



A SMART IOT ARCHITECTURE

Advanced Metering Infrastructure using Ripple Eco-System

Investor Memorandum – July 2025

About Us

Ripple's Wireless Metering Revolution

Ripple Smart Metering Limited, incorporated in 2014 in Hyderabad, is a technology-driven company offering end-to-end smart metering solutions for electricity, water, and gas. The company designs and supplies advanced smart meters that are wireless, battery-operated, and capable of real-time data transmission. Ripple has successfully delivered over 1,10,000 smart meters across India and has implemented solutions in gated communities, high-rise buildings, and utility networks. With its in-house developed digital platforms and applications, the company enables seamless monitoring, billing, and analytics for both users and utility providers. Ripple also works with OEMs and international partners, providing smart modules and digital services for integration into various metering systems. The company operates in both domestic and global markets and continues to expand its production and service capabilities year-on-year.



Our Vision

To lead the global transformation toward efficient and sustainable utility management using smart metering infrastructure



Our Mission

To provide cutting-edge, scalable, and affordable smart metering solutions that empower consumers and utilities to make smarter decisions

110,000+
Smart Meters
Deployed

**India's Largest
AMI meter
implementers
(Battery)**



Our Team

110+
Employees



Kishore Munnola

Founder and CEO

He is at the forefront of wireless connectivity for smart devices. With a vision for the future of smart buildings and smart utility measurement (including gas, water, energy, and EV), he leads innovations in smart cities management, procurement, and operations. He has a demonstrated history of success in the electronics, IoT, building materials, high-rise formwork, construction equipment, EPC, and smart meters & IoT SaaS for the utility industry. An Electronics and Communication Engineering graduate with a specialization in Project Management in National University San Diego-USA. Kishore blends technical depth with strategic vision. His expertise encompasses negotiation, project sales, business planning, sales, e-commerce, the marketplace model, international sales, vendor development both domestically and abroad, team management, and market analysis.



Capt. Krishna Ved Uppuluri

Independent Director – Investor Relations

He is a distinguished professional with over 25 years of experience in financial services. He brings expertise in sales, business development, advisory services, and Investor relations. His contributions include sales & business strategies, entrepreneurial thinking, performance management, and fostering strong client and investor relationships.

Our Products

Smart Meters

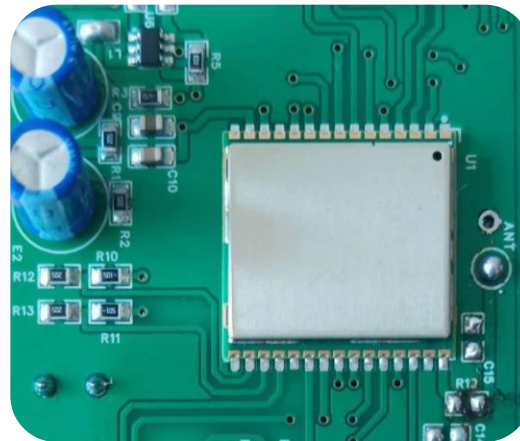
Advanced metering devices are designed for accurate measurement and efficient resource management.



- Smart Gas Meter
- Ultrasonic Smart Water Meter
- Smart Energy Meter (Electricity)
- Smart BTU Meter (HVAC Applications)

Smart Modules

Compact IoT modules for integration with existing meters, enabling smart communication and data capture.



- Modules for Gas, Water, and Energy Meters
- Supported Communication Technologies:
 - LoRaWAN, NB-IoT, BLE (Bluetooth Low Energy)
 - RF Mesh, GSM/GPRS

Software Solutions

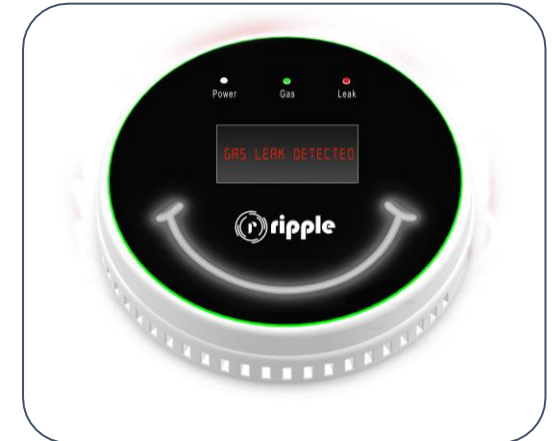
IoT platform and utility management software for real-time monitoring, analytics, and billing.



- MDM (Meter Data Management System)
- HES (Head-End System)
- IoT Device Management & Analytics Platform

Safety Devices

Smart safety systems are designed for proactive monitoring and risk prevention.



