



# WDE-K50

Woltmann type pre-equipped for inductive modules

The WDE-K50 is a horizontal Woltmann with a removable insert and sealed counter mechanism with a magnetic transmission.

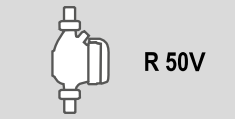
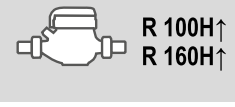
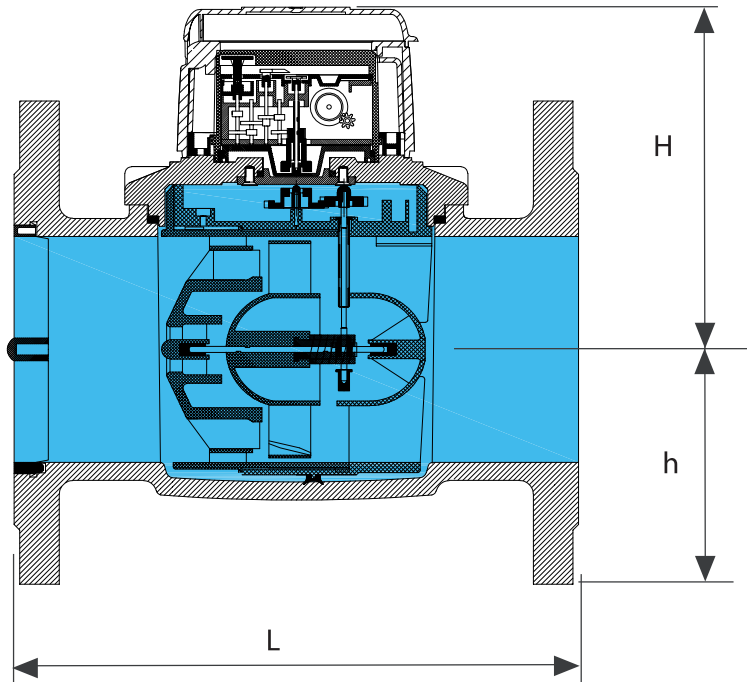
Inductive pre-equipment for the installation of M-Bus Wired and Wireless OMS data communication modules, non-magnetic pulse output and, upon request, LoRa & NB-IoT.



## TECHNICAL FEATURES

	Size	DN	mm (in)	15 (1/2")	15 (1/2")	20 (3/4")	15 (1/2")	15 (1/2")	20 (3/4")	20 (3/4")
	<b>Overload flow rate</b>	Q <sub>4</sub>	m <sup>3</sup> /h	50	78.75	125	200	200	312.5	500
	<b>Permanent flow rate</b>	Q <sub>3</sub>	m <sup>3</sup> /h	40	63	100	160	160	250	400
R=100H ↑	<b>Transitional flow rate</b>	Q <sub>2</sub>	m <sup>3</sup> /h	0.64	1.008	1.6	2.56	2.56	4.0	6.4
	<b>Min flow rate</b>	Q <sub>1</sub>	m <sup>3</sup> /h	0.40	0.63	1.00	1.60	1.60	2.5	4.0
R=160H ↑	<b>Transitional flow rate</b>	Q <sub>2</sub>	m <sup>3</sup> /h	0.256	0.403	0.64	1.024	1.024	1.60	2.56
	<b>Min flow rate</b>	Q <sub>1</sub>	m <sup>3</sup> /h	0.16	0.252	0.40	0.64	0.64	1.00	1.60
	<b>Min reading</b>		l			0.5			5	
	<b>Max reading</b>		m <sup>3</sup>			999,999			9,999,999	
	<b>Max pressure loss at Q3</b>		bar	0.25	0.40	0.25	0.40	0.40	0.16	0.40
	<b>Max admissible pressure MAP</b>		bar				16			

## DIMENSIONS & WEIGHTS



Size	mm (in)	50 (2")	65 (2" 1/2)	80 (3")	100 (4")	125 (5")	150 (6")	200 (8")
L	mm	200	200	225	250	250	300	350
H	mm	130	130	152	152	152	181	181
h	mm	78	86	95	104	117	133	162
Weight	Kg	8.5	9.5	13.5	15	18	30.5	43



# DESIGNING, PRODUCING AND DISTRIBUTING SOLUTIONS FOR OVER 25 YEARS

B METERS is an Italian company that has been designing, producing and distributing instruments and solutions for measuring the consumption of water and thermal energy used for heating and cooling, for over 25 years.

