

**DIEHL**  
Metering

# ALTAIR VOLUMETRIC WATER METER

## Highly accurate, compact, modular and sustainable

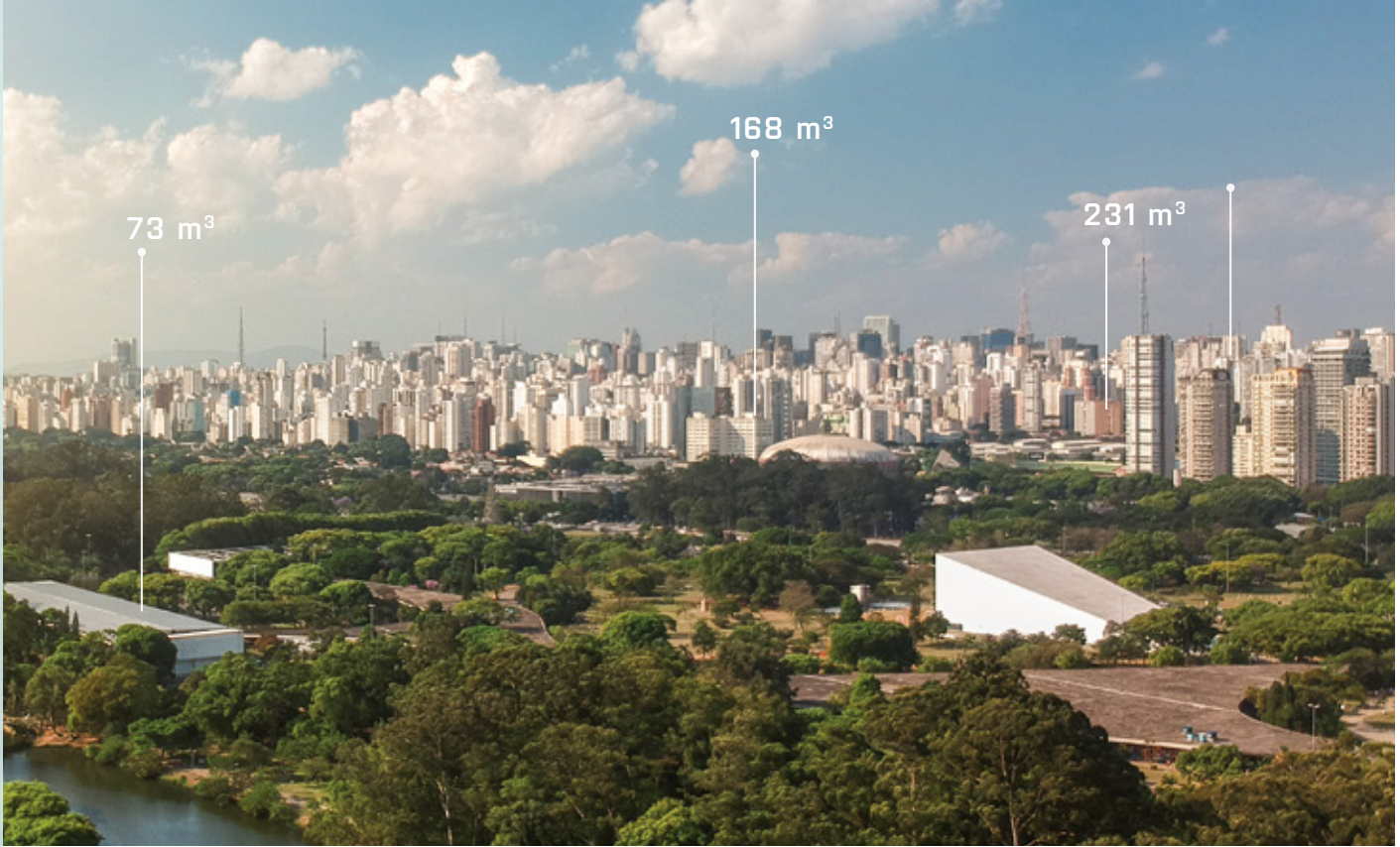




# WHY? OUR VISION.

**Empower a sustainable future.**  
Global trends have an increasing effect on our planet. Consequently, natural resources decrease. Water, for example, is a most valuable commodity. In the future, it will become even more valuable.

At Diehl Metering we believe in our duty to help building a better world. We take on responsibility. Our contribution: we design, develop and produce smart solutions to save water and to manage this resource more efficiently. We empower and innovate. For a sustainable future.



“Operational excellence is one of the key values of BRK Ambiental. That’s why the company is always looking for partners and technology that can deliver the very highest quality and efficiency for all its operations.”