- Smart Gas Leak Detector
- Smart MCB (Miniature Circuit Breaker)

B2B, B2G Model

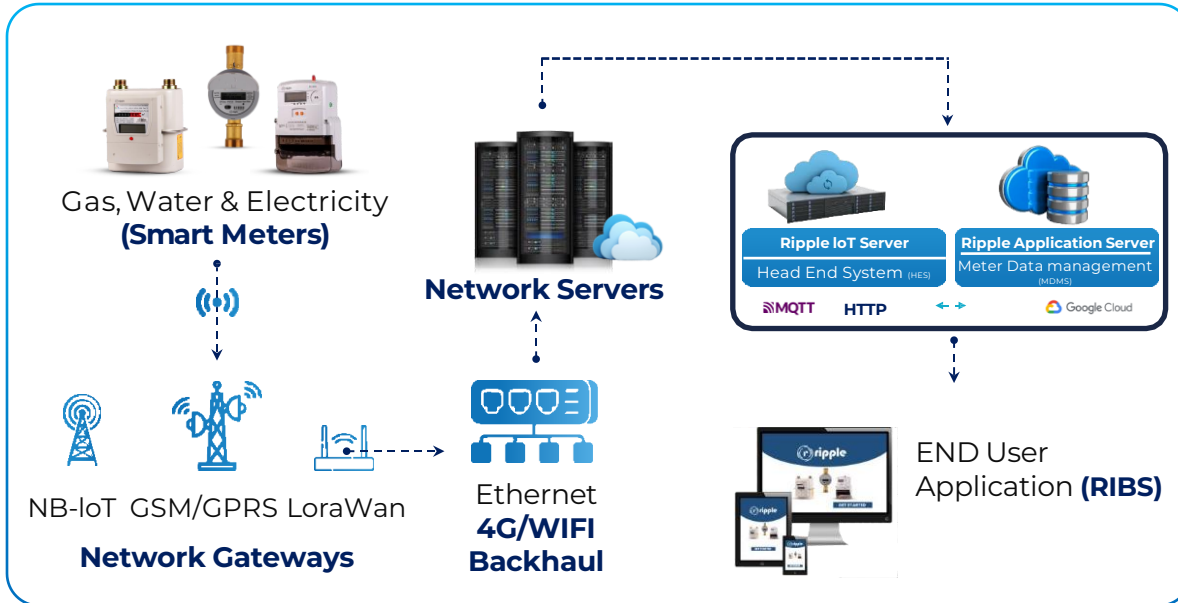
B2C, B2B, B2G Model

Smart Meter Features

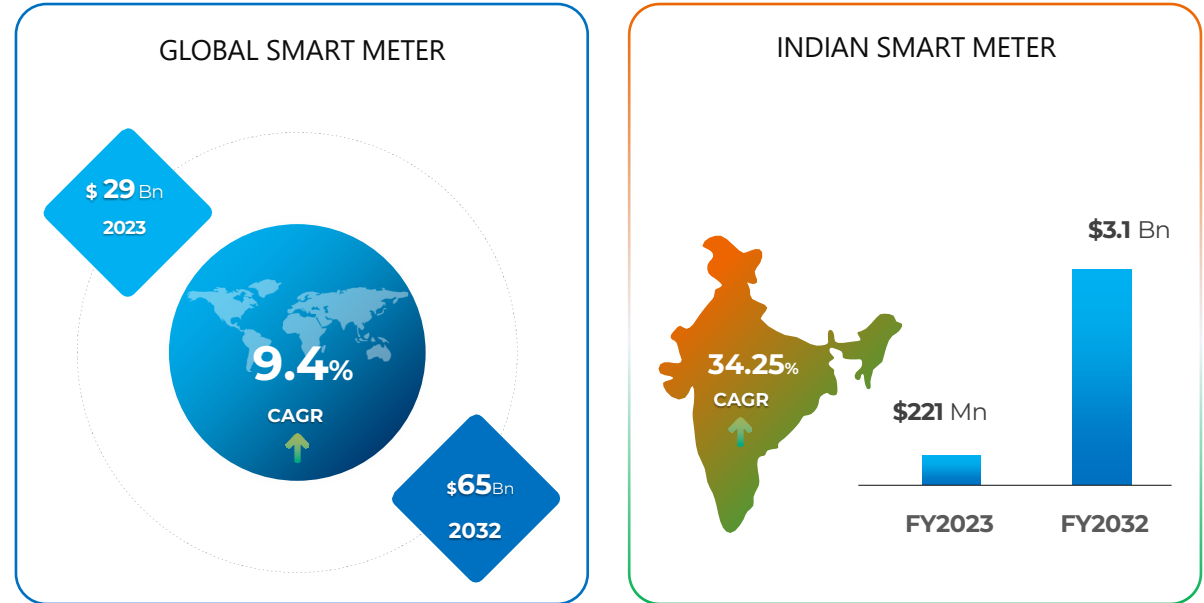


Our Architecture

Ripple IoT Eco System



Market Statistics



*Source : Sector reports, Media articles, Industry sources, Company filings, Fund house reports

Certifications and Accreditations



MID Europe (obtained)
Legal Metrology of India (obtained)
ATEX – from Italy (obtained)
WPC (obtained)
FCRI (obtained)
BIS (optional apply)



FCRI (obtained)
Legal Metrology of India (obtained)
MID Europe (Obtained)
BIS for new plant facility (Optional Apply)
WPC (obtained)



Smart Gas Meter

PRE & POSTPAID

Ripple's smart gas meters stand out with in-house designed, WPC-compliant, network-agnostic technology that supports multi-protocol wireless connectivity (LoRaWAN, NB-IoT, BLE, GSM), offers a wide flow range (G1.6 to G100), delivers extended battery life, reverse flow protection, real-time AMR/AMI integration, and proven scalability across residential, industrial, and international projects.



