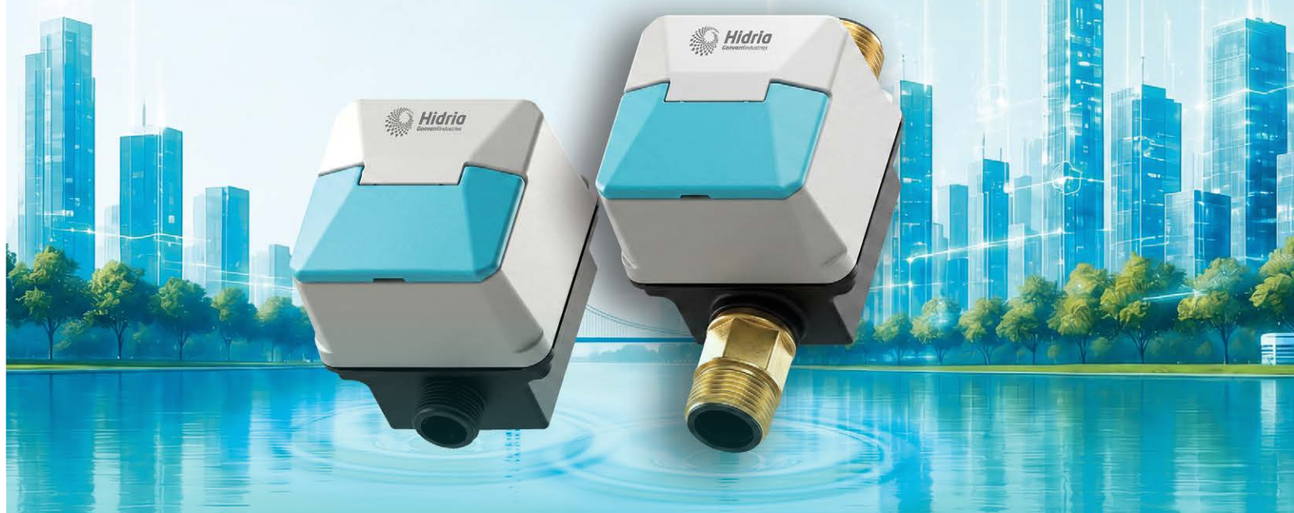
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Hidria Gonvarri Industries

# Aquasonis®
## M1&M1V

WORLD FIRST
SMART FLOW CONTROL

**BUILT FOR SMART CITIES.**
**READY FOR THE FUTURE.**




### ACCURATE & SMART

- Outstanding metrology performances in any installation position
- LoraWAN, wM-Bus, M-Bus, NB-IoT, Bluetooth
- Datalog up to 20 years
- Extended alarms

### MODULAR & DURABLE DESIGN

- Supports Local Manufacturing
- High robustness to dust
- Tamper proof
- 16y lifetime
- Up to 70°C

### VALVE

- Flow regulation valve 0–100%
- Leak prevention
- Prepaid water meters
- Remote and local control

### HIGHLY CUSTOMIZABLE

- Battery size
- Replaceable battery
- Pressure sensing
- Water quality Sensing

## HIDRIA, A LEADING AUTOMOTIVE SUPPLIER KNOWN FOR HIGH-QUALITY, HIGH-VOLUME PRODUCTION, IS NOW INTRODUCING A SMART ULTRASONIC WATER METERS TO THE MARKET

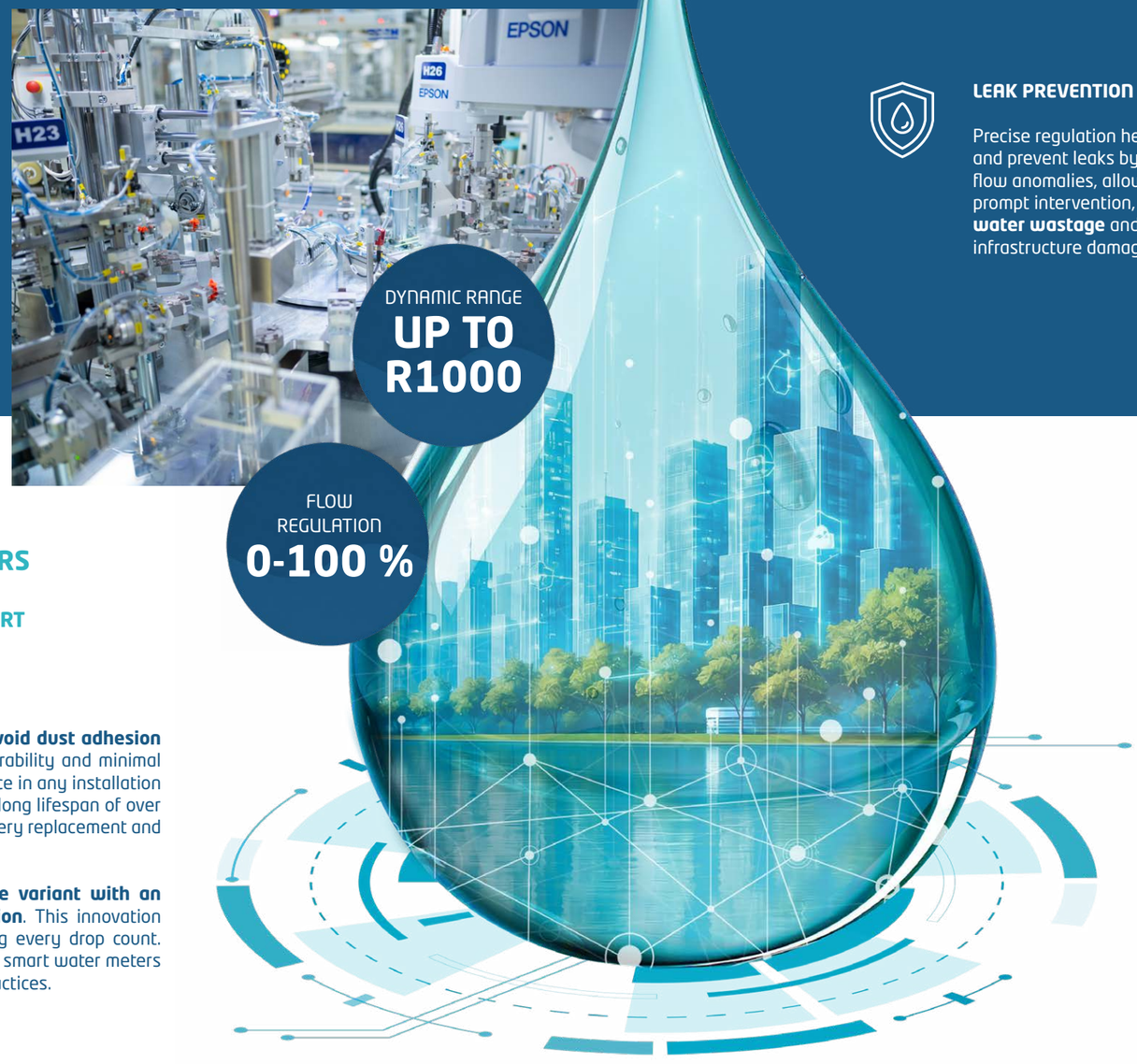
Leveraging years of experience in the industrialization of electronics and mechatronics products, including piezo sensorics, Hidria is set to revolutionize the water meter industry with its innovative solutions and high-volume production capabilities.