BRK Ambiental

# HOW WE MAKE A DIFFERENCE

## CUSTOMER FOCUS. STATE-OF-THE-ART TECHNOLOGY. ECO-DESIGN.



**You’re at the center. And the value we bring to you. Over the long term.**

We enable our customers to use water, thermal energy, gas and electricity intelligently. You receive a suitable solution for your specific requirement. Thus, your business will be successful. Our passion for innovation supports your empowerment and creates added value. Every Diehl Metering employee sees him/herself as a “solution provider” for you, our customers.

**Benefit for you, for the planet, for everyone: eco-design. Sustainable.**

We develop our products with an eco-design approach. Be sure that we use raw materials economically and efficiently. That we optimize resources. And minimize waste. Every production step follows the principles of sustainability. By the way: in 2021, we signed the United Nations Global Compact, the initiative for sustainable and responsible management.

**State-of-the-art technology. For water management. Against waste.**

The ALTAIR series provides you with volumetric technology at its best: excellent metrology performance. High metering capabilities and reliability. Suited for the most restrictive and challenging environments. For efficient water management. For the reduction of non-revenue water. To conserve one of the world’s most valuable natural resources: water.

# OUR SOLUTIONS PERFORM. AN EXAMPLE ...

**BRK Ambiental expands Brazil’s sanitation network. Thanks to major water and cost savings.**

BRK Ambiental is the largest private sanitation company in Brazil, serving more than 15 million people. Its goal: expand the supply of quality water and sewage services. Reliable meters, however, are in short supply on the local market. Therefore, BRK partnered with Diehl Metering to install ultrasonic and volumetric meters. Thanks to a continuous focus on lead times, the company has been able to expand rapidly. Non-revenue water is significantly reduced, through the meters’ high accuracy even at low flow rates. In the near future, we will provide an Advanced Metering Infrastructure using IZAR radio technology to remotely and reliably gather data for powerful data analytics.

## CHALLENGES


- Significant non-revenue water
- Procure reliable meter supplier

## SOLUTION


- ALTAIR V4 (planned to be further equipped with IZAR radio module)
- Drive-by, Fixed network

## BENEFITS

- Short lead times
- High data quality
- Reduced non-revenue water and increased profit

 **16  
MILLION**  
PEOPLE SERVED  
IN 13 STATES

 **500 K**  
ALTAIR DN 15/20  
VOLUMETRIC METERS  
WITH BUILT-IN SCALABILITY AND  
SUITED FOR ALL ENVIRONMENTS

 **50 %**  
REDUCTION OF  
NON-REVENUE WATER  
THANKS TO THE ACCURACY  
OF OUR VOLUMETRIC METERS



# ULTRA-PRECISE METROLOGY

## LONG-TERM RELIABLE. GUARANTEED.

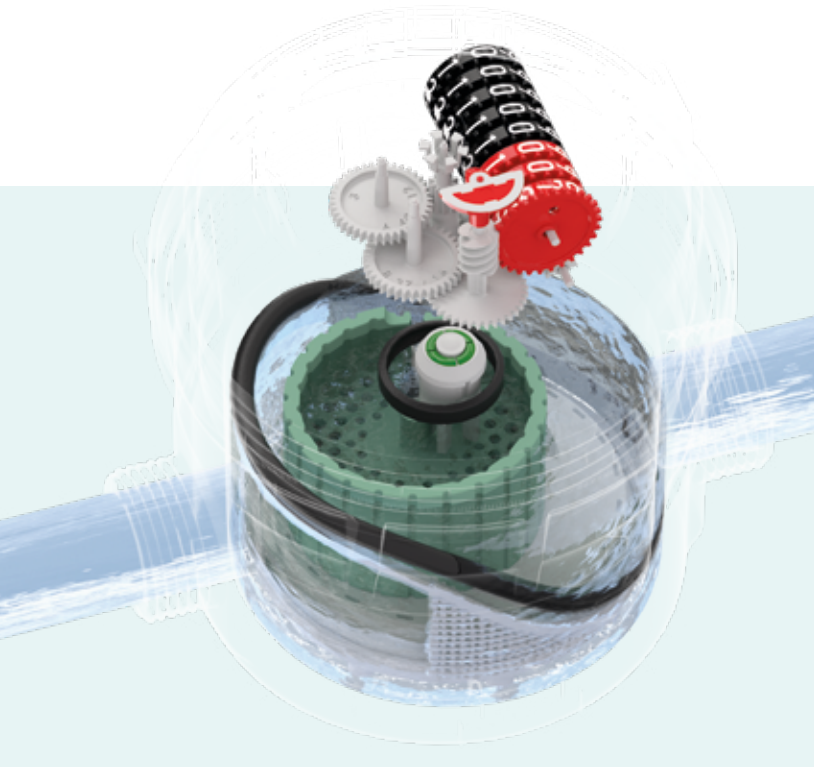
### MEASURING PRINCIPLE: oscillating piston motor

This is how it works: water flows through the protection filter and enters the measuring chamber through the inlet valve. The difference in pressure between in- and outflow of the meter causes the piston to oscillate around the central axis. Each piston rotation displaces the exact same amount of water. A magnet transmits the piston movement to the register.