Wireless Communication
LoRaWan, NBloT, BLE,
GSM/GPRS

Installed Units : **35,550**

States : **5**

Cities : **6**

Communities : **120+**

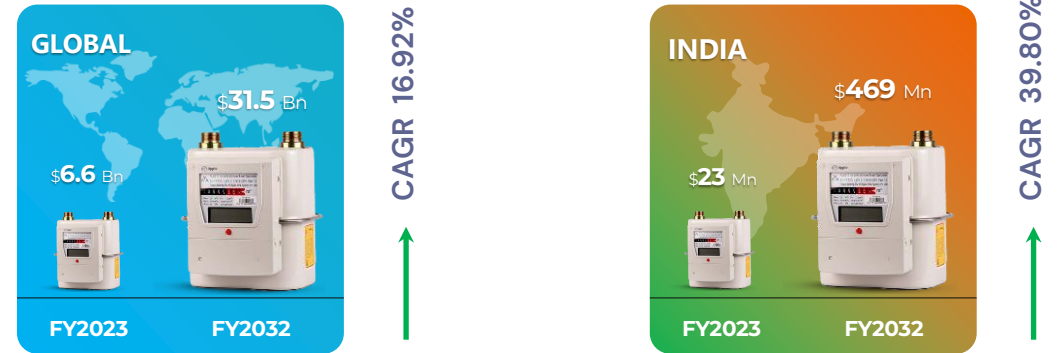
Global Residential Statistics

FY 2023 : **USD 2.4 Bn**

FY 2032 : **USD 9.9 Bn**

17.3% CAGR

Market Segment



Government Initiatives

- Petroleum & Natural Gas Regulatory Board (PNGRB) has a clear roadmap to install 125 million PNG (Piped Natural Gas) connections by 2032.
- This rollout includes mandatory smart gas meters for better usage tracking, billing accuracy, and safety monitoring.
- Over 400 Geographical Areas (GAs) have already been approved 98% of the area under the City Gas Distribution (CGD) Network.

*Source : Sector reports, Media articles, Industry sources, Company filings, Fund house reports

Smart Water Meter

PRE & POSTPAID

Ripple offers ultrasonic smart water meters with no moving parts, ensuring zero maintenance and high accuracy. It supports multi-protocol wireless connectivity (LoRaWAN, NB-IoT, BLE, GSM/GPRS) for reliable data transmission. The system is IP68-rated and AMR/AMI/AMM-ready, enabling seamless integration with digital infrastructure. Its scalable IoT ecosystem empowers both urban and rural utilities for smart water governance.



Wireless Communication
LoRaWAN, NB-IoT, BLE,
GSM/GPRS

Installed Units : **50,890**

States : **5**

Cities : **6**

Communities : **120+**

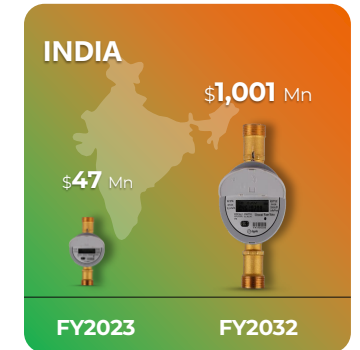
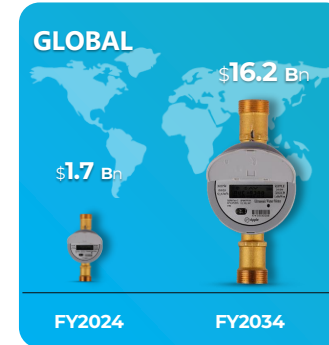
Global Residential Statistics

FY 2024 : **USD 1.7 Bn**

FY 2034 : **USD 16.2 Bn**

25.3% CAGR

Market Segment



Government Initiatives

Demand for smart water meters is projected to reach 500,000 units by 2025

Budget Allocation (2025–26) for

JJM – Jal Jeevan Mission : ₹67,000 Cr

- Piped water to every rural household (192M+ covered)
- Push for digital metering for transparency & fair usage.

Atal Bhujal Yojana – ₹1,780 Cr

- Groundwater tracking through digital tools.

AMRUT 2.0 & Smart Cities Mission.

- Urban water metering with smart tech.

