



# Intelis<sup>®</sup> wSource<sup>™</sup> Water Meters

## Right. From the Source.

Highest accuracy and proven durability that keeps costs down and protects revenue.

### UNPARALLELED ACCURACY OVER THE METER LIFETIME

- » MID-certified R1000 Class 2 and R500 Class 1 for highest accuracy.
- » Maintains accuracy over the meter lifetime.
- » Maintains high accuracy in the harshest conditions:
  - Intermittent water supply, pipe elbow, gasket, valve.
  - High humidity, temperature extremes and when water that contains particles, limestone or chlorine.

### PROVIDES FREQUENT, QUALITY DATA WITHOUT REDUCING METER LIFE

- » Solid-state ultrasonic technology with no moving mechanical parts.
- » Designed for 15 years with two batteries, 22 years with three batteries.
  - Battery and register designed and tested to last in challenging external environmental conditions (extreme heat, direct sunlight, humidity).
    - Operating temperature -10°C / +55C.
    - Accidental temperature -20°C / +70°C.
    - Protection / Relative Humidity IP 68 / 0 to 100% humidity - Floodable.
  - Hydraulics tested to resist deposit (calcium in water).



### Superior household leak detection

- » Low starting flow (1 l/h at DN15).
- » Very high accuracy at low flows (Class 1 MID accuracy certification).
- » Advanced leakage detection with 15 minute interval data in the night time to avoid false leakage alarms.



### More data, more often

Intelis wSource can transmit 4.4 LoRaWAN frames per day with wM-Bus transmission every 16 seconds (2-way mode). Many other transmission options are available.

## GUARANTEED ACCESS TO BILLING AND ADVANCED ANALYTICAL DATA

- » Hybrid, simultaneous Automated Meter Reading (AMR) and Advanced Metering Infrastructure (AMI) connectivity.
  - Connectivity based on open standards for easy integration with existing systems:
    - AMI: LoRaWAN R1.0.4, Sigfox V2.10.0, OMS v4.1.2.
    - AMR: wM-Bus T1/T2, C1/C2.
  - Two-way AMR (wM-Bus T2/C2 modes) enabling fast drive-by reads and battery savings.
- » Full set of field tools for easy configuration and field updates, via NFC (NearField Communication) or via wM-Bus.

- » Complete data set providing billing data and advanced analytics.

- Granular consumption data, measured every 2 seconds.
- Daily, weekly, and monthly AMI data transmissions to provide timely information to the operational teams.

## HIGHER CUSTOMER SATISFACTION WITH TIMELY NOTIFICATIONS

- » Quickly resolve customer concerns with leak and freeze alerts.
- » Accurate water measurement helps utilities avoid billing disputes.

## Technical Specifications

Nominal Diameter DN	mm inches	15 ½"	20 ¾"	25 1"	32 1¼"	40 1½"	50 2"			
<b>In compliance with MID - (2014/32/EU)</b>										
MID Accuracy Ratio (Q3/Q1) all positions		160 to 1000 class 2 & 160 to 500 class 1				160 to 1000 class 2				
MID type Approval Number		LNE 37882				LNE 37882				
Nominal Flow Rate (Q3)	m³/h	1.6	2.5	2.5	4	6.3	10	10	16	25
Standard Production Ratio* (Q3/Q1)		500	800	500	800	400	400	400	400	400
Minimum Flow Rate (Q1)	l/h	3.2	3.125	5	5	15.75	25	25	40	62.5
Transitional Flow Rate (Q2)	l/h	5	5	8	8	25.2	40	40	64	100
Overload Flow Rate (Q4)	m³/h	2	3.125	3.125	5	7.9	12.5	12.5	20	31.25
High Cut Flow Rate	m³/h	3	5	5	7.5	10	16	16	26	40
Pressure Loss Class at Q3	bar	0.25	0.40	0.25	0.63	0.4	0.63	0.63	0.4	0.63
Real Pressure Loss at Q3	bar	0.16	0.38	0.17	0.44	0.255	0.61	0.61	0.31	0.59
Maximum Admissible Pressure	MAP bar	0.1 / 16								
Sensitivity Class		U0D0 (Seal restriction, Elbow, Ball Valve)								
Water Operating Temperature	T °C	+0.1 / +50								
Climatic Environment	°C	-25 / +70								

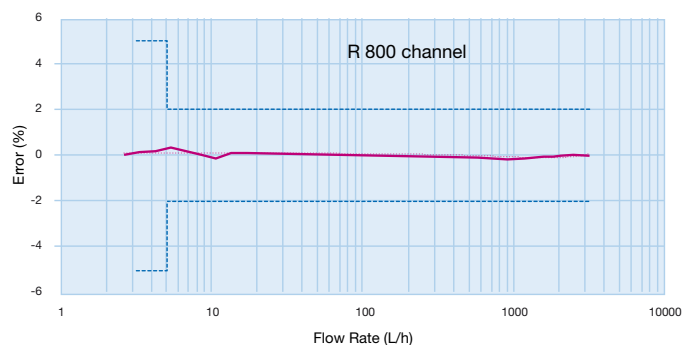
\* Other Ratios available under specific request

## Other Characteristics

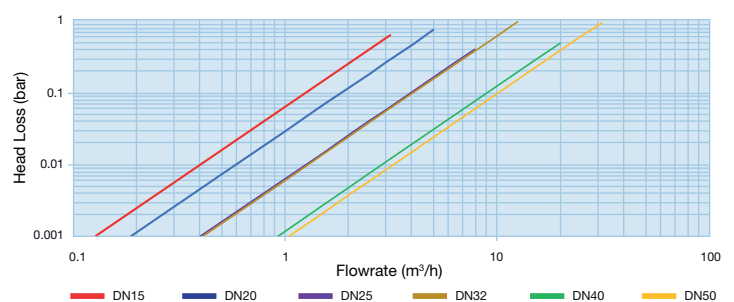
Indication Range*	m³	999999.999				999999.999			999999.99	
Minimum Scale Interval**	l	1				1			10	
Typical Starting Flow Rate	l/h	1	1	2	2	4	6	6	10	10
Testing Pressure	bar	25				25				
Maximum Accidental Water Temperature	°C	70 (<1h/week)				70 (<1h/week)				