### Patented dual-zone filter (optional for ALTAIR V4 DN 15)

Choose sustainability. Higher durability = higher return on investment. With our patented dual-zone filter and filter fabric, you benefit from improved product life and even better metrological performance over time. Up to 2%\* annual performance gain by year of service.

\*Estimated annual gain from year 9 to year 15 of operation.



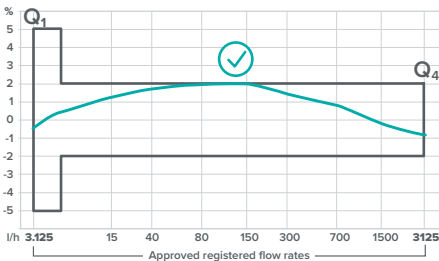
**0.1 mm**  
DUAL-ZONE  
FILTER FABRIC



**UP TO +2 %**  
ANNUAL  
PERFORMANCE GAIN\*

## EXCELLENT PERFORMANCE AND TAMPER-PROOF

### MEASURING DYNAMICS ALTAIR V4 DN 15 Q3 = 2.5 m³/h R800 T50



- ▶ Accurate measurements of low flow: up to R=800
- ▶ Very low starting flow rate: < 0.4 l/h, dripping water measurement

#### Your benefits:

Save money: combined with an IZAR radio module, ALTAIR helps you to detect leaks quickly, thus reducing non-revenue water.

### TAMPER-PROOF DESIGN



- ▶ Protected magnetic transmission against all types of magnets
- ▶ Resistant to fraud attempt with clamp
- ▶ Resistant to hot needle or screwdriver fraud attempt
- ▶ Snap-fit plastic sealing ring: dismantling or modifying impossible without visible damage

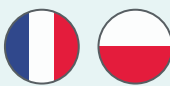
#### Your benefits:

Always play it safe: your investment is secure. The data it provides are reliable.



## ALTAIR V4 RANGE

### VOLUMETRIC METERS



**MADE IN  
FRANCE  
& POLAND**



## INTELLIGENT AND DURABLE

### IMPROVED LIFETIME



- ▶ Large filtration area
- ▶ Optional dual-zone filter for ALTAIR V4 DN 15
- ▶ Full resistance to blockages
- ▶ Low pressure loss

#### Your benefits:

ALTAIR earns its money: it ensures smooth operation. Long-term. Varying water qualities? Challenging environment? No problem.

### INSTALLATION CHARACTERISTICS



- ▶ Horizontal and vertical position
- ▶ No calming sections (U0/D0)
- ▶ Indoor and outdoor installation (resistant to humidity, ambient temperature, UV ...)

#### Your benefits:

Enjoy flexibility and maximum performance in every installation situation. As well as constant metrological accuracy.



