

# Adept-MWM (Mechanical Water Meter) Smart Meter for Smart Cities



Adept-MWM (Mechanical Water Meter) is an impeller (turbine) type water meter with magnetic transmission, dry type register. Adept-MWM is indeed a Smart Water Meter which is most suitable for Municipal Water Schemes. With sizes ranging from DN 15 to DN 20 it meets the requirements of ISO 4064 & IS 779.

## Characteristics

- ▲ All the materials coming in contact with water are resistance to corrosion
- ▲ Adept-MWM (Mechanical Water Meter) can be safely used for metering water with temperature up to 50°C (T50) as against other conventional water meters which are generally suited for temperatures lower than 30°C (T30)
- ▲ Rotary indicator register for comfortable reading position of 7 Rollers & 2 Pointers
- ▲ Rotary plastic cap and lid is easy to install
- ▲ Impeller is the only moving part coming in contact with water
- ▲ The inlet filter of the meter body allows its cleaning without breaking the metrological seal (Internal filter as an option)
- ▲ Magnetic protection against external influences
- ▲ Non-return valve to avoid the reserve flow rate (optional)

## Features

- ▲ LoRaWAN connectivity
- ▲ Easy to install using simple connectors
- ▲ Protection Class : IP 67
- ▲ Protection from magnetic attack
- ▲ Smart economical solution

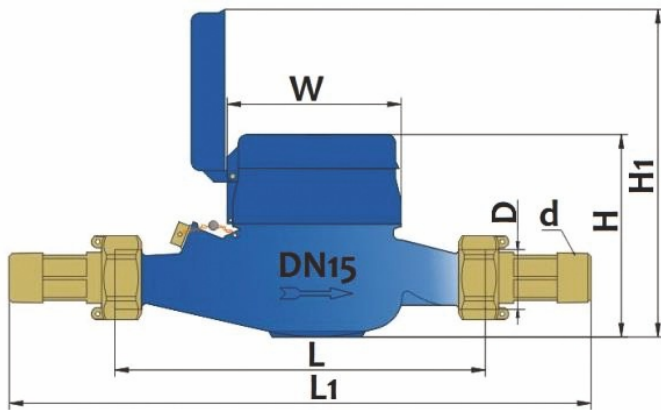
## Advantages

- ▲ Accurate billing
- ▲ Water saving
- ▲ Time and manpower saving
- ▲ Helpful in increasing revenue of utilities

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## Dimensions



Size	DN 15	DN 20
L	165	190
L1	259	294
D	G3/4B	G1B
d	R1/2	R3/4
H	90	90
H1	145.5	145.5
W	77.5	77.5

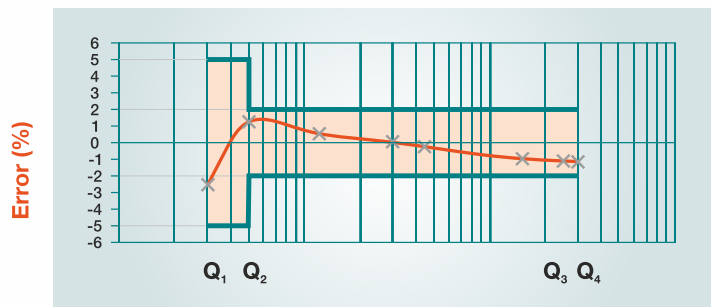
**Dimension L1:** Total length with connection and the gasket without compression

## Technical Specifications

Size	mm	DN 15	DN 20	DN 20
R	$Q_3/Q_1$	80	80	80
Q4	$m^3/h$	3,125	5	3,125
Q3	$m^3/h$	2,5	4	2,5
Q2	$l/h$	50	80	50
Q1	$l/h$	31,25	50	31,25
Specification as option				
R	$Q_3/Q_1$	50	50	50
Q4	$m^3/h$	2	3,125	2
Q3	$m^3/h$	1,6	2,5	1,6
Q2	$l/h$	51.2	80	51.2
Q1	$l/h$	32	50	32
Max. Reading	$m^3$	99999.9999		
Min. Reading	Litre	0.05		
Pressure Loss	$\Delta P$	$\Delta P < 63$ at Q3		
Max. Pressure	MAP	MAP16		
Max. Temperate	$^{\circ}C$	T30 or T50		

