Urjā by Kimbāl

PRODUCT CATALOGUE

Smart Advanced Metering Infrastructure
(Prepaid / Postpaid)

For residential, gated communities, townships, industrial & commercial complexes: Kimbal smart meters with Urjā meter data management, billing, user interface and mobile app.



Kimbal Urja Pvt. Ltd. — a subsidiary of Kimbal Pvt. Ltd.

www.kimbal.io

Smart dual prepaid/postpaid meter · User interface and mobile app

About Urjā

Urjā by Kimbāl — smart metering, billing and energy intelligence on Kimbal's proven AMI



Kimbal Mega Plant, Greater Noida — where our meters are built

Kimbal Urja Pvt. Ltd. (Urjā by Kimbāl) works hand in hand with Kimbal, India's smart-metering specialist. Kimbal designs and manufactures the smart meters, RF-mesh networks and head-end system. Urjā builds and runs everything on top of them — smart prepaid/postpaid metering and billing for residential and commercial projects, the mobile app, meter data management and energy intelligence for commercial and industrial (C&I) customers.

Urjā comes from the Sanskrit word for energy. Built on Kimbal's trusted legacy, it is our commitment to intelligent energy management: helping homes, businesses and utilities turn every unit into a better decision.

Our Vision

To be the digital backbone of efficient energy in the new energy economy.

Our Mission

To provide intelligent digital solutions that empower consumers to optimise, manage and maximise value from every unit of energy.

URJĀ BY THE NUMBERS

100+

Residential and commercial projects on prepaid/postpaid metering

125+

C&I sites on our Energy Intelligence platform

12M+

Kimbal-group smart meters live in India

01

Why Smart Metering

Manual billing, unpaid dues and DG cost disputes drain every residential and commercial project. Smart prepaid/postpaid metering fixes all three.

IN THIS SECTION

01 The problem and the solution

02 Benefits for builders, facility management and end users

From Chasing Dues to Zero Dues

The problem and the solution — what changes when a project moves to Urjā smart metering

THE PROBLEM · WITHOUT SMART METERING	THE SOLUTION · WITH URJĀ SMART METERING
Staff read meters by hand; bills go out weeks later	**Meters are read remotely and automatically; billing runs itself**
Unpaid electricity dues pile up; defaulters are chased every month	**On prepaid, users pay before they use. At zero balance supply disconnects; it reconnects on recharge**
DG power cost is shared by estimate and disputed	**Mains and DG units metered and charged separately, at their own tariffs**
Users question bills they cannot verify	**Live usage, balance and bills on the Ojas app — fully transparent**
Tampering and bypass go unnoticed	**Real-time tamper alerts to the facility team**
Maintenance and fixed charges billed and collected separately	**Fixed charges deducted automatically from the same prepaid wallet**

A Win for Every Stakeholder

Benefits for builders, facility management and end users

Builder / developer

1. Hand over a smart, prepaid/postpaid-ready project
2. No revenue leakage during the maintenance period
3. A premium amenity that helps sell homes
4. BIS-certified IS 16444 smart meters

Facility management / RWA

1. Zero receivables — power is paid for in advance
2. No meter-reading staff or manual billing
3. One portal for every tower, flat and tariff
4. Recharge, balance and consumption reports on demand

End user

1. Pay only for what you use
2. Recharge online, any time
3. Low-balance alerts before supply is cut
4. Mains and DG usage shown separately

02

Our Smart Metering Solution

Smart meters, RF-mesh network, meter data management, prepaid/postpaid billing and mobile app — designed to work as one.