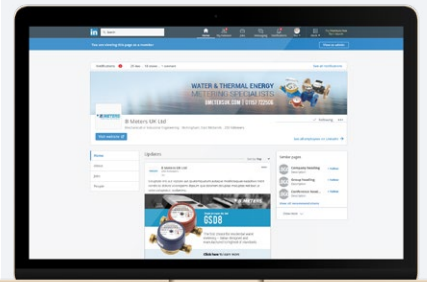
The yearly production currently exceeds 1,800,000 units, putting B METERS in a leading position both at national and European level.

The product range includes turbine (velocity) type single and multi-jet water meters with mechanical or magnetic transmission, Woltmann meters, irrigation meters, flow meters, thermal energy meters and heat cost allocators with direct reading, or complete with integrated modules for the remote transmission of the consumption data.



EN 1434

EN 834



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## THE BMETERS RANGE



**WATER METERS**



**THERMAL ENERGY METERS**



**READING SYSTEMS**



**M-BUS SOLUTIONS**

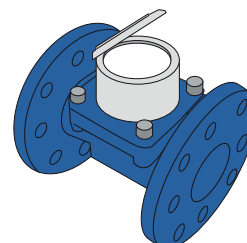
mod.

# IWM-TX4

Wireless M-BUS OMS module  
for Woltmann meters with inductive interface



Compatible water meters



mod. WDE-K50

IWM-TX4 has been designed to allow wireless remote reading in different types of applications in commercial and industrial sectors. The radio module thanks to the presence of the inductive target into the meter dial allows the reading of the volume consumption without any constraints of access to the site in walk-by mode or AMR (automatic meter reading), in respect of the WMBUS standard and complying with the OMS (Open metering system) specification.

- Consumption analysis with reverse flow compensation that provides an always perfect alignment between the counter and the counter clock.
- Fraud control (removal of the radio module, application of external magnetic field, reverse flow, identification of system loss). Magnetic tampering at the counter and removal are recorded and reported to the receiving system via radio transmission. The presence of reverse flow is recorded in an additional register that allows to calculate the amount of water passed in reverse. The loss function can be monitored at the time of reading or by the AMR system if a timely update is desired.
- IP68 protection\* allows the use of the module also for meters installed in difficult environments.
- NFC interface allows configuration and commissioning of the device with the use of a simple smartphone app.

Radio interface	W-Mbus EN13757-4 @868 MHz ≤ 25 mW, mode T1
Coverage	500 meters*
Compatible water meters	WDE-K50
Pulse output minimum value (K)	10 liters (up to DN125) or 100 liters (from DN150)
Configuration	Via radio (with RFM-RX2 and software B Metering), NFC (with Android app)
Energy supply	Non-replaceable lithium battery, maximum lifetime 10 years**
Protection class	IP68***
Weight	167 g
Size (l x p x h)	100 x 100 x 57 mm
Working Temperature	+1° / +55°C
Transmitted data	Volume (consumption), total of backward flow, 12 monthly historical values, battery status, alarms.
Alarms	Discharged battery, module removal, magnetic fraud attempt, backward flow, leakage detection.
Module programming requirements	Android device (smartphone, tablet, etc.) with an NFC interface and the NFC IWM Config APP freely downloadable from GOOGLE PLAY

\* In optimal signal transmission conditions

\*\* The battery life strongly depends on the working time window, set during the configuration process, and on the environmental conditions

\*\*\* IP68: maximum 24 hours of continuous submersion at 1 m depth