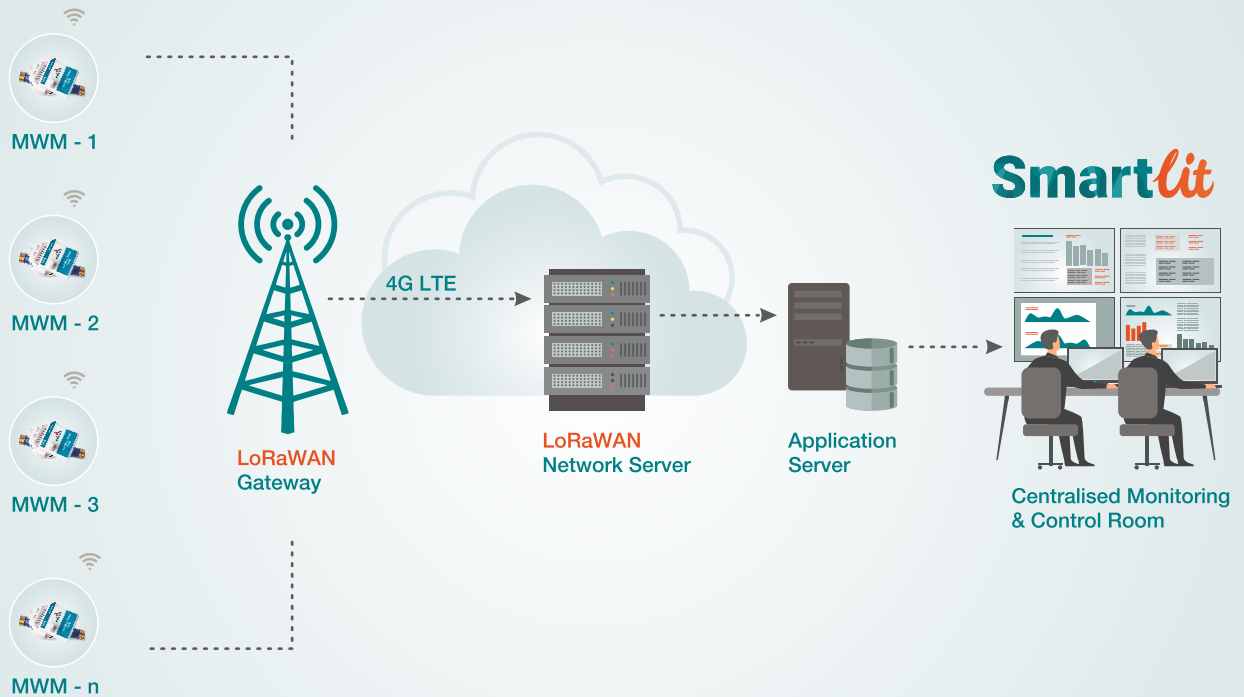
## Max. Permissible Error

- ▲ From  $Q_1$  inclusive up to but excluding  $Q_2$  is  $\pm 5\%$
- ▲ From  $Q_2$  inclusive up to and including  $Q_4$  is  $\pm 2\%$  for T30 and  $\pm 3\%$  for T50