\* Comma configurable under specific request - \*\* 0.001 liter in test mode

### TYPICAL ACCURACY CURVE Q3=2,5 M³/H

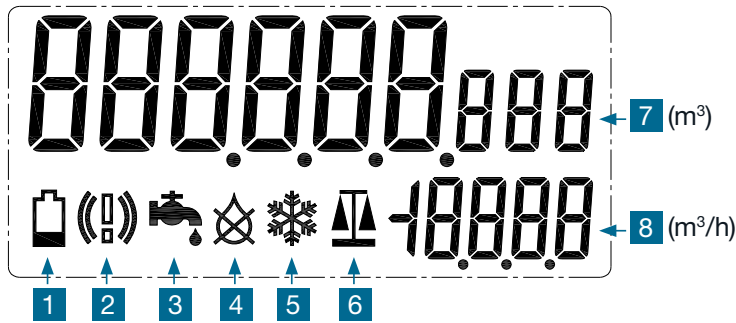


### HEAD LOSS



## MULTIFUNCTIONAL DISPLAY

- » Easy to read display
- » Visual Alarms



## Local Reading

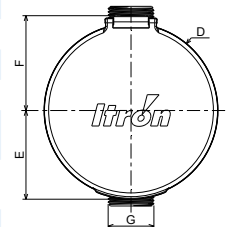
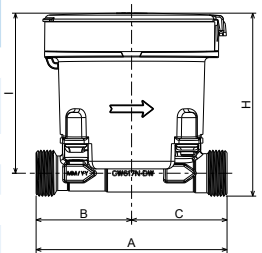


- |                                  |  |   |
|----------------------------------|--|---|
| <b>1</b> Battery Level Indicator | <b>4</b> Air in pipe Indicator           | <b>8</b> Flowrate Unit and Flowrate Direction Indicator |
| <b>2</b> System Alarm Indicator  | <b>5</b> Freezing Indicator              |   |
| <b>3</b> Leakage Indicator       | <b>6</b> Test mode Indicator             |   |
|                                  | <b>7</b> Main Index Indicator 8/9 digits |   |

## Dimensions

Nominal Diameter	mm	15							20			25	32	40	50		
A	mm	105*	110	115	134*	165	170	115	105*	130	190	260	260	300	300	270	270
G	inches	G 3/4 B							G 7/8 B x 3/4 B	G 1 B			G 1 1/4 B	G 1 1/2 B	G 2 B	G 2 1/2 B	Flanges**
B	mm	52.5	55							52.5	65	130			150		
C	mm	52.5	55	60	79	110	115	60	52.5	65	125	130		150	120	120	
D	mm	ø 100															
E	mm	51										51					
F	mm	54.5							54.5								
H	mm	105.2							107.1	111.2	122.6	125.6	137.1	144.9			
H (w/o Lid)	mm	101.2							103.1	107.2	118.6	121.6	133.1	140.9			
I	mm	92							94.7	101.7	107.4						
I (w/o Lid)	mm	88							90.7	97.7	103.4						
Weight (2 batteries)	gr	667	674	679	698	731	737	695	729	766	845	1405	1480	2225	2365	2220	2360***
Weight (3 batteries)	gr	690	697	702	721	754	760	718	752	789	868	1423	1503	2248	2388	2243	2383***

\* Bodies version on demand (L105 - 134 DN15 & L105 DN20)  
 \*\* Mobile Flanges  
 \*\*\* Weight with Mobile Flange not included



## Radio Frequency Features

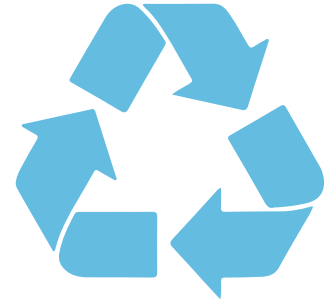
Protocol	wM-Bus T1, C1, T2, C2 (EN 13757-3 & 4) / LoRaWAN™ R1.0.4 / Sigfox® V2.10.0 / OMS v4.1.2
Modulation	FSK, BPSK (Sigfox®), CSS (LoRa®)
Frequency carrier	868 MHz ISM Band
Radiated power	< 25 mW

## Connectivity Certifications



## COMPLIANCE

- » Compliant with Directive 2014/53/EU on RF Spectrum usage.
- » MID, ISO4064, R-49.
- » ACS, W270, DM174.
- » RoHs, WEEE2, **CE**.
- » IP68 certified according to EN 60529.
- » Compliant with 2002/95/EC on non usage of hazardous substances in electrical and electronic equipment.
- » Wireless M-Bus according to EN 13757-3 & 4.
- » Electromagnetic environmental class E2.
- » Certified ISO 27001 for data security.



Intelis wSource is more  
than 98% recyclable

## *Right. From the source.*

Intelis wSource is the third generation of Itron's solid state water meters, based on more than 25 years of experience in solid-state water metering, with 25 million smart-water meters deployed in the field.

Itron's Intelis wSource range of water meters are right for you.  
Right for your customer. Right from the source.

To see Itron's complete end-to-end solutions for smart water metering,  
go to [intelis wSource webpage](#).

To learn more visit [itron.com](#)

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**Itron**

2111 North Molter Road  
Liberty Lake, WA 99019 USA