Protects utility revenue and provides long-term value

Intelis™ wSource™
Smart solid-state water meter

Intelis™ wSource™ is the most accurate residential smart water meter available with AMR backup that protects revenue for the life of the meter. No moving parts to wear out and durable components extend meter life and lower operating costs.

Provides highly accurate reads

Meter accuracy is the highest level on the market, even at low flow rates

» Protects utility revenue

» Superior leak detection

» Superior performances in adverse installation conditions

» NMI-certified for R1000 Class 2 and R500 Class 1

Built For The Long Run

Robust components withstand harsh conditions ensuring accurate billing for the long haul

» Reliable operation for 15 years

» Battery protect features to secure battery lifetime

» Exceptional performance in heat, humidity, and intermittent water supply

» Compatible with indoor and outdoor installations

MANAGING WATER WITH ITRON'S WATER AMI ESSENTIALS

Smart metering for flexibility:
• Remote reading
• Precise billing
• Real-time alarms notification

Data collection for simplicity:
• Customer awareness
• Workforce management
• Network as a service

Advanced analytics for efficiency:
• Visibility to the health of distribution system
• Reduce real and apparent losses

For more information:
go to Itron Water AMI Essentials webpage.

WATER

Supports AMR and AMI for uninterrupted data

With M-Bus AMR backup, utilities can collect billing data even when the AMI network is down

» Wireless data collection with walk-by or drive-by mode (2-way interrogation enabled)

» Reduces labor costs – no manual reads

Secure by design

Designed to protect your utility assets and customer data with the highest level of security

» End to end security management system and credentials

» Data encryption and protect features

Actionable insights improve customer satisfaction

Extensive data set helps drive informed decisions making

» Measures water consumption every 2 seconds

» Identifies leaks at consumer homes thanks to highly accurate water measurement capability at low flow rates

» Provides customer profiles so you can recommend water conservation programs

Keep customer service informed

Timely notifications and alarms keep your customer service team up-to-date

» Improve customer satisfaction with freezing pipes and leak notifications

» Reduce theft with tampering and zero consumption alerts

» Remote monitoring

Easy to deploy, easy to manage daily operations

Streamline installations and better manager your distribution system

» Interoperable and open standards (including LwM2M protocol) make it easy to integrate with IT systems

» Remotely update firmware and manage meter operations

» eSIM ready

INTEROPERABLE WITH OPEN-STANDARDS (with out-of-the-box connectivity options)

NB-IoT

IoT Networks (Nb-IoT™)
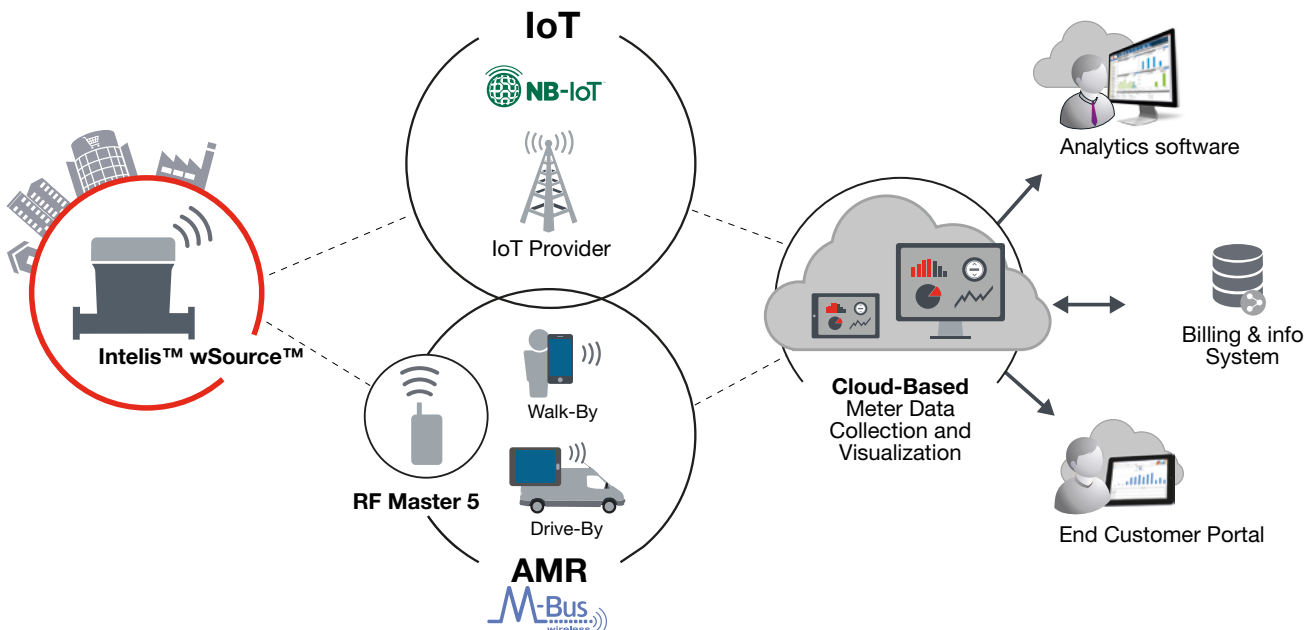Connect smart water meters to networks dedicated to the Internet of Things (IoT).

M-Bus wireless

Automated Meter Reading (AMR)
Wirelessly collect data from meters either in walk-by or drive-by mode using Itron's RF Master 5. Eliminates the need for physical access to the meter.

NFC local reading
Read data, advanced commands and configuration of the meter by smartphone application.

