

WATER and **THERMAL** energy metering

Precision, Reliability, and Smart Technology.
Main product range



**Residential
Smart Meters**



**Thermal Energy
Meters**



**Bulk Water
Meters**

mod.GSD8-I



R100

on request
up to:

R200

on request:



REED

Size DN			mm (in)	15 (1/2")	15 (1/2")	20 (3/4")
Length			mm	80/110/115		130
R=100H ↑	Overload flow rate	Q ₄	m³/h	2	3,12	5
	Permanent flow rate	Q ₃	m³/h	1,6	2,5	4
	Transitional flow rate	Q ₂	L/h	25,6	40	64
	Minimum flow rate	Q ₁	L/h	16	25	40
	Minimum reading		L	0,05		
	Maximum reading		m³	99.999		
	Maximum admissible pressure MAP		bar	16		

Single jet meter, dry dial, direct reading on 8 numerical rolls with anti-fraud ring and 360° rotating lid. Available for both cold water 0÷50°C and hot water 30÷90°C. Magnetic transmission. Inductive predisposition for the installation of **LoRaWAN** and **M-Bus**.

mod.HYDRODIGIT-S1



R250



on request:

R400

Size DN			mm (in)	15 (1/2")	20 (3/4")
Length			mm	80/110	130/190
R=250H ↑	Overload flow rate	Q ₄	m³/h	3,12	5
	Permanent flow rate	Q ₃	m³/h	2,5	4
	Transitional flow rate	Q ₂	L/h	16	25,6
	Minimum flow rate	Q ₁	L/h	10	16
	Minimum reading		L	1	
	Maximum reading		m³	99.999	
	Maximum admissible pressure		bar	16	

Digital single jet meter, direct reading on 8 digits LCD display with 360° rotating dial. Available for cold water 0÷50°C and hot water 30÷90°C. Inductive transmission. Real time detection of reverse flow, low battery, leakage & burst. Integrated **M-Bus** and/or **LoRaWAN** data transmission. **IR-MB-Pulse** module predisposition.

mod.HYDRODIGIT-M1



R250



on request:

R400

Size DN			mm (in)	15 (1/2")	20 (3/4")	25 (1")	32 (1"1/4)	40 (1"1/2)	50 (2")
Length			mm	145-165-190	190	260	260	300	300
R=250H ↑	Overload flow rate	Q ₄	m³/h	3,12	5	7,87	12,5	20	31,25
	Permanent flow rate	Q ₃	m³/h	2,5	4	6,3	10	16	25
	Transitional flow rate	Q ₂	L/h	16	25,6	40,32	64	102,4	160
	Minimum flow rate	Q ₁	L/h	10	16	25,2	40	64	100
	Minimum reading		L	1					
	Maximum reading		m³	99.999					
	Maximum admissible pressure		bar	16					

Digital multi-jet meter, direct reading on 8 digits LCD display with 360° rotating dial. Available for cold water 0÷50°C and hot water 30÷90°C. Inductive transmission. Real time detection of reverse flow, low battery, leakage & burst. Integrated **M-Bus** and/or **LoRaWAN** data transmission. **IR-MB-Pulse** module predisposition.

mod.HYDROSONIC



R400



on request:

R500

Size DN			mm (in)	15 (1/2")	20 (3/4")	25 (1")	32 (1"1/4")	40 (1"1/2")
Length			mm	110/145/165	130/190	260		300
R=400	Overload flow rate	Q ₄	m³/h	3,125	5	7,875	12,5	20
	Permanent flow rate	Q ₃	m³/h	2,5	4	6,3	10	16
	Transitional flow rate	Q ₂	L/h	10	16	25,2	40	64
	Minimum flow rate	Q ₁	L/h	6,25	10	15,75	25	40
	Minimum reading		L	1				
	Maximum reading		m³	99.999				
	Maximum admissible pressure		bar	16				

Ultrasonic meter for counting cold water in homes, buildings and industrial applications. High precision, up to R500. Can be installed in all positions. Excludes measurement of air contained in pipes. Integrated **M-Bus** and/or **LoRaWAN** data transmission. **IR-MB-Pulse** module predisposition.