IN THIS SECTION

01 One partner for end to end solution

02 IIEMS architecture

03 How prepaid works

04 Ojas mobile app

05 Rollout and support

OUR SOLUTION

One Partner for End to End Solution

Everything a customer needs — meters, meter data management, billing, mobile app, support & services

Crystal Group
Est. 1981

Kimbal
Smart metering since 2011 · AMI Company of the Year 2024

Kimbal Urja
Software, data & service

KIMBAL BUILDS

Kushal smart meters
1-phase, 3-phase and CT-operated; IS 16444 / IS 15959

Vayu RF Mesh network
Self-healing meter-to-meter radio network

RF gateways
Collect meter data and backhaul it over cellular/fibre

Vaani Head End System
Reads, commands and FOTA for every meter

Firmware & manufacturing
In-house design, Mega Plant production

one data pipeline

URJĀ DELIVERS

IIEMS smart metering
Dual-source (Mains/DG) prepaid/postpaid metering

Meter Data Management
Wallets, tariffs, billing, connect/disconnect

Energy Intelligence platform
15-min analytics, reports and alarms for C&I

Mobile apps
Ojas and Energy Intelligence apps for every user

Onboarding, SIMs & support
Meter onboarding, SIM management, helpdesk

12M+
Meters live nationwide

10M+
Annual meter production

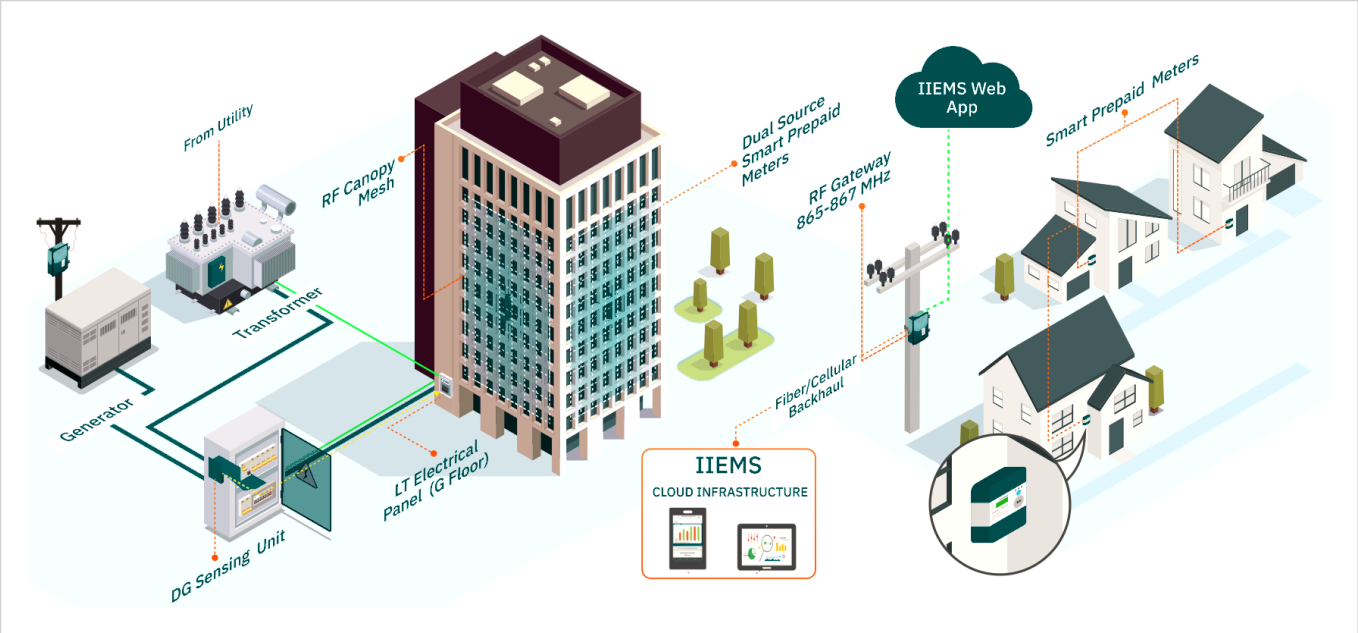
250K sq ft
Mega Plant, Greater Noida

ISO 9001:2015
Certified quality

OUR SOLUTION

IIEMS Architecture

Integrated Infrastructure Energy Management System — smart prepaid/postpaid metering, end to end



Dual-source smart meter	Vayu RF Mesh	RF gateway	Vaani HES	MDM & billing	Web & Ojas app
Kimbal	Kimbal	Kimbal	Kimbal	Urjā	Urjā

Dual-source smart prepaid/postpaid meters

Smart meters with our NIC cards join the RF mesh and deliver usage, tamper alerts and billing data to the cloud in real time — with separate Mains and DG accounting.

