

# IZAR RC i R4

## RADIO | RADIO MODULE



### APPLICATION

IZAR Radio Compact Inductive R4 is designed for mobile reading and long-range fixed network remote reading of Diehl Metering water meters. IZAR RC i R4 radio module can be clipped onto all the meters of the Diehl Metering inductive modular range (Ha+Ti or Ti) with a grey or red ring. It comprises a tamper proof sensor operating on inductive principle.

Easy to fit, IZAR RC i R4 is field or factory programmable with the serial number of the associated meter. IZAR RC i R4 radio module transmits the meter reading via a unidirectional link every 8 seconds in R3 mode and every 15 minutes in long-range fixed network R4 mode, enabling an efficient drive-by reading at 50 km/h and an accurate fixed network.

IZAR RC i R4 offers multiple functions (historical index value, remaining battery lifetime...) and alarms (leaks detection, meter stopped, backflow...).

### FEATURES

- Compact radio emitter
- Compatible with Diehl Metering water meters
- Available in 868 MHz and 434 MHz
- Suitable for mobile reading and long-range fixed network
- IP 68
- Lifetime up to 15 years
- Different functions and alarms available
- 1 historical index value stored at predefined date to facilitate billing
- Insensitive to magnetic fraud

## PRINCIPLE OF OPERATION

IZAR RC i R4 includes an electronic circuit that collects the data coming from a Diehl Metering water meter and transmits in real time the index and other operating information every 8 seconds in R3 mode and every 15 minutes in long-range fixed network R4 mode.

Mobile reading in Walk-by / Drive-by / Passive Drive-by:

The data sent by IZAR RC i R4 is collected using either a handheld computer or a tablet equipped with an IZAR RECEIVER BT for Walk-by/Drive-by or an IZAR RDC VEHICLE for passive Drive-by. Data is then transferred directly to a centralized monitoring system.

Fixed network:

A fixed receiver IZAR RDC STANDARD/IZAR RDC BATTERY (fixed network R3) or IZAR RDC PREMIUM (long-range fixed network R4) installed in a building will collect the data and send it at predefined intervals via GPRS or LAN, to a centralized server. Reading through M-Bus application with an IZAR CENTER associated to an IZAR RECEIVER M-BUS and IZAR@NET 2 software is also possible.

## TECHNICAL DATA

| IZAR RC i R4           |     |                                                                   |
|------------------------|-----|-------------------------------------------------------------------|
| Communication protocol |     | PRIOS                                                             |
| Frequency              | MHz | 868.95 or 434.47 MHz (R3 mode) and 868.30 or 433.42 MHz (R4 mode) |
| Modulation             |     | FSK                                                               |
| Transmission power     | mW  | 16 mW (868 MHz)   10 mW (434 MHz)                                 |
| Transmission mode      |     | Unidirectional                                                    |
| Radio range            |     | Up to 500 m (R3) and 1.5 km (R4) depending on the environment     |
| Standards              |     | EN 300 220, CE, RED directive, EN 13757-3/-4                      |
| Power supply           |     | Lithium battery 3.6 V                                             |
| Battery lifetime       |     | Up to 15 years*                                                   |

\* Standard conditions of use and temperature. Theoretical life, with no guarantee.

## AMBIENT CONDITIONS

| IZAR RC i R4                |    |             |
|-----------------------------|----|-------------|
| Operating temperature range | °C | -15 ... +55 |
| Storage temperature range   | °C | -20 ... +70 |
| Ambient humidity            | %  | 0 ... 100   |
| Degree of protection        |    | IP 68       |

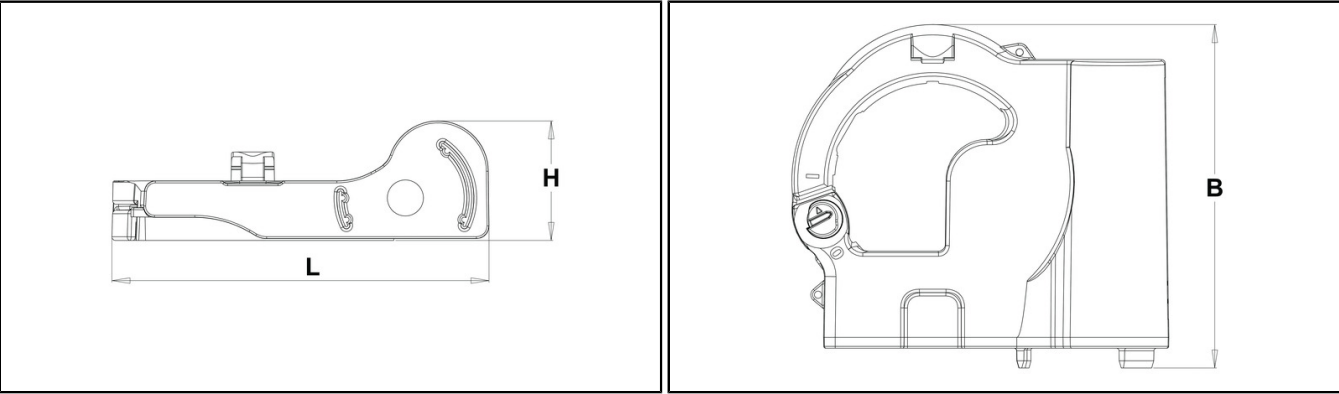
## CONFIGURATION

| IZAR RC i R4      |                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------|
| Interface         | Optical IrDA                                                                            |
| Functions         | Current index   Historical index value   Remaining battery lifetime                     |
| Alarms management | Leak detection   Meter stopped   Overflow   Underflow   Backflow   Mechanical tampering |

## COMPATIBILITY

| IZAR RC i R4 |                                                                                                                                                                           |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Meters       | Diehl Metering inductive modular range Ha+Ti or Ti. Pulse weight DN15 to DN40 (1 liter)   Pulse weight DN50 to DN125 (10 liters)   Pulse weight DN150 to 300 (100 liters) |

DIMENSIONS



| IZAR RC i R4 |   |    |     |
|--------------|---|----|-----|
| Length       | L | mm | 104 |
| Height       | H | mm | 33  |
| Width        | B | mm | 95  |

## **Economic Actor Information**

Applicable regulation and legal obligations for products may change.

DIEHL METERING monitors applicable regulation to ensure their products comply at the date of placing on the market.

Each economic actor making products available on the market thereafter must independently keep informed about the current applicable regulation.

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