

IZAR RC 868 I W R4

RADIO MODULE



APPLICATION

IZAR Radio Compact Inductive Waterbox R4 is designed for mobile and long-range fixed network remote reading of Diehl Metering water meters. IZAR RC i W 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 W R4 is field or factory programmable with the serial number of the associated meter. IZAR RC i W 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, allowing an efficient drive-by reading at 50km/h and an accurate fixed network.

IZAR RC i W R4 offers multiple functions (historical index value, remaining battery lifetime...) and alarms (leaks, meter stopped, backflow...). An internal data logger is readable via the IrDA interface, in case of consumer disputes.

FEATURES

- Compact radio emitter 868 MHz designed for concentric meters
- Suitable for mobile reading and long range fixed network
- IP 68
- Lifetime up to 15 years
- Integrated data logger (up to 6 months memory)
- 1 historical index value stored at predefined date to facilitate billing
- Insensitive to magnetic fraud

PRINCIPLE OF OPERATION

IZAR RC i W 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 W R4 is collected using either a Diehl Metering handheld computer or 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 buildings 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 possible as well.

Data logger function:

IZAR RC i W R4 has an integrated data logger that registers consumption at a regular intervals. In case of consumer dispute or for analysis purposes, data is available via the IrDA interface of the module and is transferred to the handheld or computer/tablet via a dedicated application. By default, the consumption backup interval is set to 30 minutes in the module, ensuring up to 6 months of historical values. This interval can be modified thanks to the same dedicated application.

TECHNICAL DATA

IZAR RC 868 i W R4	
Communication protocol	PRIOS
Frequency	MHz 868,95 (R3 mode) and 868,30 (R4 mode)
Modulation	FSK
Transmission power	mW 16
Transmission mode	Unidirectional
Radio range	Up to 500 m (R3 mode) and up to 1.5 km (R4 mode) depending on the environment
Standards	EN 300 220 CE RED directive EN13757-3/-4
Power supply	Lithium battery 3.6V
Battery lifetime	Up to 15 years*

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

AMBIENT CONDITIONS

IZAR RC 868 i W R4	
Ambiant operating temperature	°C -15 ... +55
Storage temperature	°C -20 ... +70
Ambient humidity	% 0 ... 100
Protection class	IP68

CONFIGURATION

IZAR RC 868 i W R4	
Interface	Optical IrDA
Functions	Current index Historical index value Remaining battery lifetime Integrated datalogging
Alarms management	Leak detection Meter stopped Overflow Underflow Backflow Mechanical tampering

DATA LOGGER

IZAR RC 868 i W R4

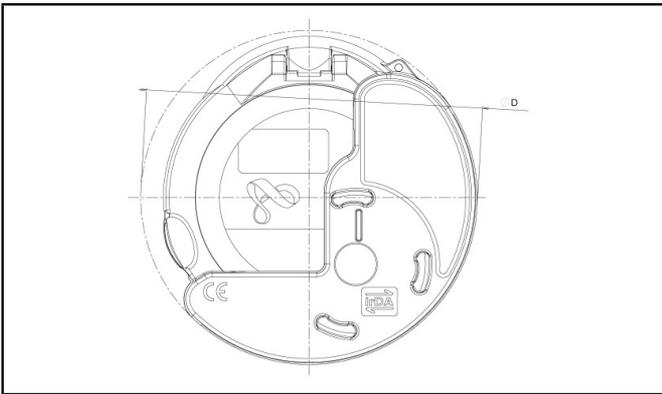
Interface	IrDA + dedicated application working with handheld terminal and/or laptop computer/tablet
Management	In case of consumer dispute, the 30 minutes saving interval set by default provides an average of 6 month's consumption

COMPATIBILITY

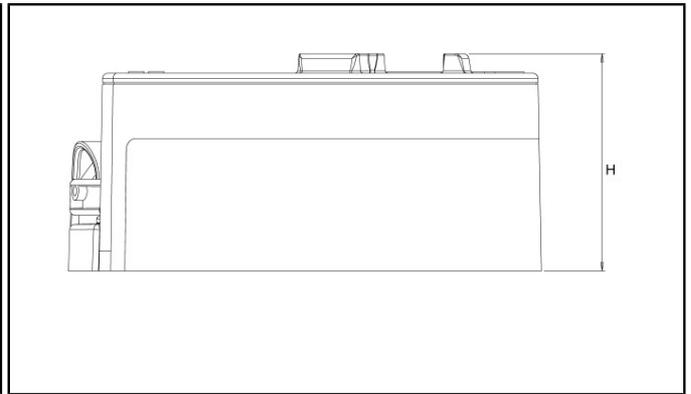
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Meters	Diehl Metering inductive modular range Ha+Ti or Ti. Pulse weight: DN 15 to 40 (1 litre) DN 50 to 125 (10 litres) DN 150 to 300 (100 litres)
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DIMENSIONS



Top view



Side view

IZAR RC 868 i W R4

Diameter	D	mm	90
Height	H	mm	40

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.

For questions, please contact: metering-germany-info@diehl.com

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