

# Smart Water Meter Solution

*For Apartments and Societies*

## *The Problem*

- Today, measurement of accurate water consumption in Building Societies is not a scientific system in India
- Due to the lack of suitable and economical infrastructure, water is paid for based on the size of the occupancy instead of actual consumption
- This leads to an unfair system of charging

## *The solution*

- Smart Metering Units
- Smart Meters have a built-in sensor that notes and shares the consumption data with a Central Monitoring device
- Such a Meter is attached to each inlet
- Every milestone completed (10 ltrs), information is recorded by the Central Monitoring device and stored in the Cloud
- Consumption Data is available Real Time for Users and Society Managers
- At the end of each cycle, consumption data is shown in the form of a Report
- Managers bill tenants according to the prevailing rate
- Water Bills are now calculated based on consumption

## *Solution Details*

**Pulse Water Meters** from Anand Asahi (1/2", Multi-jet) - Rs. 2,000 per Meter

**Building Monitor:** Rooftop/Liftnroom unit that connects to upto 254 Smart Meters and saves data in the Cloud Server. Rs.30,000 + UPS

**Cloud Server:** Rs. 50/meter/month

### **Pulse Meter Tracker:**

#### OPTION 1

- Single Pulse Meter Tracker - Rs.6,000/unit
- 1 unit is connected to each pulse water meter and located alongside
- Upto 30 such units can be connected to a common Cable running from the rooftop unit (single cable with 5 wires : 3 for data and 2 for power)
- Installation takes 6 to 8 weeks

#### OPTION 2

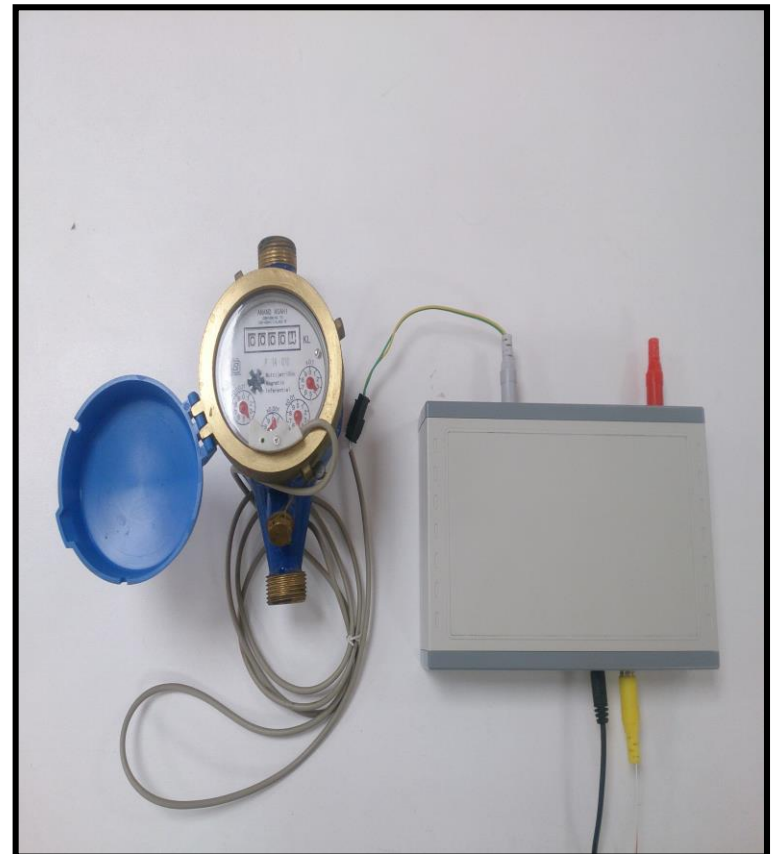
- Multiplexed Pulse Meter Tracker - Rs.36,000/unit
- 1 unit can monitor upto 12 pulse water meters and can be located upto 90m away
- Runs independent cable with 2 wires for each pulse meter
- Installation takes 4 to 6 weeks