National Water Mission & Hydrology Project

- Focus on GIS, SCADA, IoT, AI for sustainable water management

*Source : Sector reports, Media articles, Industry sources, Company filings, Fund house reports

Smart Energy Meter

PRE & POSTPAID

Ripple's BIS-compliant Smart Energy Meters are AMR/AMI/AMM-ready and offer tamper-proof, overload-protected, dual-source measurement systems up to 80A. Supports all major wireless protocols (LoRa WAN, NB-IoT, BLE, GSM) – ideal for India's RDSS scale and varied infrastructure.

Enables real-time prepaid billing and energy analytics, aligning perfectly with RDSS objectives of reducing losses and improving efficiency.



Wireless Communication
LoRaWan, NBloT, BLE,
GSM/GPRS

Installed Units : 27,090

States : 5

Cities : 6

Communities : 40+

Global Residential Statistics

FY 2023 : **USD 8.1 Bn**

FY 2032 : **USD 18.6 Bn**

9.3% CAGR

Market Segment



Government Initiatives

RDSS – Revamped Distribution Sector Scheme (launched 2021)

Objectives:

Install 25 crore smart electricity meters by March 2026

Reduce AT&C Losses – Aggregate Technical and Commercial Losses to 12–15%

Close ACS-ARR Gap – Average Cost of Supply – Average Revenue Realised

Budget Allocation:

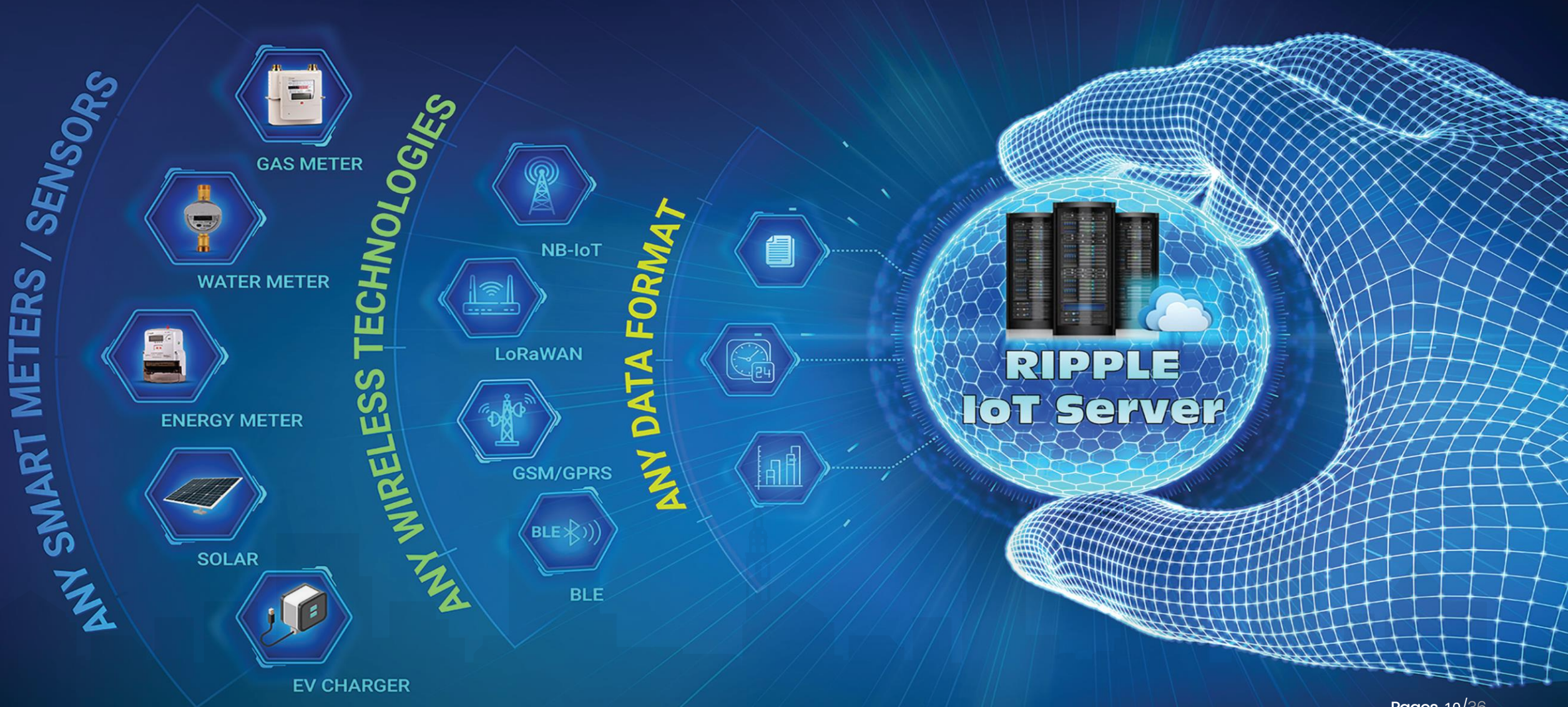
Total Investment: ₹1.25 Lakh Crores

(₹95,000 Cr as debt and 25% as equity)

