mod.
GMDM-I

Getto multiplo, quadrante asciutto, predisposto per moduli induttivi
Multi jet, super dry dial, pre-equipped for inductive modules

MID
Measuring Instrument Directive 2014/32/UE - Approved

ACS

WRAS APPROVED PRODUCT

kiwa IT-TD-Ki0413



Versioni alternative
Alternative versions

Acqua calda 30-90°C
Hot water 30-90°C



IT

Getto multiplo, quadrante asciutto, trasmissione magnetica con coperchio girevole a 360°. Versione per acqua fredda e acqua calda. Predisposizione induttiva per l'installazione di moduli di trasmissione dati M-BUS cablati, wireless M-BUS, lancia impulsi di tipo amagnetico e LoRa.

EN

Multi-jet, dry dial, magnetic transmission with 360° rotating lid. Versions for cold water and hot water. Inductive pre-equipment for the installation of data communicaton modules M-BUS wired and wireless M-BUS, non-magnetic pulse output and LoRa.

ES

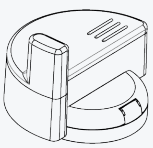
Chorro múltiple, esfera seca, de transmisión magnética con tapa orientable 360°. Realizado en las versiones para agua fría y agua caliente. Predisposición inductiva para módulos de telemetría M-Bus cable y wireless M-BUS, lanza impulsos no magnético y LoRa.

FR

Jet multiple, cadran sec, entrainement magnétique avec capot orientable à 360°. Version pour eau froide et eau chaude. Pre-équipement inductive pour modules de télérelèvage M-Bus filaire et radio M-BUS, avec émetteur d'impulsions amagnétique et LoRa.

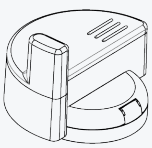
Moduli compatibili — Compatible modules

mod. IWM-TX3



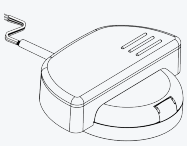
M-Bus wireless

mod. IWM-LR3



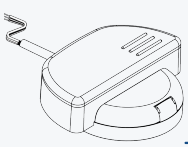
LoRaWAN

mod. IWM-MB3



M-Bus

mod. IWM-PL3



PULSE

	Calibro - Size		DN (in)	15 (1/2")	20 (3/4")	25 (1")	32 (1"1/4)	40 (1"1/2)	50 (2")
	Portata di sovraccarico Overload flow rate	Q_4	m³/h	3,125	5	7,875	12,5	20	31,25
	Portata permanente Permanent flow rate	Q_3	m³/h	2,5	4	6,3	10	16	25
R=100 H ←	Portata di transizione Transitional flow rate	Q_2	L/h	40	64	100,8	160	256	400
R=100 H ←	Portata minima Min flow rate	Q_1	L/h	25	40	63	100	160	250
R=160 H ←*	Portata di transizione Transitional flow rate	Q_2	L/h	25	40	63	100	160	250
R=160 H ←*	Portata minima Min flow rate	Q_1	L/h	15,63	25	39,38	62,5	100	156,25
R=50 VH→	Portata di transizione Transitional flow rate	Q_2	L/h	80	128	201,6	320	512	800
R=50 VH→	Portata minima Min flow rate	Q_1	L/h	50	80	126	200	320	500
	Sensibilità Sensitivity		L/h	6		10		20	
	Lettura minima Min reading		L	0,05					
	Lettura massima Max reading		m³	99.999				999.999	
	Pressione max ammissibile Max admissible pressure		bar	16					

*Versione su richiesta solo acqua fredda/ Version on request only cold water

Versione base — Basic version

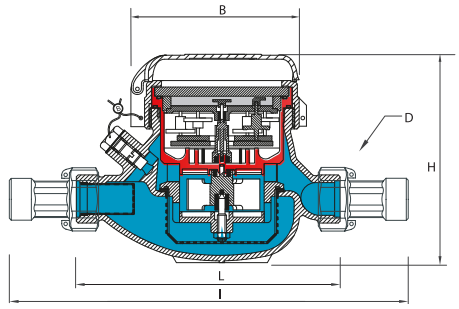
- **R100H↑ R50VH→**
- **Versione acqua fredda (0,1 °C - 50 °C)**
- **Versione acqua calda (30 °C - 90 °C)**
- **Trasmissione magnetica**
- **Protezione antifrode magnetica**
- **Lettura diretta su 5 rulli numeratori (6 rulli numeratori su DN40 e DN50)**
- **Quadrante asciutto**
- **Coperchio girevole a 360° (DN15-DN32)**

- R100H↑ R50VH→
- Cold water version 0,1°C-50°C
- Hot water 30°C-90°C
- Magnetic transmission
- Anti-magnetic fraud protection
- Direct reading on 5 numeric rolls (6 numeric rolls on DN40 and DN50)
- Dry dial
- 360° rotating lid (DN15-DN32)