# Pulse Meter + Tracker

Option 1



Option 2

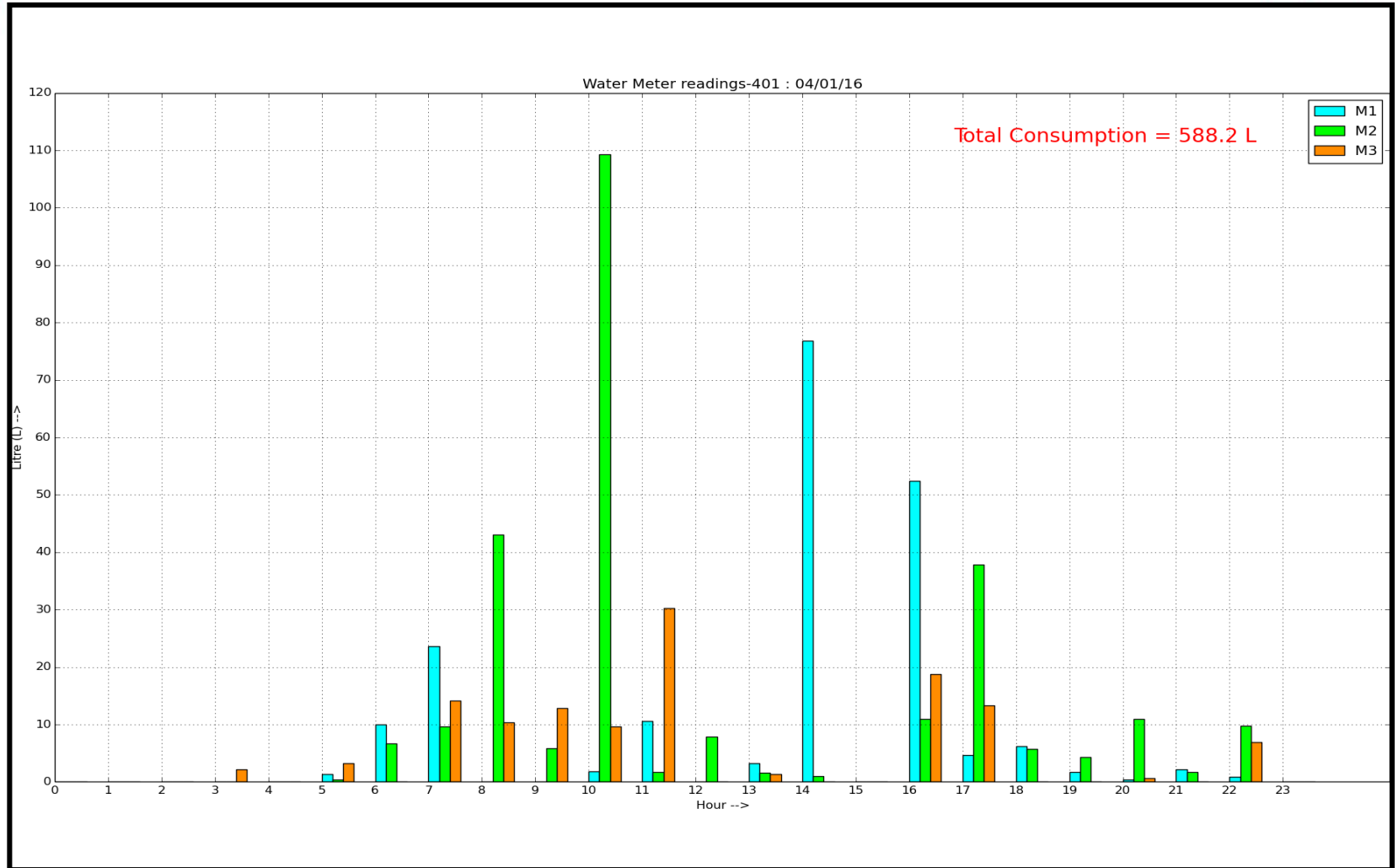


## *Building Monitor*

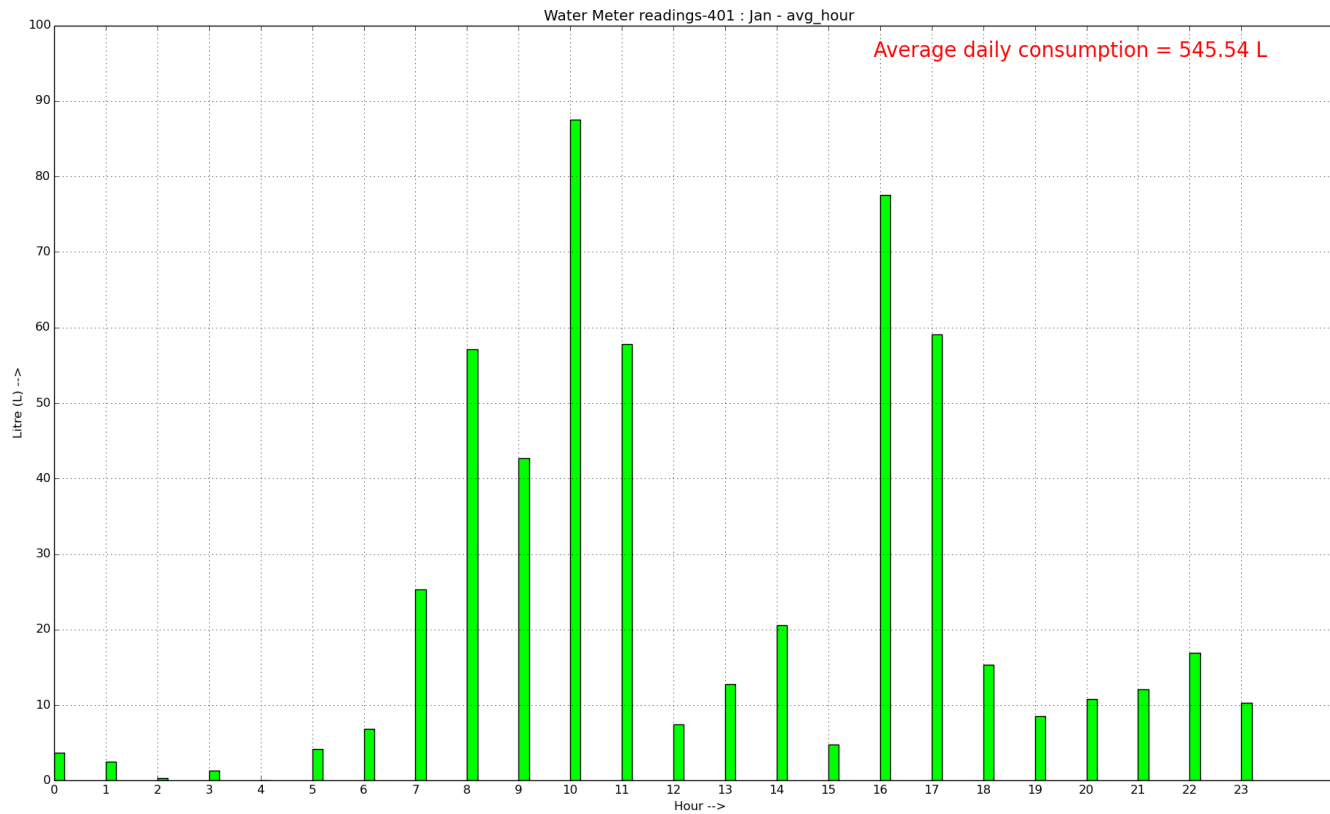
- + UPS
- + Internet Dongle



# Hourly Consumption Report

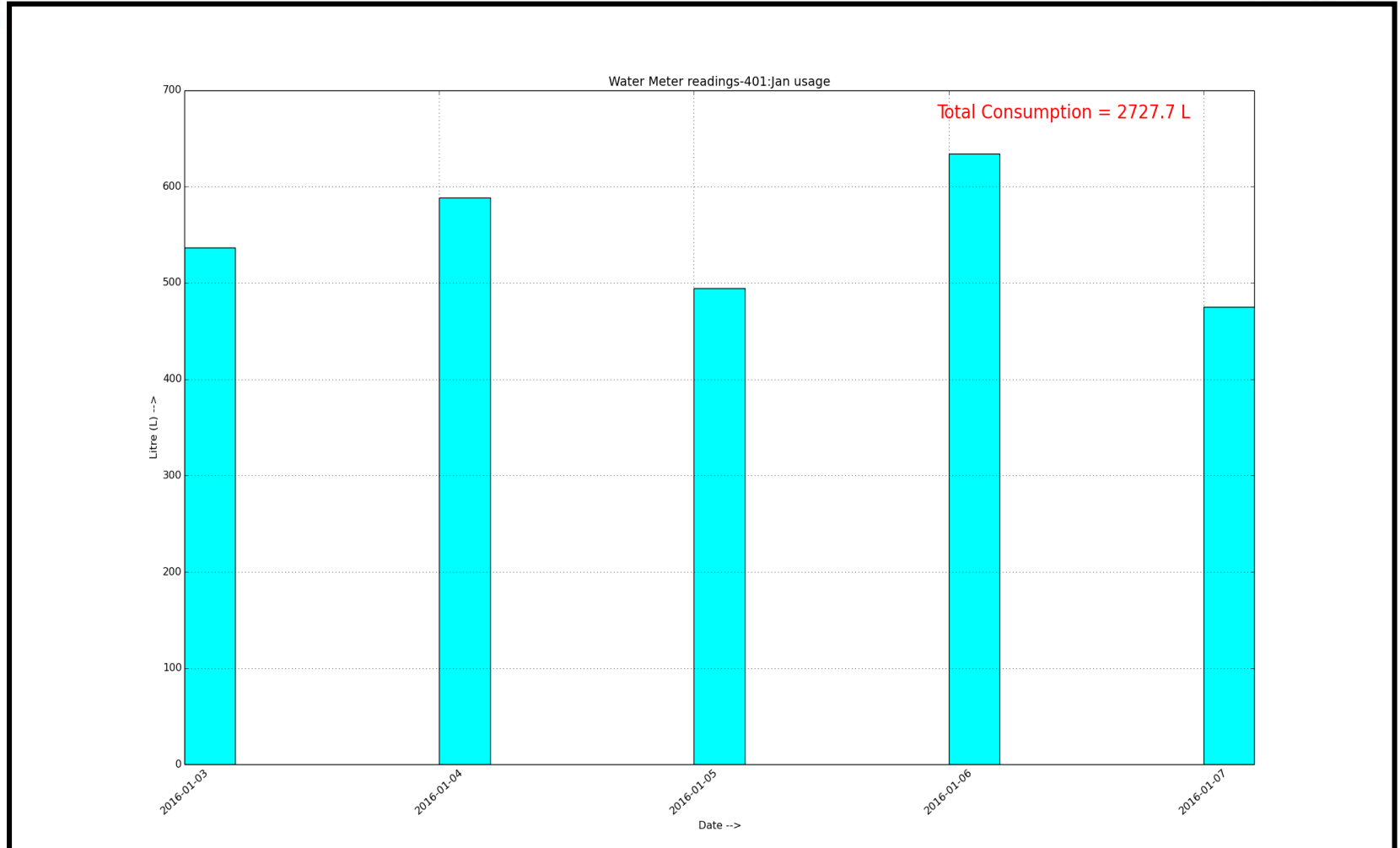


# Average Hourly Consumption Report





# Total Consumption by Date Report



## *Benefits of Smart Metering System*

- Saves all metering data centrally and provides usage information and reports to all the Occupants and Building Management in Real Time
- Since Meters are fitted by Society/Builder's plumbers at each home inlet, maintenance is easy
- Hidden Leakages and Wastages can be detected in plumbing based on daily data analysis
- Small investment results in major Cost savings for occupants
- WorldofArya team is available for support 24/7

## Sample Project Costing

- *An apartment complex of 50 Homes with 3 inlets each*
- *Option 2 is implemented*
- *Set up costs are as follows:*
  - $50 \times 3 = 150$  meters
  - $150 \times \text{Rs.}5,000 = \text{Rs.}7,50,000$  (Rs. 2000 for the meter + 1 Multiplexed pulse meter monitor at  $\text{Rs.}36,000/12 = \text{Rs.} 3,000$ .  
 $\text{Rs.} 2,000 + \text{Rs.} 3,000 = \text{Rs.} 5,000$ )
  - *Building Monitor: Rs. 30,000*
  - Wires and Pipes at actuals
- *Total cost of Metering System is Rs. 7,80,000 + wires and pipes + UPS + Installation + Taxes*
- *Set up cost : Rs.15,600 approx per Home*
- *Running Cost: Cloud - Rs.7,500 pm + Internet Data Charges for the Building Monitor*



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