Central Budgetary Support: ₹25,000 Cr, ₹900 subsidy per meter

*Source : Sector reports, Media articles, Industry sources, Company filings, Fund house reports

Ripple IoT Server - Head End Server for Meter Management



IoT Safety Devices– New Products



Gas Leak Detector (GLD)

Key Features

- Detects LPG/PNG at 5–10% LEL
- Buzzer + LED alert system
- Can trigger automatic shut-off (solenoid valve)
- Wi-Fi, Zigbee, LoRaWAN, RS-485 or NB-IoT enabled for alerts

Benefits

- Prevents fire, explosion etc.
- Protects property and avoids costly damage
- Reduces gas wastage
- Integrates with home automation

GLD Global Statistics

FY 2025 : **USD 32.9 Mn**
FY 2030 : **USD 47.99 Mn**

7.9% CAGR



Smart MCB (Miniature Circuit Breaker)

Use Cases

- Homes: Appliance control, remote shutdown, energy savings
- Offices: Lighting/HVAC automation, energy optimization
- Integrates with: IoT, BMS, dashboards

Benefits

- Enhances electrical safety
- Enables remote diagnostics & reset
- Reduces power consumption
- Seamless smart system integration

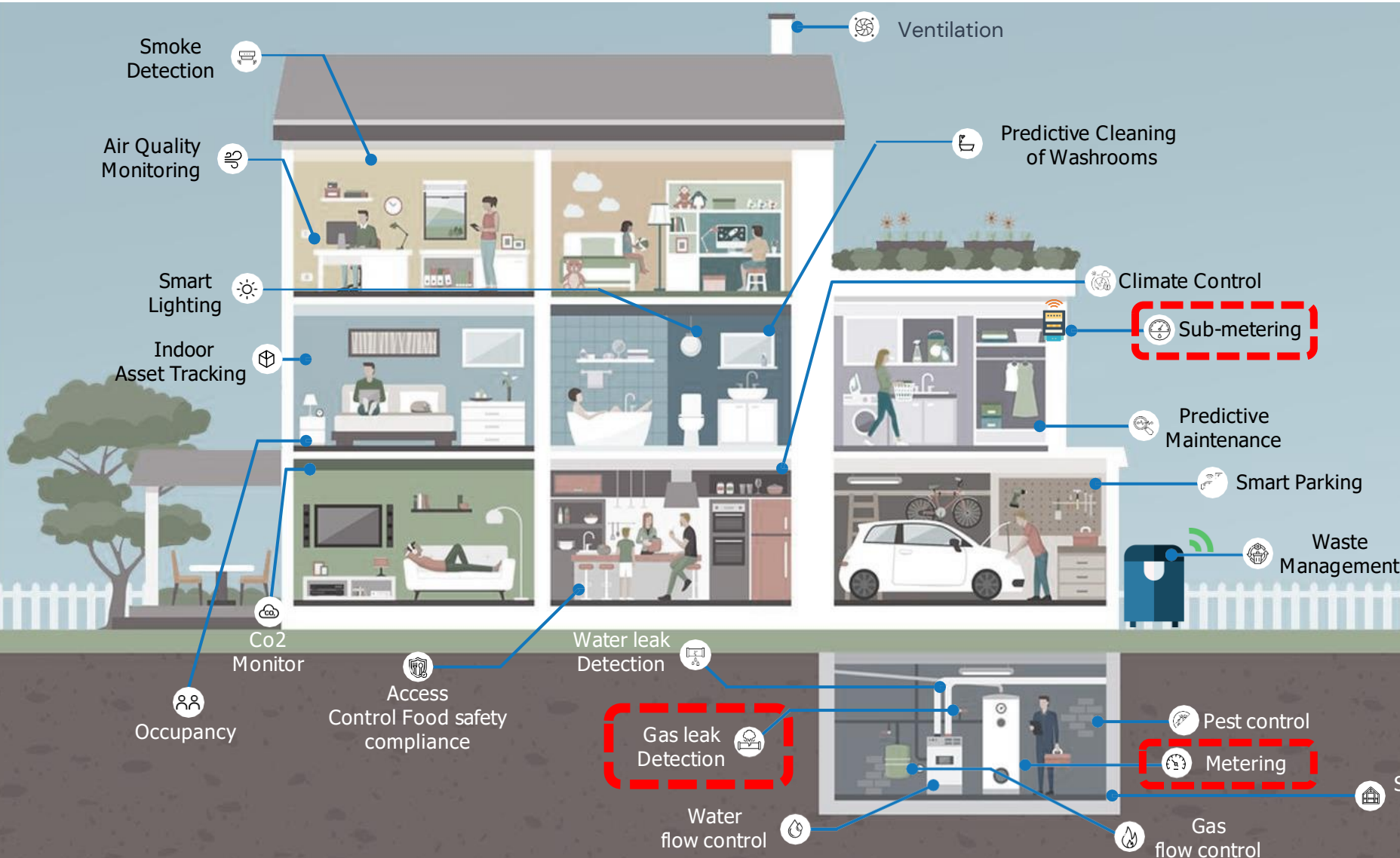
Smart MCB Global Statistics

FY 2024 : **USD 5.10 Bn**
FY 2033 : **USD 10.63 Bn**

8.20% CAGR

*Source : Sector reports, Media articles, Industry sources, Company filings, Fund house reports