mod.GMDM-I



R100
on request:
R160

Size DN		mm (in)	15 (1/2")	20 (3/4")	25 (1")	32 (1"1/4)	40 (1"1/2)	50 (2")
Length		mm	145-165-190	190	260		300	
R=100H ↑	Overload flow rate	Q ₄ m³/h	3,125	5	7,875	12,5	20	31,25
	Permanent flow rate	Q ₃ m³/h	2,5	4	6,3	10	16	25
	Transitional flow rate	Q ₂ L/h	40	64	100,8	160	256	400
	Minimum flow rate	Q ₁ L/h	25	40	63	100	160	250
	Sensitivity	L/h	6		10		20	
	Minimum reading	L	0,05					
	Maximum reading	m³	99.999					999.999
	Maximum admissible pressure	bar	16					

Multi-jet meter, dry dial. Available for both cold water 0÷50°C and hot water 30÷90°C. Magnetic transmission. Inductive predisposition for the installation of **LoRaWAN**, **M-Bus**, wired **M-Bus** & non-magnetic Pulse modules.

mod.WDE-K50



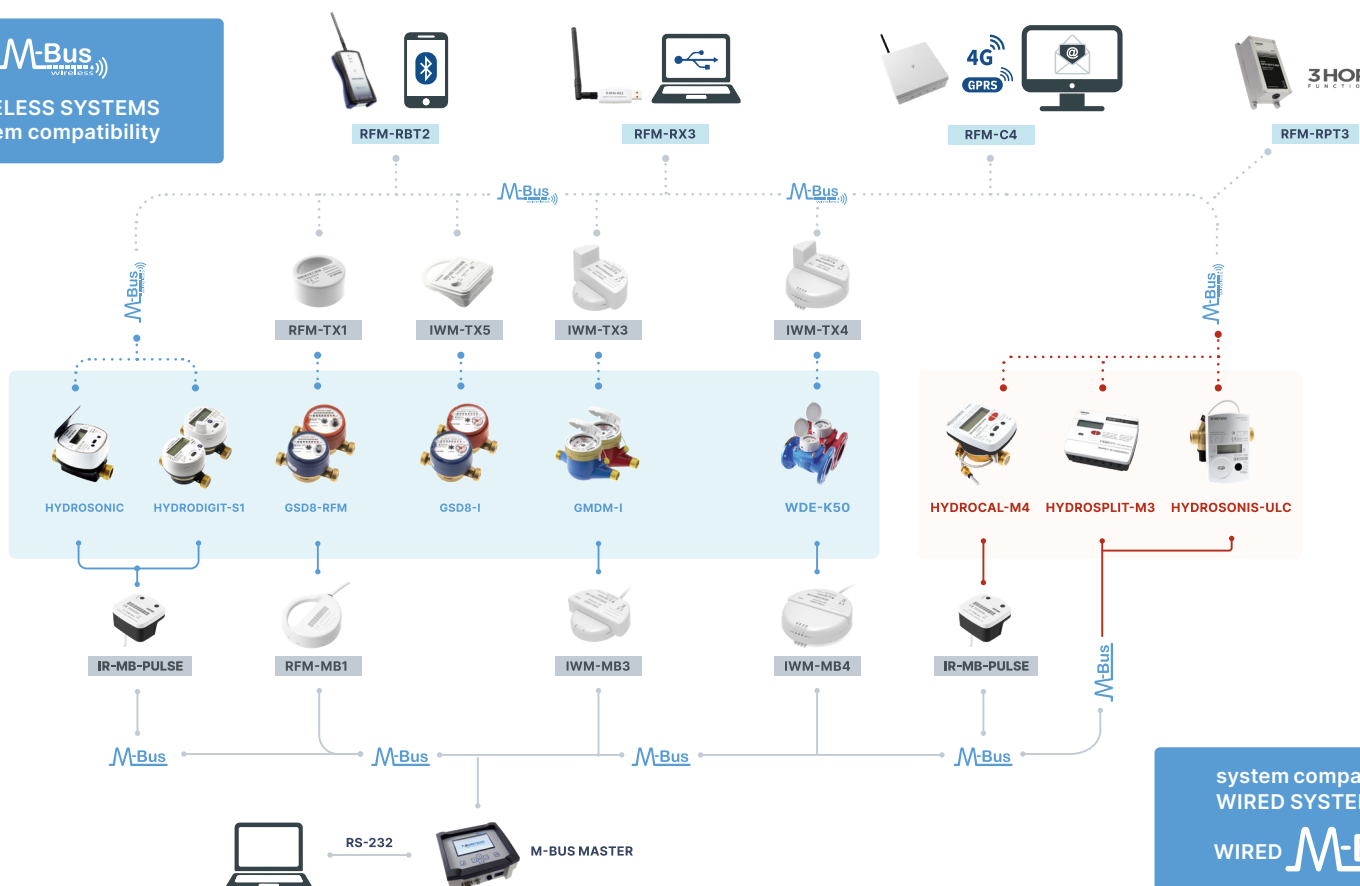
R100
on request
up to:
R250

Size DN	mm (in)	50 (2")	65 (2 1/2")	80 (3")	100 (4")	125 (5")	150 (6")	200 (8")
Length	mm	200	225	250	300	350		
Overload flow rate	Q_4 m ³ /h	50	78,75	125	200	200	312,5	500
Permanent flow rate	Q_3 m ³ /h	40	63	100	160	160	250	400
Transitional flow rate	Q_2 m ³ /h	0,64	1,008	1,60	2,56	2,56	4,00	6,40
Minimum flow rate	Q_1 m ³ /h	0,40	0,63	1,00	1,60	1,60	2,50	4,00
Minimum reading	L	0,5						5
Maximum reading	m ³	9.999.999						99.999.999
Maximum pressure loss at Q_3	bar	0,25	0,40	0,25	0,40	0,40	0,16	0,40
Maximum admissible pressure	bar	16						

Horizontal Woltmann type meter with removable insert and sealed counter mechanism. Available for both cold water 0÷50°C and hot water 30÷90°C. Magnetic transmission. Inductive predisposition for the installation of **LoRaWAN**, **M-Bus**, wired **M-Bus** & non-magnetic Pulse modules.



WIRELESS SYSTEMS
system compatibility



system compatibility
WIRED SYSTEM

WIRED **M-Bus**



mod. **RFM-MB1**

Optical Wired M-BUS Module

Standard EN13757-2/3