RF gateway

Gateways collect data from every meter and send readings and power-quality information in real time to the Head End System in the cloud.

Intelligent metering for multi-tenant buildings, complexes, factories and campuses

- **Real-time monitoring** — consumption, voltage, current and PF for each meter
- **Tamper detection & alerts** — anomalies detected and notified instantly
- **Automated billing & reporting** — accurate invoices, usage analytics and compliance reports

How Prepaid Works

A simple cycle that keeps every flat paid up — with no one chasing dues

1. Recharge

Users top up online through the mobile app; the facility team can also issue recharge coupons.

2. Wallet credited

The balance updates instantly and is visible on the app.

3. Usage deducted

Mains and DG units are charged at their own tariffs; fixed charges are deducted daily.

4. Low-balance alert

SMS, e-mail and app notifications warn users well before the balance runs out.

5. Auto-disconnect

At zero balance the meter disconnects remotely. Friendly-credit rules can protect nights and holidays.

6. Auto-reconnect

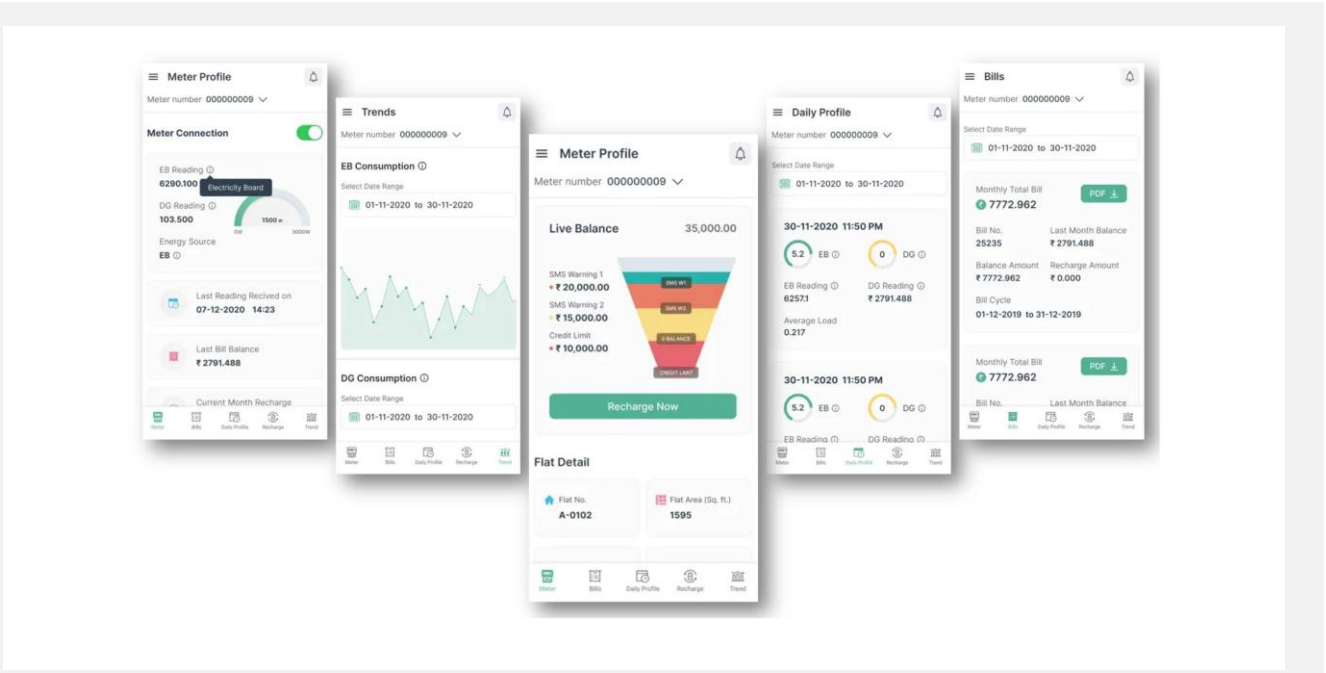
The moment the user recharges, supply is restored automatically.