Ripple Smart IOT Devices – Upcoming Products Scope



SMART BUILDING

Monitor & Control

- ✓ Indoor air quality
- ✓ Occupancy
- ✓ Metering
- ✓ Leak detection
- ✓ Regulation Compliance
- ✓ Predictive maintenance
- ✓ Heating & Climate Control

Achieve

- ✓ Healthier Conditions for occupants
- ✓ Early mitigation of emergencies before they cause significant damage
- ✓ Reduced operational and labor costs
- ✓ Optimized use of energy

B2G – New Vertical (Smart Water Metering Project Tenders in India)

Andhra Pradesh

Tender for Supply, Installation, and Maintenance of Smart Water Meters: The Andhra Pradesh Urban Water Supply and Sanitation Department invited tenders for the supply, installation, and maintenance of smart water meters in various cities across the state—The tender aimed to improve water management and reduce water losses. The deadline for submission was in mid-2025.

Ahmedabad– TOT Reference No: 120210810

The Ahmedabad Municipal Corporation (AMC) launched a tender for a smart water metering project to install advanced meters in residential and commercial areas. The project aimed to enhance water distribution efficiency and reduce non-revenue water. The tender was published in early 2025.

Mumbai :TOT Reference No: 120460400 Tender Value: ₹ 628,409,728

The Brihanmumbai Municipal Corporation (BMC) invited tenders for a smart water metering initiative in Mumbai. The project included the installation of smart meters in high-consumption areas to monitor water usage and detect leaks. The tender was published in mid-2025.

Chennai: TOT Reference No: 119461376

The Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) launched a tender for a smart water metering project in Chennai. The project aims to install smart meters in residential and commercial areas to enhance water management and reduce losses. The tender was published in early 2025. Tender for the Procurement, Testing, Installation, Commissioning, Operation, and Maintenance of 1.0 lakh smart water meters with an associated communication and billing system in Chennai City under the Hybrid Annuity Model.

Karnataka: TOT Reference No: 119461376

The Bangalore Water Supply and Sewerage Board (BWSSB) invited tenders for a smart water metering project in Bangalore. The project included the installation of smart meters in high-consumption areas to monitor water usage and detect leaks. The tender was published in mid-2025.

Delhi Jal Board : TOT Reference No: 120786521

The Delhi Jal Board (DJB) launched a tender for a smart water metering project in Delhi. The project aimed to install smart meters in residential and commercial areas to improve water management and reduce water losses. The tender was published in early 2025.

Faridabad : TOT Reference No: 118001402

The Faridabad Municipal Corporation invited tenders for a smart water metering project in Faridabad. The project included the installation of smart meters in high-consumption areas to monitor water usage and detect leaks. The tender was published in mid-2025.