IP65 protection class
BUS powered (Backup battery included)
Real-time alarms



mod. **RFM-TX1**

Optical WM-BUS Module

Standard EN13757-4 @868 MHz ≤ 10 mW, mode T1
IP68 protection class
10 years lifetime battery
Real-time alarms

For predisposed
single jet water meters



 module also available



mod. **IWM-MB3**

Inductive Wired M-BUS Module

Standard EN13757-2/3
IP68 protection class
BUS powered (Backup battery included)
Real-time alarms
Android mobile devices configurable via NFC



mod. **IWM-TX3**

Inductive WM-BUS Module

Standard EN13757-4 @868 MHz ≤ 25 mW, mode T1
IP68 protection class
10 years lifetime battery
Real-time alarms
Android mobile devices configurable via NFC



mod. **IWM-PL3**

Inductive Pulse Output Module

Non-magnetic Pulse output for incremental/decremental counting
IP68 protection class
10 years lifetime battery
Android mobile devices configurable via NFC

For predisposed
multiple jet water meters





module also
available



mod. **IWM-MB4**

Inductive Wired M-BUS Module

Standard EN13757-2/3
IP68 protection class
BUS powered (Backup battery included)
Real-time alarms
Android mobile devices configurable via NFC



mod. **IWM-TX4**

Inductive WM-BUS Module

Standard EN13757-4 @868 MHz ≤ 10 mW, mode T1
IP68 protection class
10 years lifetime battery
Real-time alarms
Android mobile devices configurable via NFC



mod. **IWM-PL4**

Inductive Pulse Output Module

Non-magnetic Pulse output for incremental/decremental counting
IP68 protection class
10 years lifetime battery
Android mobile devices configurable via NFC

For predisposed
Woltmann
water meters





module also
available



mod. **IWM-TX5**

Inductive WM-BUS Module

Standard EN13757-4 @868 MHz ≤ 10 mW, mode T1
IP65 protection class
10 years lifetime battery
Real-time alarms
Android mobile devices configurable via NFC