User wallet

Steps 1 → 6 repeat automatically. Recharge, deduction, alert and reconnection logs are kept for every meter.

Ojas Energy Watch

Urjā's mobile app for smart prepaid/postpaid metering — smart-meter control at every user's fingertips



Built for residential projects, commercial users and multi-tenant sites. Ojas syncs with the Kimbal RF mesh network in real time, so users can cut costs, stay in control and avoid surprise disconnections.

Real-time meter monitoring	Live load, units consumed, voltage and balance — no more guesswork.
Balance & billing hub	Current balance, bill downloads and full history in one place.
Notifications	Instant alerts for overload, low balance and tamper events.
Daily consumption insights	Easy charts and reports to spot trends and save.
Simple login & support	Self-service password reset, or contact the site admin.

Rollout & Support

How we take a project from survey to go-live — and stay with you after

01 Site survey & RF planning

Tower-by-tower survey; RF-mesh and gateway placement planned by Kimbal engineers.

02 Meter supply & installation

Kushal smart meters supplied; installation by the site's electrical contractor with our guidance.

03 Network commissioning

Gateways configured and the RF mesh brought up; every meter checked for communication.

04 Portal onboarding

Towers, flats, tariffs, fixed charges and opening balances set up in the portal.

05 End-user go-live

End users onboarded on the Ojas mobile app; prepaid/postpaid mode switched on tower by tower.

06 Ongoing support

Helpdesk for the facility team, spares and replacements, and continuous platform monitoring.

03

Smart Meters & Gateways by Kimbal

Every Urjā smart metering site runs on Kushal smart meters, designed and made by Kimbal at its Greater Noida Mega Plant.

IN THIS SECTION

01 Kushal family overview

02 Kushal U1 — single phase

03 Kushal U3 — three phase

04 Kushal Magna CCG2 — CT operated

05 RF gateway

Kushal

Intelligent metering, reliable communication



Kushal U1 · Single Phase

Basic current	**10 A**
Maximum current	**60 A**
Standards	**IS 16444, IS 15959, IS 13779, CBIP 325**



Kushal U3 · Three Phase

Basic current	**10 A / 20 A**
Maximum current	**60 A / 100 A**
Standards	**IS 16444, IS 15959, IS 13779, CBIP 325**



Kushal Magna CCG2 · CT Operated

Basic current	**5 A**
Maximum current	**10 A**
Standards	**IS 16444, IS 14697**

Kushal, Kimbal's next-generation smart meter, is built for fast data, strong stability and reliable field performance. It tracks energy use in real time, improves billing precision and stands up to harsh conditions. Paired with the end-to-end AMI network — Vayu RF Mesh and the Vaani Head End System — it gives operators full oversight and confidence.

Instant intelligence for better control over energy expenses

Accurate billing and transparency for tenants

Built and engineered in India

Kushal U1

Single Phase Smart Meter

1 Phase, 2 Wire, DLMS Category D1



KEY FEATURES

1. Real-time tamper alerts
2. Multiple tariff management
3. Power failure alerts
4. Firmware upgrade over the air (FOTA)
5. Load control by current and load limit
6. Field-swappable communication module