Punjab–Ludhiana

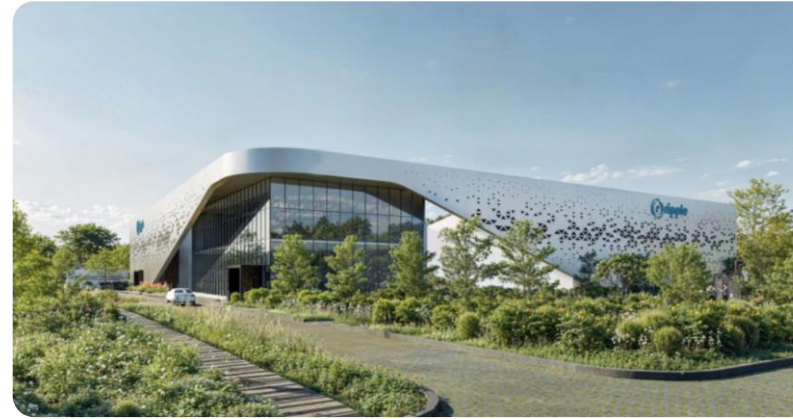
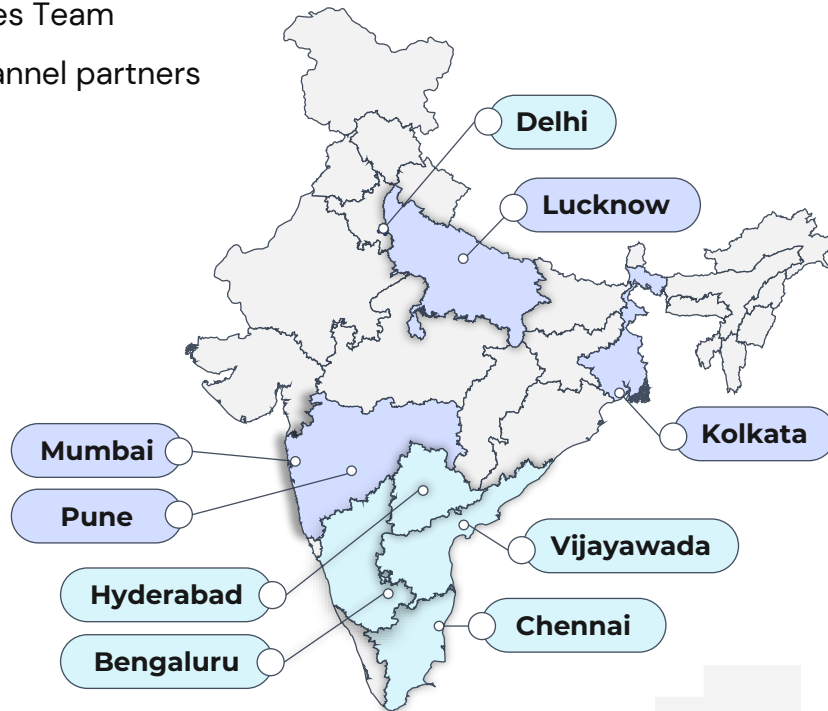
The Ludhiana Municipal Corporation invited tenders for a smart water metering project in Ludhiana. The project aimed to install smart meters in residential and commercial areas to improve water management and reduce water losses. The tender was published in early 2025.



Source: Tender Detail, TendersOnTime, IndianTenders, FirstTender, TenderTiger

Geographical Presence

- Sales Team
- Channel partners



8 States

9 Cities

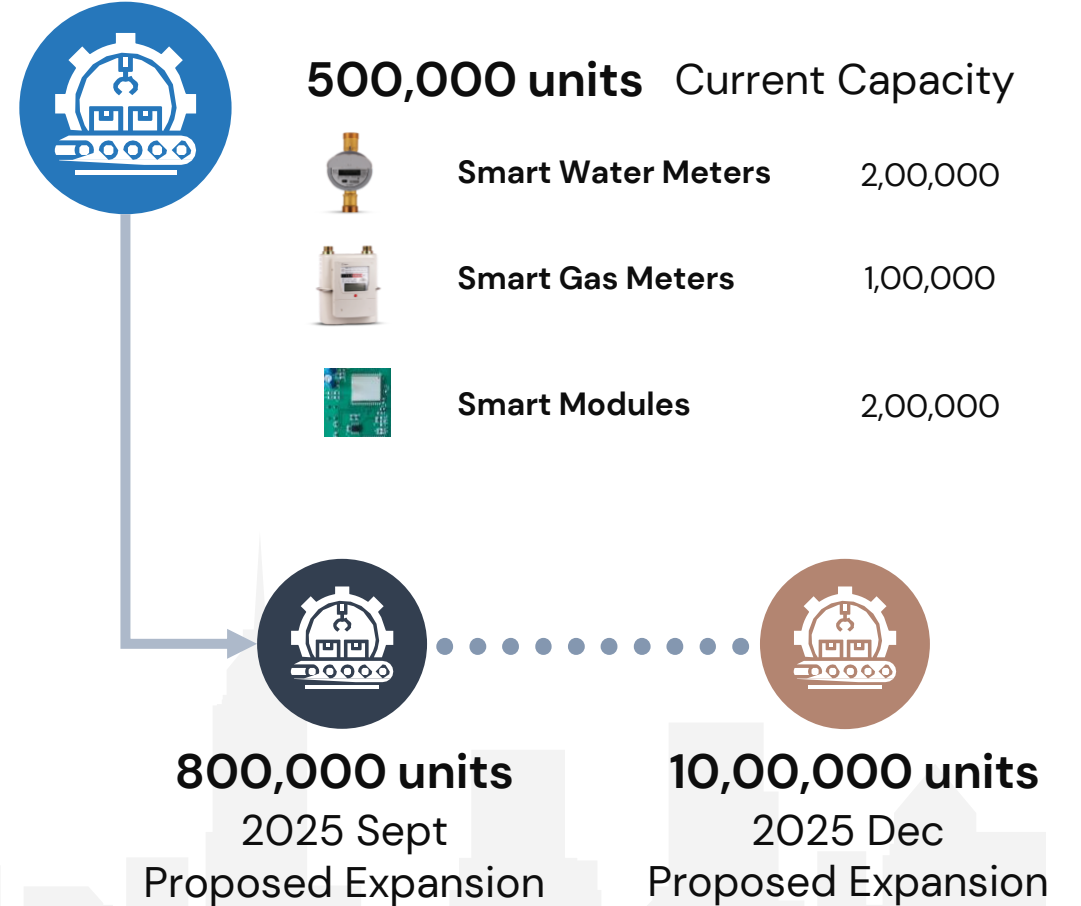
120+ Communities

Exports-UAE

Our Manufacturing Unit



Factory Address :
4-20/9/1, Chinna Golconda Village, Shamshabad, Ranga Reddy District, TS-501218



Diversified Revenue Model

The company delivers **end-to-end SaaS-based digital solutions** for smart utility management in electricity, water, and gas metering & Smart Building Management .

