

# IZAR RADIO EXTERN AIR

RADIO MODULE

**DIEHL**  
Metering



## APPLICATION

IZAR RADIO EXTERN AIR measures temperature and humidity and sends information via radio, using the OMS protocol. With its modern and inconspicuous design, it is especially developed for in-house application. The hybrid and flexible sending scheme ensures operating reading in mobile (walk-by) and/or fixed network (wireless or wired) mode.

## FEATURES

- ▶ Easy installation
- ▶ Modern and inconspicuous design
- ▶ Fast set-up without software
- ▶ Suitable for mobile reading (Walk-by) and fixed network
- ▶ Battery powered with a lifetime of up to 10 years
- ▶ Wide temperature range for in-house application
- ▶ Accurate data

# IZAR RADIO EXTERN AIR

## RADIO MODULE

### OPERATING PRINCIPLE

IZAR RADIO EXTERN AIR is an electronic unit which measures humidity and temperature. The data is sent within an adjustable sending interval to a mobile or fixed network receiver. The telegram is according to OMS specification.

Mobile reading in walk-by:

The data sent by IZAR RE AIR is collected using either a handheld computer or a tablet equipped with an IZAR RECEIVER BT. Data is then directly transferred to a centralized monitoring system.

Fixed network:

A fixed receiver IZAR RDC STANDARD, IZAR RDC BATTERY or IZAR RDC PREMIUM collects and saves the data and transmits it cyclically to a central FTP server. Data visualization can be done using IZAR@NET software or IZAR PLUS PORTAL.

### TECHNICAL DATA

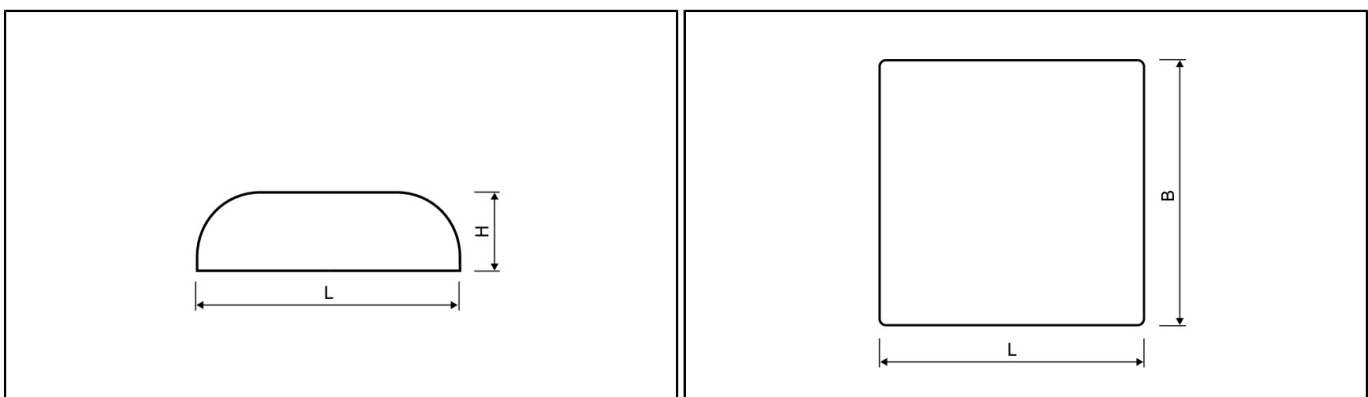
IZAR RADIO EXTERN AIR	
Communication protocol	OMS 3.0.1; Encryption Mode 5 with AES128bit Encryption
Frequency	868.95 MHz
Modulation	FSK
Transmission power	10 mW
Transmission mode	T-Mode and S-Mode
Radio range	Up to 600m depending on installation conditions
Programming interface	DIP-switches
Standards	EN 60950 Information technology equipment
Power supply	2 x AA replaceable batteries included
Battery lifetime	Up to 6 years (1min sending interval) / Up to 10 years (15min sending interval) *
Sending interval	1min, 5min, 10min or 15min
Accuracy	Typically $\pm 2\%$ in the range of 20-80%; Typically $\pm 0.3^{\circ}\text{C}$ in the range of $-10^{\circ}\text{C}$ up to $55^{\circ}\text{C}$

\* The lifetime depends significantly on the performances of the battery and is not guaranteed.

### AMBIENT CONDITIONS

IZAR RADIO EXTERN AIR	
Operating temperature	$^{\circ}\text{C}$ -10 ... +55
Ambient humidity	% 20 ... 80 (non-condensing)

### DIMENSIONS



IZAR RADIO EXTERN AIR			
Length	L	mm	80
Width	B	mm	80
Height	H	mm	25