Su richiesta — Upon request

- **Versione acqua fredda R160H↑ R50VH→**
- Cold water version R160H↑ R50VH→

Dimensioni e pesi - Dimensions and Weights



Calibro - Size	DN (in)	15 (1/2")	20 (3/4")	25 (1")	32 (1"1/4)	40 (1"1/2)	50 (2")
L	mm	145-165-190	190	260	260	300	300
l	mm	225-245-270	288	360	380	440	460
H	mm	109	111	117	117	153	172
B	mm	100	100	104	104	126	160
D	in	3/4"	1"	1"1/4	1"1/2	2"	2"1/2
Pesi Weight	Kg	1,18-1,41	1,40	2,09	2,18	4,38	4,46-9,40

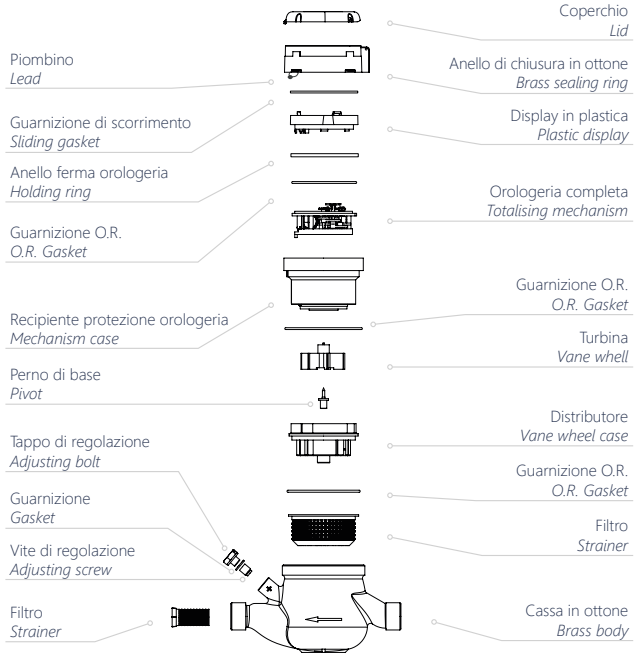
Filettatura/Threading: EN ISO 228-1:2003

I contatori DN50 possono essere forniti flangiati secondo ISO 7005-2 / EN 1092-2 PN16
The DN50 meters can be supplied flanged according to ISO 7005-2 / EN 1092-2 PN16

Posizione d'installazione - Installation position



R 100H↑ R 160H↑	R 50H→	R 50V



mod.

IWM-LR3

V1.1

LoRaWAN Radio module for pre-equipped multi jet water meters

NFC

android

Google play

LoRaWAN CERTIFIED



Compatible water meters

mod. CPR-M3-I



mod. GMDM-I
mod. GMB-RP-I
mod. GMB-I



ENG

Description

IWM-LR3 has been designed to allow wireless remote reading in different types of applications from the residential sector to the 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 thanks to the Long Range LoRa radio technology and the compliance to the LoRaWAN standard can be intergated into multi-service networks.

- *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.*

Technical features	
Radio interface	*LoRaWAN @868 MHz ≤ 25 mW*
Network joining methods	*OTAA / ABP*
Frequency of transmission	*max. 4 per day*
Coverage	*Up to 5 Km**
Compatible water meters	*CPR-M3-I, GMDM-I, GMB-RP-I, GMB-I*
Pulse output minimum value (K)	*1 liter*
Maximum reading error	*0,5%*
Configuration	*NFC (with Android app)*
Energy supply	*Non-replaceable lithium battery, maximum lifetime 10 years***
Protection class	*IP68****
Weight	*124 g*
Size (l x p x h)	*88 x 75 x 60 mm*
Working Temperature	*+1° ÷ +55°C*
Transmitted data	*Volume (consumption), total of backward flow, alarms*
Allarms	*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 Bmetering NFC Config android app 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*

SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

mod.

IWM-MB3

V3.2

Wired M-BUS module for multi let water meters with inductive interface

NFC

android

Google play

LoRaWAN CERTIFIED



Compatible water meters

mod. CPR-M3-I



mod. GMDM-I
mod. GMB-RP-I
mod. GMB-I



ENG

Description

The IWM-MB3 is suitable for remote reading applications in a residential, commercial and industrial context. This M-BUS module allows the meter consumption data collecting by using the standard Wired M-BUS protocol, developed for remote meters reading. The use of an inductive target into the meter dial excludes the possibility of magnetic fraud and makes the application insensitive to the pipes vibrations.

The IWM-MB3 is compatible with all the pre-equipped multiple jet meters (wet, semi-dry and dry dial) and provides:

- *Consumption analysis with reverse flow compensation.*
- *Fraud detection (removal of the module, external magnetic field tampering, reverse flow, water leakage). All the alarms are recorded and reported into the M-BUS telegram sent by the module.*
- *IP68 protection* allows the installation of the module even in harsh environments.*
- *NFC interface allows configuration and commissioning of the device with the use of a simple smartphone app.*

Technical features	
Protocol	MBUS EN13757-2\3
Cable length	1,5 meters
Compatible water meters	CPR-M3-I, GMDM-I, GMB-RP-I, GMB-I
Sensitivity measure	1 liter
Reverse flow	*Activate for the backward flow amount after user-settable threshold*
Energy supply	*Non-replaceable lithium battery, rechargeable (automatic recharge from the BUS network). Backup for measuring function in absence of BUS voltage.*
Protection class	IP68*
Weight	122 g
Size (l x p x h, cable excluded)	88 x 69 x 28 mm
Working Temperature	from +1°C to +55°C
Transmitted data	Volume (consumption), alarms
Maximum reading error	0,5%
Alarms	*Module removal, magnetic fraud attempt, backward flow, leakage detection.*
Module programming requirements	*• Android device (smartphone, tablet, etc.) with an NFC interface and the Bmetering NFC Config android app freely downloadable from GOOGLE PLAY.* *• Any M-BUS level converter and Windows PC with BMBus software installed (or other M-BUS softwares).*

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

SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

mod.

