

AMR

CE

FCRI  
Model  
Approval

MID\*  
Approval



# JalSonic™

Battery Powered  
Ultrasonic Bulk Water Meter

MCCM PROPERTY  
NOT FOR SALE

Meter Sr. No. 8001103  
AMR No. 8652201611  
Meter Size 80mm

JalSonic™

Meter Size - 80mm  
Max ΔP=0.63Bar  
Qn-40M³/hr  
MAP-16 Bar

0.00 m³/hr  
E  
4067 m³



Battery-powered ultrasonic water meters JalSonic™ is intended for industrial and commercial applications in water supply systems where they provide for measurement and data storage on instantaneous flow rates and aggregate water consumption.

## Features

- Transit time ultrasonic technology for Accuracy and reliable metering
- No moving parts
- Plug in replacement to existing bulk water meters
- Unique Ultrasonic design doesn't measure air and hence no incorrect customer billing
- Rugged mechanical design – Submersible (IP68)
- Measurement under Submerged conditions
- Battery powered – 6 years life expectancy
- Working pressure – 16 Kg/cm<sup>2</sup>
- Turn down ratio – better than 1:300
- Liquid Working temperature – Water 60°C
- Bi-directional flow measurement
- AMR – Remote flow monitoring through GSM / RF
- EMI/RFI Protection
- Ambient operational temperature : -25°C to +60°C
- Programmable multi line LCD display
- In built data logger for tracking the history

## Technical Specifications

Maximum Working Pressure	16 kg/cm <sup>2</sup>
Liquid Temperature	0 to 60° C
Accuracy Class	ISO 4064 (rev. 2005)
Configuration	In built – Display is part of the unit
Power Source	2D size Li-battery with 6 year's back up time
Environmental Protection	IP68, Ambient operation temperature -25° C to +60° C
Display Units	m <sup>3</sup> / hr, CPM, GPM

## Construction

50-80-100mm – SS 316L

100-500mm – Cast iron with food grade epoxy lining

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## Applications

- Bulk Revenue Metering
- DMA Metering
- Irrigation Metering
- Municipal Water Distribution / Transmission Networks
- Bulk Industrial / Commercial AMR Metering

## Meter Sizes

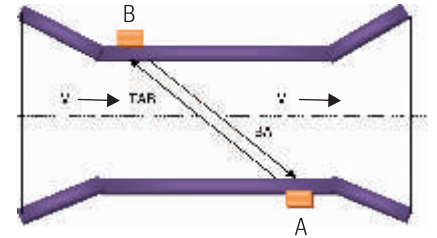
DN 50 – DN 65 – DN 80 – DN 100 – DN 150

DN 200 – DN250 – DN 300 – DN 400 - DN 500



## Mechanical Dimensions

JalSonic™ Size (mm)	Length(L) (mm)	Height(H) (mm)	PCD (mm)	F (mm)
50 Threaded	204	170	N.A.	N.A.
50 Flanged	204	165	125	160
80	225	200	160	194
100	250	220	180	215
150	300	285	240	279
200	350	340	295	335
250	450	395	350	390
300	500	445	400	440



## Measuring Principle

The Ultrasonic Flow Meters are noted for their high accuracy and longterm stability over wide range of flow measurement. Hence we moulded this technology by revolutionary in-house development in Electronic circuits and sensors to have super low power consumption.

Today JalSonic™ do not require any external power source, have no moving parts and offer very low pressure loss.

Mechanical dimensions are similar to Woltman / Helix bulk meters so that retro fitting is easily possible.

JalSonic™ gives you instantaneous flow rate, flow totalisation, computer connectivity, data logging, AMR

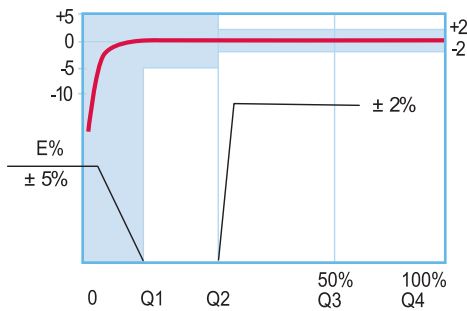
(Remote data monitoring through GSM/RF) with battery back up of 2 to 6 years.

These unique features are primarily intended for industrial and commercial applications in water supply and distribution systems and hence JalSonic™ is 100% tamper proof, accurate and modern water flow meter available for Irrigation and Municipal applications.

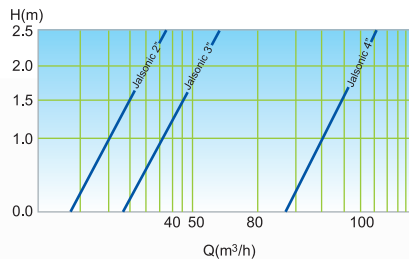
## Meter Performance as per ISO 4064 (rev. 2005)

Flow rate (m³/hr)	Meter Size		
	DN50-2"	DN80-3"	DN100-4"
Q4	50	80	125
Q3	40	63	100
Q2	0.125	0.200	0.320
Q1	0.080	0.125	0.200
Starting flow	0.015	0.015	0.015
Q3/Q1	500	500	500

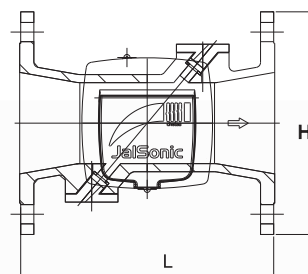
## Accuracy Curve



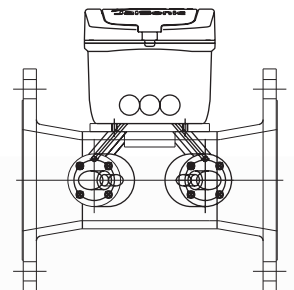
## Head Loss Curve



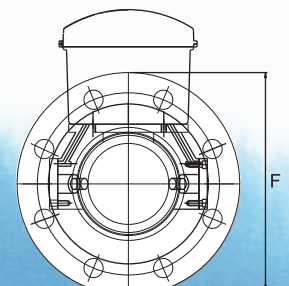
## Top View



## Front View



## Side View



ugged  
Construction

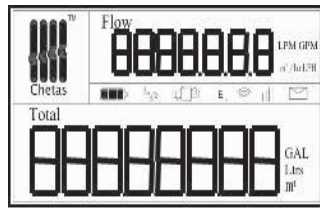


01000101  
10111011





## Primary Digit Display



Symbol	Meaning
	Battery Full- 3.25 VDC to 3.6 VDC
	Battery Caution - 3 VDC to 3.25 VDC
	Battery Critical- 2.75 VDC to 3 VDC
	Indicates when Pipe is Empty
	Indicates when Message is Sent
	On when GSM AMR Firmware Loaded & Presence of GSM Network
	On at Leak Flow
	On when RF AMR Firmware Loaded
E	Indicating at every Sec -Heart beat - to acknowledge LIVE Condition
Total 1	Sum of Reverse & Forward Cumulative Flow
Total 2	Forward Cumulative Flow
Total 3	Reverse Cumulative Flow
Total 4	Differential Cumulative Flow of Forward & Reverse Totaliser

Note :  
On account of our constant process to improve & enhance product performance, specifications are subject to change without notice.



## Chetas Control Systems Private Limited

ISO 9001-2008

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