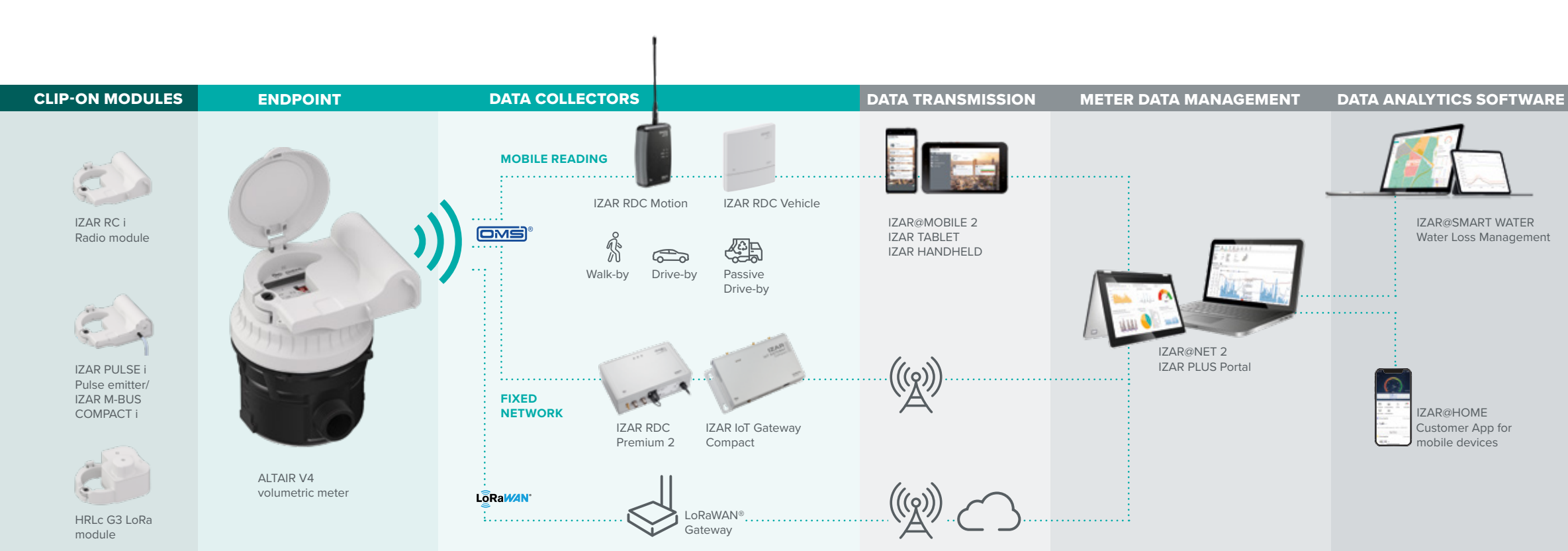
**-25 %\***  
CO<sub>2</sub>  
FOOTPRINT

### ECO-DESIGN COMPOSITE RANGE

The ALTAIR V4 composite meter considers the principles of sustainability: its body has been developed and constantly refined to minimize its carbon footprint. To make as little impact as possible on the environment.

- ▶ Less energy needed for production
- ▶ Reduced product weight
- ▶ Reduced shipping costs

\*ALTAIR V4 DN 15 composite versus ALTAIR V4 DN 15 brass.



WHY PARTNER WITH  
DIEHL METERING?  
IT JUST MAKES SENSE.

# MODULAR CONNECTIVITY

## VALUE CHAIN FROM HARDWARE TO SOFTWARE

### NEED A COMMUNICATING METER? NO PROBLEM!

We offer a wide range of connectivity that adapts to your every need: each ALTAIR can be equipped with either IZAR clip-on radio modules or IZAR wired connectivity modules, which are programmed with a set of alarms. You can order your ALTAIR V4 with an IZAR module already mounted, to raise your productivity in the field. Furthermore, our HRLc G3 LoRa module that integrates LoRaWAN® technology enables smart metering applications and the connection to smart city radio networks.

### IZAR: A FLEXIBLE AND POWERFUL SYSTEM TAILORED TO YOUR NEEDS

Our IZAR system has been providing radio communication in different protocols for over 25 years. You'll be convinced of its coverage and performance as well as of its data granularity and speed. Moreover, it is scalable and adapts perfectly to your network. With different reading modes coexisting, you can switch from one reading per year to daily reading to further optimize your water network, without replacing your IZAR module.

### SOFTWARE FOR YOUR WATER LOSS MANAGEMENT

Take control! A leak of 1 l/hour over 12 months equals 8.76 m³ of unbilled water. Diehl Metering supports you to optimize the performance of your network and reduce the unbilled water: with our new IZAR@SMART WATER Water Loss Management (WLM) application, you track the non-revenue water levels in your distribution network. In case of a leak, you'll be informed at once and can react immediately to minimize water losses.



### THEY TRUST US

with ALTAIR. All over the world.

#### CHINA



#### MEXICO



#### COLOMBIA



#### ECUADOR



#### BRASIL



#### MALAYSIA



#### UNITED KINGDOM



#### PORTUGAL



#### ENERMETER



#### FRANCE



#### VEOLIA



#### SPAIN



### 30 MILLION

ALTAIR V4 SOLD  
WORLDWIDE SINCE 2008,  
TOP SELLER IN FRANCE,  
SPAIN, UK, POLAND



### 30 YEARS

EXPERIENCE IN  
DEVELOPING  
VOLUMETRIC  
TECHNOLOGY



### AWARDS

ENTERPRISES & ENVIRONMENT  
TROPHY IN 2008;  
ECOVADIS GOLD (SOCIAL  
RESPONSIBILITY) IN 2021 & 2022



### 60 MILLION

COMMUNICATIVE  
METERS AND RADIO  
MODULES INSTALLED  
WORLDWIDE

### MEMBER

OF THE UNITED NATIONS  
GLOBAL COMPACT SINCE 2021



### INTERESTED?

LET'S TALK ABOUT  
YOUR CHALLENGES!