IoT
NB-IoT
IoT Provider

Intelis™ wSource™

RF Master 5
Walk-By
Drive-By

AMR
M-Bus wireless

Cloud-Based Meter Data Collection and Visualization

Analytics software

Billing & info System

End Customer Portal

EXTENDED DATA SET

Billing Index & Consumption Data Logging
Daily billing and custom billing functions along with precise consumption data logging up to 15min resolution

Flow Distribution
Precise monitoring of the distribution flow including periodic minimum and maximum values

Backflow / Reverse Flow
Detection and quantification of backflow to help assess water quality and/or sanitary risk

Alerts
Alarms are generated when important events are detected, such as:
» Broken pipe
» Leakage at customer side (continuous flow)
» Tamper attempt (dismantling)
» Blocked meter (zero consumption)
» Oversize/undersize
» Freeze risk

Diagnostics
Good system performance is ensured via monitoring of:
» Battery level
» Configuration settings

ENVIRONMENTAL-ECO DESIGN

A life cycle assessment study has been carried out to ensure the proper design of the new Intelis™ wSource™. It can be easily recycled at the end of the product life, as it can be dismantled into separate components (batteries, circuit board, brass) that each have their own recycling circuits.
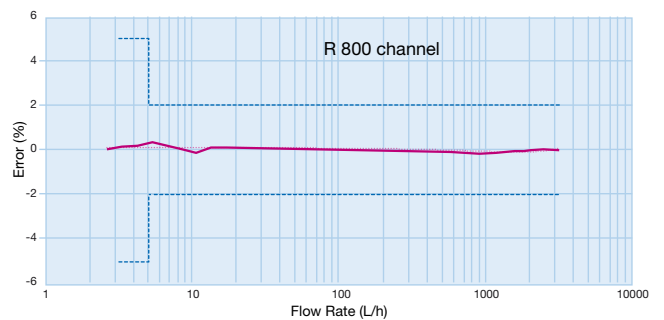
Technical Specifications

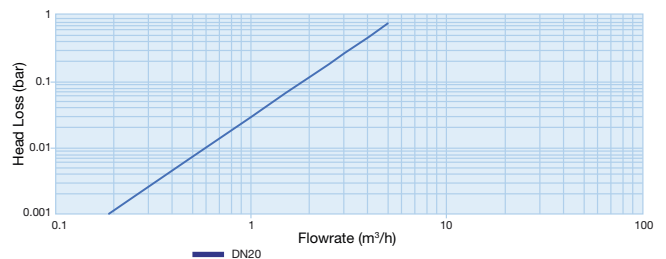| Nominal Diameter DN		mm	20
		inches	¾"
In compliance with NMI R49-1 (2022)			
NMI Accuracy Ratio (Q3/Q1) all positions			200 to 1000 class 2 & 200 to 500 class 1
NMI type Approval Number			NMI 14/3/67
Nominal Flow Rate	(Q3)	m³/h	4
Standard Production Ratio*	(Q3/Q1)		400
Minimum Flow Rate	(Q1)	m³/h	0,010
Transitional Flow Rate	(Q2)	m³/h	0,016
Overload Flow Rate	(Q4)	m³/h	5
High cut off flowrate		m³/h	7.5
Pressure Loss Class at Q3			Δp63
Real Pressure Loss at Q3		kPa	4400
Maximum Admissible Pressure	MAP	kPa	1600
Sensitivity Class			U0D0 (Seal restriction, Elbow, Ball Valve)
Water Operating Temperature	T	°C	+0.1 / +50
Climatic Environment		°C	-25 / +70
*Class 2 only, other ratios available under specific request			

Other Characteristics

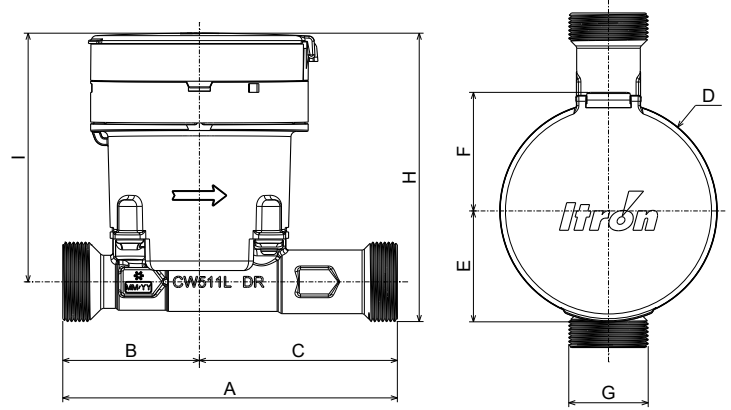| Indication Range*		m³	999999.999
Minimum Scale Interval**		l	1
Typical Starting Flow Rate		l/h	2
Testing Pressure		kPa	2500
Maximum Accidental Water Temperature		°C	70 (<1h/week)
Electromagnetic class			E2
* Comma configurable under specific request - ** 0.001 liter in test mode			

TYPICAL ACCURACY CURVE Q3=4 M³/H

HEAD LOSS

Dimensions

Nominal Diameter	mm	20	
A	mm	154	
G	inches	ø 32.5mm 14TPI Gasket seat	ø 36.6mm 14 TPI Ball seat
B	mm	63	
C	mm	91	
D	mm	ø 100	
E	mm	51	
F	mm	54.5	
H	mm	130	132
H (w/o Lid)	mm	126	128
I	mm	114	
I (w/o Lid))	mm	110	
Weight	gr	928	973