## Adept-MWM (Mechanical Water Meter): Smart Meter for Smart Cities

### MWM LoRaWAN Architecture



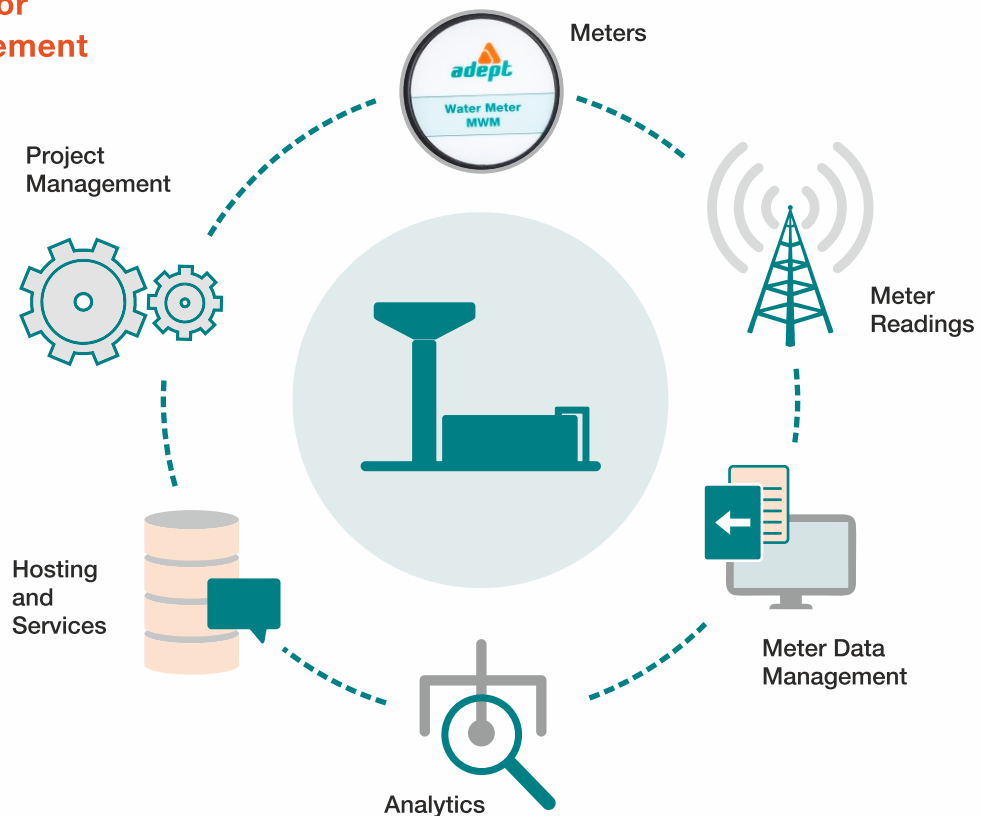
MWM

LoRaWAN Gateway

LoRaWAN Network Server

SmartLit Application Software

### Effective Tool for Project Management



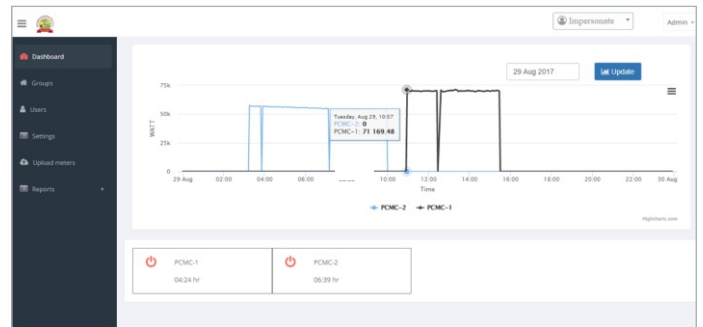
## Adept-MWM (Mechanical Water Meter): Smart Meter for Smart Cities

### Smart Monitoring Through App

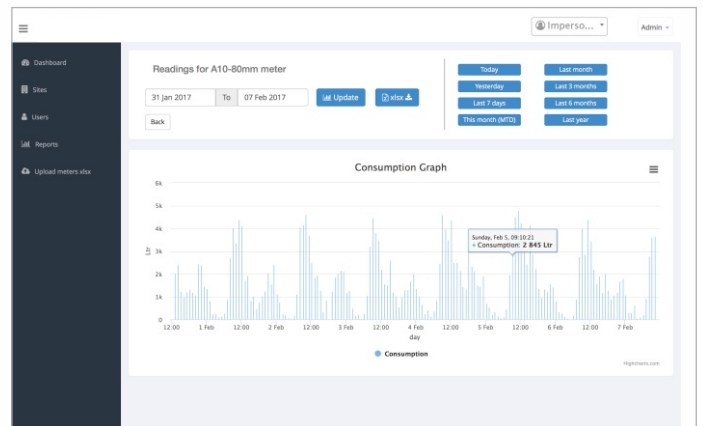
- ▲ Quick view of consumption
- ▲ Consumption graph
- ▲ Number of days left
- ▲ Compare and compete