IWM-PL3

Electronic pulse emitter module
for multi jet meters with inductive interface

NFC

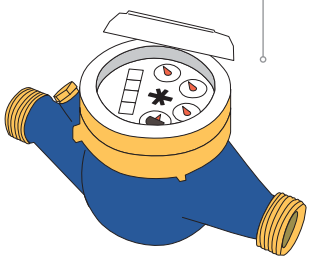
ANDROID

Google play

PULSE



Compatible water meters



mod. **GMDM-I**
mod. **GMB-RP-I**
mod. **GMB-I**

ENG

Description

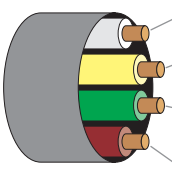
The IWM-PL3 is suitable for remote reading applications in commercial and industrial sectors, acting as an electronic pulse-emitter. It allows the acquisition of the consumption of the counter by third-party systems with a universal interface and integrating advanced counting functions and fraud detections. The use of an inductive target on the meter dial excludes the possibility of magnetic fraud and makes the application insensitive to the pipes vibrations.

The IWM-PL3 is compatible with all the pre-equipped multiple jet meters (wet, semi-dry & dry dial) and allows:

- *Consumption analysis (with incremental and decremental counting), Reverse flow compensation can be activated for having always perfect alignment between the totalizer and the meter.*
- *Checking frauds (cable cut and tampering, detection of external magnetic field application, reverse flow). The presence of reverse flow can be monitored with a dedicated impulse contact.*
- *Dedicated dosing function available for industrial applications.*
- *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 (available ratio values K = 1, 5, 10, 25, 50, 100, 250, 500, 1000), and being able to configure the duration of the output pulse according to the sensitivity of the acquisition system.*

Technical features	
Output signal	*Supply: maximum 30VDC (100mA) Type: polarized open-collector*
Cable length	*1.5 meters (4 conductors)*
Compatible water meters	*GMDM-I, GMB-RP-I, GMB-I*
Pulse output minimum value (K)	*1 liter*
Energy supply	*Non-replaceable lithium battery, max lifetime 10 years**
Protection class	*IP68***
Weight	*122 g*
Size (l x p x h, cable excluded)	*88 x 69 x 28 mm*
Working Temperature	*+1° / +55°C*
Module programming requirements	*Android device (smartphone, tablet, etc.) with a NFC interface and the NFC IWM Config APP freely downloadable from GOOGLE PLAY*

** 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.*



WHITE+ — *Simple counting wire, NO contact*
Closes every index revolution, independently from the flow direction

YELLOW+ — *Fraud wire, NC contact, Opens at the following alarm conditions:*
- Module removal
- Inductive target tampering
- Cable cut
- Magnetic tampering

GREEN+ — *Third wire, NO contact, it can be assigned to one of the following features:*
- Absolute counting (closes every index revolution during forward flow, with backward flow revolution compensation)
- Backward counting (closes every revolution during back flowing)
- Dosing (closes every XX liter, with XX freely settable)

BROWN- — *Ground (common wire)*

mod.

IWM-LR3

V21.2

Wireless M-BUS module for multi jet meters with inductive interface



Compatible water meters

mod. CPR-M3-I



mod. GMDM-I
mod. GMB-RP-I
mod. GMB-I



ENG

Description

IWM-TX3 has been designed to allow wireless remote reading in different types of applications from the residential sector to the 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, in respect of the wM-Bus standard.

- *Consumption analysis with reverse flow compensation that provides an always perfect alignment between the totalizer and the meter.*
- *Fraud control (removal of the radio module, application of external magnetic field, reverse flow, identification of system loss).*
  Magnetic tampering to the meter 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.*

Technical features	
Radio interface	W-Mbus EN13757-4 @868 MHz ≤ 25 mW, modo T1
Coverage	500m*
Compatible water meters	CPR-M3-I, GMDM-I, GMB-RP-I, GMB-I
Pulse output minimum value (K)	1 liter
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	124 g
Size (l x p x h)	88 x 75 x 60 mm
Working temperature	from +1°C to +55°C
Transmitted data	Volume (consumption), backward flow volume, 12 monthly historical values, battery status, alarms
Maximum reading error	0,5 %
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 android Bmetering NFC Config app freely downloadable from GOOGLE PLAY • RFM-RX2 receiver, magnet and Windows PC with B Metering software installed

** 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*