Hidria's foray into the smart water meter market is backed by a team of water meter experts with a proven track record of success. This strategic move aims to deliver the next generation of water meters, combining advanced technology with Best-in-class precision and reliability.

The new ultrasonic smart water meters will feature cutting-edge piezo sensor technology, ensuring accurate and reliable water usage data that will not only meet but exceed industry standards. This advancement will enable partners better water management and conservation, aligning with global sustainability goals.

HIDRIA'S ENTRY INTO WATER METER MARKET MARKS A SIGNIFICANT MILESTONE IN THE COMPANY'S GROWTH AND DIVERSIFICATION STRATEGY.

BY EXPANDING ITS PRODUCT PORTFOLIO, HIDRIA CONTINUES TO DEMONSTRATE ITS DEDICATION TO INNOVATION AND EXCELLENCE ACROSS VARIOUS INDUSTRIES.




## AQUASONIS® M1V WITH INTEGRATED VALVE OFFERS ADVANCED FLOW REGULATION FOR INNOVATIVE WATER MANAGEMENT AND LOSS PREVENTION

### SMART MANAGEMENT

The valve interfaces with smart systems for real-time monitoring and **remote flow adjustments**, essential for modern smart cities and IoT infrastructure.

### CUSTOMIZED DELIVERY

The valve's full-range regulation tailors water delivery to specific needs, **optimizing distribution** for residential, commercial or industrial use.

### LEAK PREVENTION

Precise regulation helps detect and prevent leaks by identifying flow anomalies, allowing prompt intervention, **reducing water wastage** and prevent infrastructure damage.

### ADAPTABLE TECHNOLOGY

Designed to integrate with future innovations in **prepaid water metering**, our valve ensures long-term adaptability and relevance in evolving water management technologies.

## INTRODUCING THE NEXT GENERATION OF ULTRASONIC SMART WATER METERS

### HIDRIA'S NEW GENERATION OF ULTRASONIC SMART WATER METERS IS FEATURING CUTTING-EDGE ULTRASONIC TECHNOLOGY.

With a clear flow path and specific pipe inner design **to avoid dust adhesion** to transducers, these meters ensure users exceptional durability and minimal maintenance. It delivers best-in-class metrology performance in any installation conditions. Our ultra-low power consumption guarantees a long lifespan of over 16 years. Additionally, the modular design allows easy battery replacement and supports local manufacturing.

Hidria ultrasonic water meter portfolio includes a **unique variant with an integrated valve that enables 0-100 % flow regulation**. This innovation ensures optimal distribution and minimizes waste, making every drop count. With exceptional accuracy and reliability, Hidria's ultrasonic smart water meters drive more efficient and sustainable water management practices.

## SUPPORTING AUTOMATIC METER READING WITH ADVANCED COMMUNICATION TECHNOLOGIES

Hidria water meters are designed to seamlessly integrate with various advanced communication technologies, ensuring efficient and accurate automatic meter reading (AMR). By leveraging **LoRaWAN, Wireless M-Bus, NB-IoT, NFC and Bluetooth**, our water meter provides real-time data, leak detection alerts and remote monitoring to diverse operational needs.

## PARAMETERIZATION

**Integrated NFC, optical interfaces, and Bluetooth technology** enables efficient data reading and parameterization. NFC and optical interfaces provide secure local communication for on-site access and configuration, while Bluetooth supports seamless wireless interaction with mobile devices and networks for real-time monitoring and control.