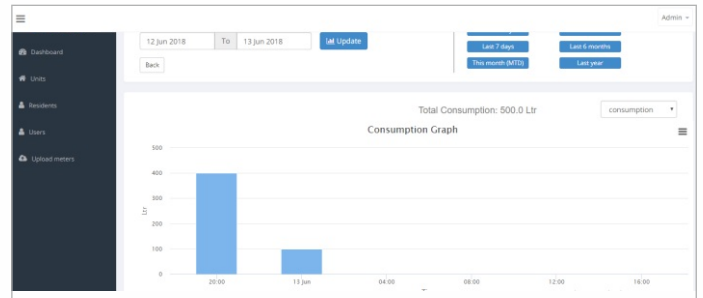
### Dashboards



Status	Meter No.	Unit name	Site name	Today's consumption	Yesterday's consumption	Last reading	Last reading at	Action
✓	16150114	A10-80mm	Hinjewadi	24780 Ltr	66462 Ltr	2751445 Ltr	10 Mar 17 10:11:19	[Edit] [Refresh]
✓	16150113	A1-80mm	Hinjewadi	5397 Ltr	14692 Ltr	1027135 Ltr	10 Mar 17 10:16:16	[Edit] [Refresh]
✓	16150111	STP-1	Hinjewadi	8407 Ltr	24533 Ltr	4340313 Ltr	10 Mar 17 09:41:53	[Edit] [Refresh]
✓	16150112	A9-80mm	Hinjewadi	14675 Ltr	21138 Ltr	1540338 Ltr	10 Mar 17 10:06:17	[Edit] [Refresh]
✓	16150115	A2-80mm	Hinjewadi	3982 Ltr	10803 Ltr	1043384 Ltr	10 Mar 17 10:06:19	[Edit] [Refresh]
✓	16150120	A1-65mm	Hinjewadi	6993 Ltr	15624 Ltr	952359 Ltr	10 Mar 17 10:11:17	[Edit] [Refresh]
✓	16150119	A3-65mm	Hinjewadi	5978 Ltr	13343 Ltr	1465825 Ltr	10 Mar 17 10:01:19	[Edit] [Refresh]
⚠	16150116	WTP-1	Hinjewadi	42790 Ltr	0 Ltr	20562082 Ltr	10 Mar 17 07:52:32	[Edit] [Refresh]
✓	16150121	ESR-Phase 2	Hinjewadi	146975 Ltr	281150 Ltr	7670270 Ltr	10 Mar 17 10:24:58	[Edit] [Refresh]
✓	16150118	A9-65mm	Hinjewadi	4682 Ltr	31098 Ltr	1128893 Ltr	10 Mar 17 10:01:20	[Edit] [Refresh]
✓	16150122	ESR-Phase 1	Hinjewadi	15467 Ltr	57370 Ltr	9559679 Ltr	10 Mar 17 10:26:18	[Edit] [Refresh]
✓	16150117	A10-65mm	Hinjewadi	6919 Ltr	31164 Ltr	919881 Ltr	10 Mar 17 10:16:41	[Edit] [Refresh]



Status	Meter No.	Unit name	Today's consumption	Yesterday's consumption	Last reading	Last reading at	Action
⚠	ADP123	GMR-01	0 Ltr	400 Ltr	5300 Ltr	13 Jun 18 16:00:08	[Edit] [Refresh]
⚠	8937487	T3MB-Building			74.44288873 m3	10 Dec 17 16:05:16	[Edit] [Refresh]
⚠	9878769	Engineering Building			1371.7 m3	15 Feb 18 16:02:15	[Edit] [Refresh]



**Adept Fluidyne Pvt. Ltd.**  
 Corporate Office & Plant 1:  
 Plot 4, S. No. 17/1-B, Kothrud Ind. Estate,  
 Kothrud, Pune 411 038 INDIA  
**T** +91 20 2546 4551/2543 1474  
**E** info@adeptfluidyne.com

[www.AdeptFluidyne.com](http://www.AdeptFluidyne.com)