For predisposed
single jet water meters



module also available

DATA ACQUISITION SYSTEMS



WIRELESS DEVICES



mod. **RFM-RX3**

WM-BUS Configurator & Receiver

Reads the consumption data of the WM-BUS devices
Programming software & drivers included
Pc connection via USB port



mod. **RFM-RBT2**

WM-BUS Receiver for Android devices

Wireless M-BUS receiver for all B METERS M-BUS wireless devices
Connectable to Android Smartphones / Tablet
Compatible with HYDROLINK MOBILE app
External antenna with SMA connector
Free B METERS app downloadable from Google Play

android



mod. **RFM-C4**

WM-BUS to GPRS Concentrator

Programming software included
GPRS wireless data concentrator for all B METERS
WM-BUS wireless devices
Sends data via a standard SIM card 4G
Double version: external power supplied or battery supplied



mod. **RFM-RPT3**

WM-BUS signal Repeater

Repeats the signal from the WM-BUS devices
3 HOP Function, up to 3 levels of repeating chains
Battery powered, predisposed for external energy supply

3 HOP
FUNCTION



mod. **MB-MASTER**

Wired M-BUS Concentrator for 60/250 slaves

Collects the consumption data of the wired M-BUS devices
Suitable for network branches up to 1200 m of length
Storage of up to 12 month historical values
Direct reading via high-contrast display
Pc connection via USB port



WIRED DEVICES



mod. **MB-LV32**

M-BUS level converter

Suitable for up to 32 M-BUS wired devices

mod.HYDROCAL-M4



Size DN	mm (in)	15 (G 3/4")		20 (G 1")
Length	mm	110		130
Nominal flow rate	m³/h	0.6	1.5	2.5
Temperature range	°C	1÷90 / 0.2÷90		
Temperature difference	K	3÷90 / 0.2÷90		
Energy units		J, MJ, GJ, kWh, MWh		
Accuracy class		2 (EN1434)		
Protection class		IP65		
Power supply		10+1 years lifetime battery		

Version for installing on the return pipe or flow pipe configurable during installation

Smart and compact thermal energy/BTU meter capable of measuring the amount of energy used for heating/cooling individual utilities served by a centralised system. The data processing related to the flow and return temperature difference, along with the volume data, allows the calculation of the exact amount of energy consumed.

mod.HYDROSONIS-ULC



Size DN	mm (in)	15 (G 3/4")		20 (G 1")
Length	mm	110		130
Nominal flow rate	m³/h	0.6	1.5	2.5
Temperature range	°C	5÷105		
Temperature difference	K	3÷80		
Energy units		MJ/GJ ou kWh/MWh		
Accuracy class		2-3 (EN1434)		
Protection class		IP54		
Power supply		10+1 years lifetime battery		

Standard version for the installation on return pipe - Flow pipe installation version available on request

Ultrasonic thermal energy/BTU meter designed to measure heating/cooling energy consumption in commercial utilities like dwelling houses, office buildings, energy plants and similar applications.

mod.HYDROSPLIT-M3



Technical features			
Temperature range	°C	5÷180 / 2÷24	
Temperature difference	K	3÷150 / 3÷20	
Temperature sensor		PT 1000	
Input Pulse rate (flow sensor)	Litres	0.1 - 0.25 - 1.0 - 2.5 - 10 - 25 - 100 - 250	
Energy units		MJ/GJ ou kWh/MWh	
Accuracy class		2 (EN1434)	
Protection class		IP52	
Power supply		10+1 years lifetime battery	

Standard version for the installation on return pipe - Flow pipe installation version available on request

Separate thermal energy/BTU calculator, used for measuring the amount of energy used for heating/cooling. The data processing related to the flow and return temperature difference, along with the volume data, allows the calculation of the exact amount of energy consumed. Connectable to external volume measurement devices with pulse output: mod.CMC-R, mod.Hydrosonis-UP and mod.WDC-R.

mod.HYDROSONIS-UP + HYDROSPLIT-M3



Size DN	mm (in)	25 (1")	40 (1 1/2")	50 (2")	65 (2 1/2")	80 (3")	100 (4")
Maximum flow rate	m³/h	7	12	20	30	50	120
Nominal flow rate	m³/h	3.5	6	10	15	25	60
Minimum flow rate	L/h	35	60	100	150	250	600
Pressure loss at Qp	mbar	60	240	110	105	160	115
Operating limit	L/h	14	24	40	60	100	240
Temperature range	°C	5 ÷ 130					

Standard version for the installation on return pipe - Flow pipe installation version available on request

Ultrasonic flow sensor without internal moving parts that ensures maximum measurement accuracy, no maintenance requirement and constant functionality over time even in the presence of debris and deposits in the fluid. It allows the installation in any position with ascending or descending flow.