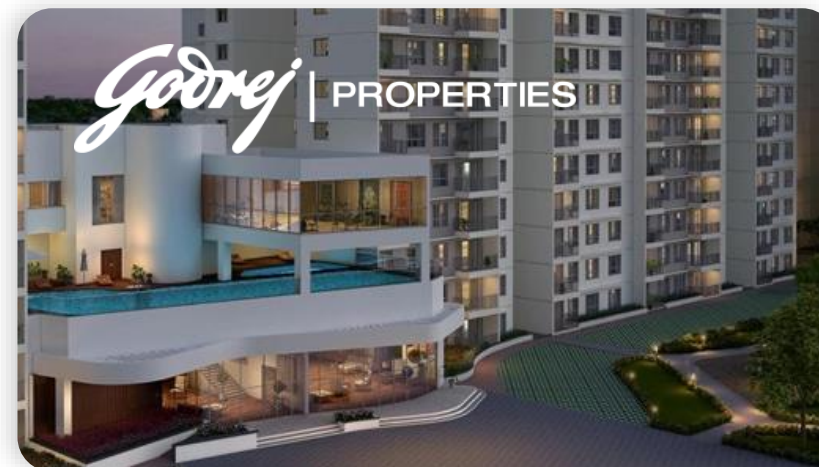
Core SaaS Offerings:

1. **IoT Software Stack:** Full-stack digital infrastructure for mobile/web-based access, featuring:
 - Real-time usage dashboards for end-users and utilities
 - Custom analytics for consumption, leakage, and theft detection
 - Integration with LPWAN like LoRaWAN, NB-IoT, GPRS networks
2. **HES (Head-End System) & MDM (Meter Data Management):**
 - Remote monitoring, firmware updates, and diagnostics
 - Scalable data collection, storage, and analysis across millions of meters
 - Supports third-party OEM integration under white-label or license-based models
3. **Recurring SaaS Revenue Model:**
 - Subscription-based billing for gated communities and utilities
 - License revenue from other OEMs and international smart metering firms
4. **Smart Building Platform:**
 - Embedded SaaS for climate control, leak detection, predictive maintenance, etc.

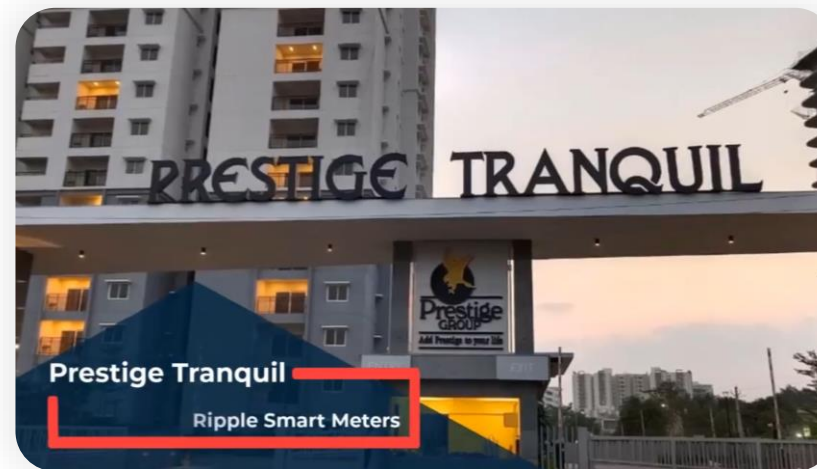
The **expected monthly revenue of SAAS is projected to reach 2 crores by the fiscal year 2029.**



Our Projects



Our Projects



Key Clients



Thank You

DISCLAIMER: Ripple Smart Metering Limited presents this document to provide insights into its business and future growth plans. The company is seeking funding to support its expansion and strategic initiatives. The information shared is based on reliable sources, but accuracy and completeness cannot be guaranteed. Forward-looking statements in this document are subject to uncertainties, and actual outcomes may vary. Potential investors are encouraged to conduct their own due diligence before making any commitments. This document is confidential and intended solely for the recipient. It should not be shared, distributed, or relied upon without prior consent from the company.

ripple

ISIN: INEOXOV01019

Contact us for investor relations:



Phone:
+91 98855 71740



Web :
www.ripplemetering.com



Mail
info@ripplemetering.com