TECHNICAL SPECIFICATIONS

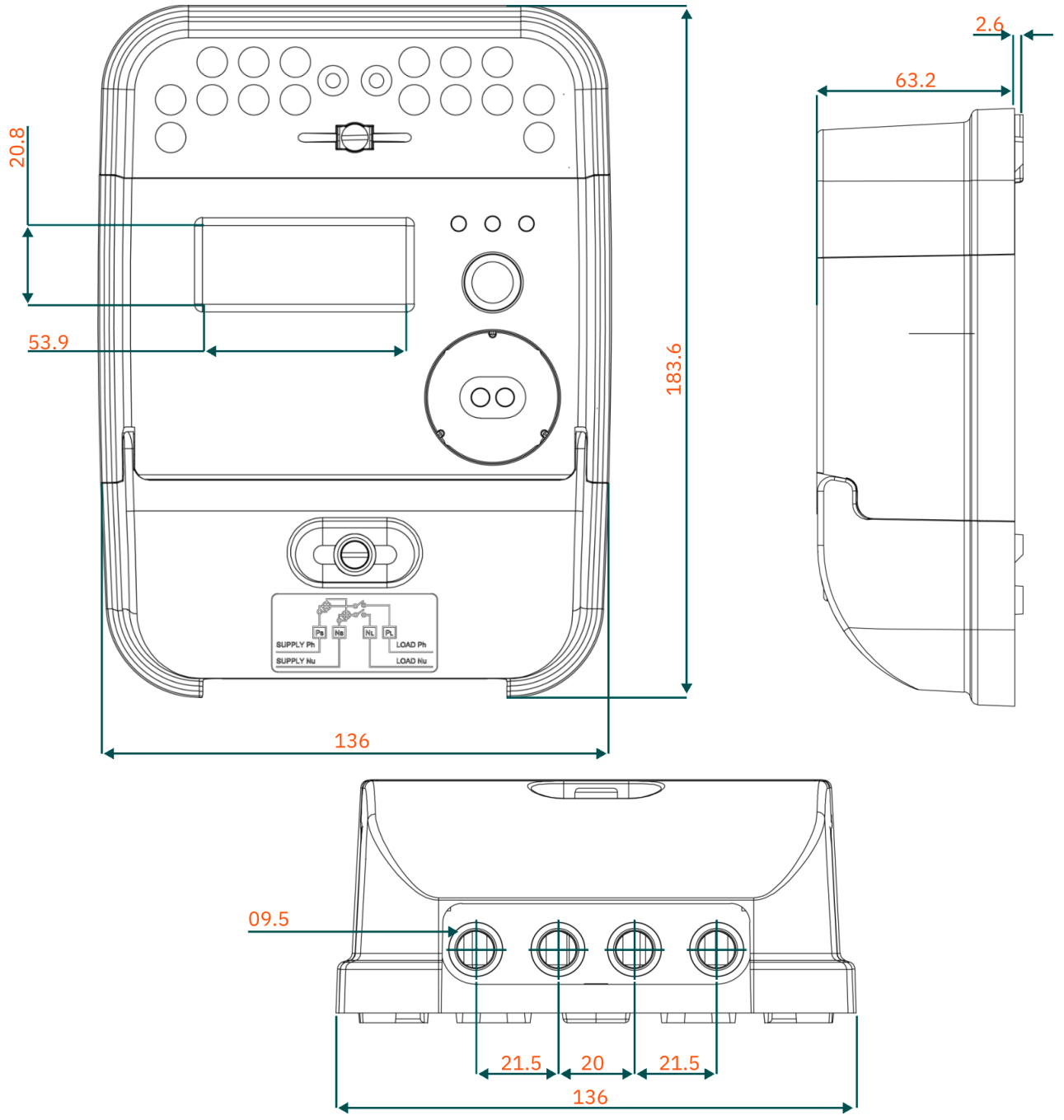
Country of origin	India
Applicable standards	IS 16444, IS 15959, IS 13779, CBIP 325
Reference voltage	240 V | +20% Vref to −40% of Vref
Current rating	10–60 A
Starting current	0.2% of basic current (Ib)
Accuracy class	Class 1.0
Operating temperature range	−25 °C to +75 °C
Humidity	Up to 95% relative humidity (RH)
Frequency	50 Hz ± 5%
Load control (connect / disconnect)	Category UC1
Material	High-grade polycarbonate
Meter constant	3200 imp/kWh
Overload capacity	120% of Imax

Images are indicative and may vary with customisation and features requested by the customer. Guaranteed technical particulars & Net metering will be optional.

DIMENSION DRAWING

Kushal U1

Single Phase Smart Meter 1 Phase, 2 Wire, DLMS Category D1



All dimensions in mm

Images are indicative and may vary with customisation and features requested by the customer. Guaranteed technical particulars & Net metering will be optional.

Kushal U3

Three Phase Smart Meter

3 Phase, 4 Wire, DLMS Category D2



KEY FEATURES

1. Real-time tamper alerts
2. Multiple tariff management
3. Power failure alerts
4. Firmware upgrade over the air (FOTA)
5. Load control by current and load limit
6. Field-swappable communication module

TECHNICAL SPECIFICATIONS

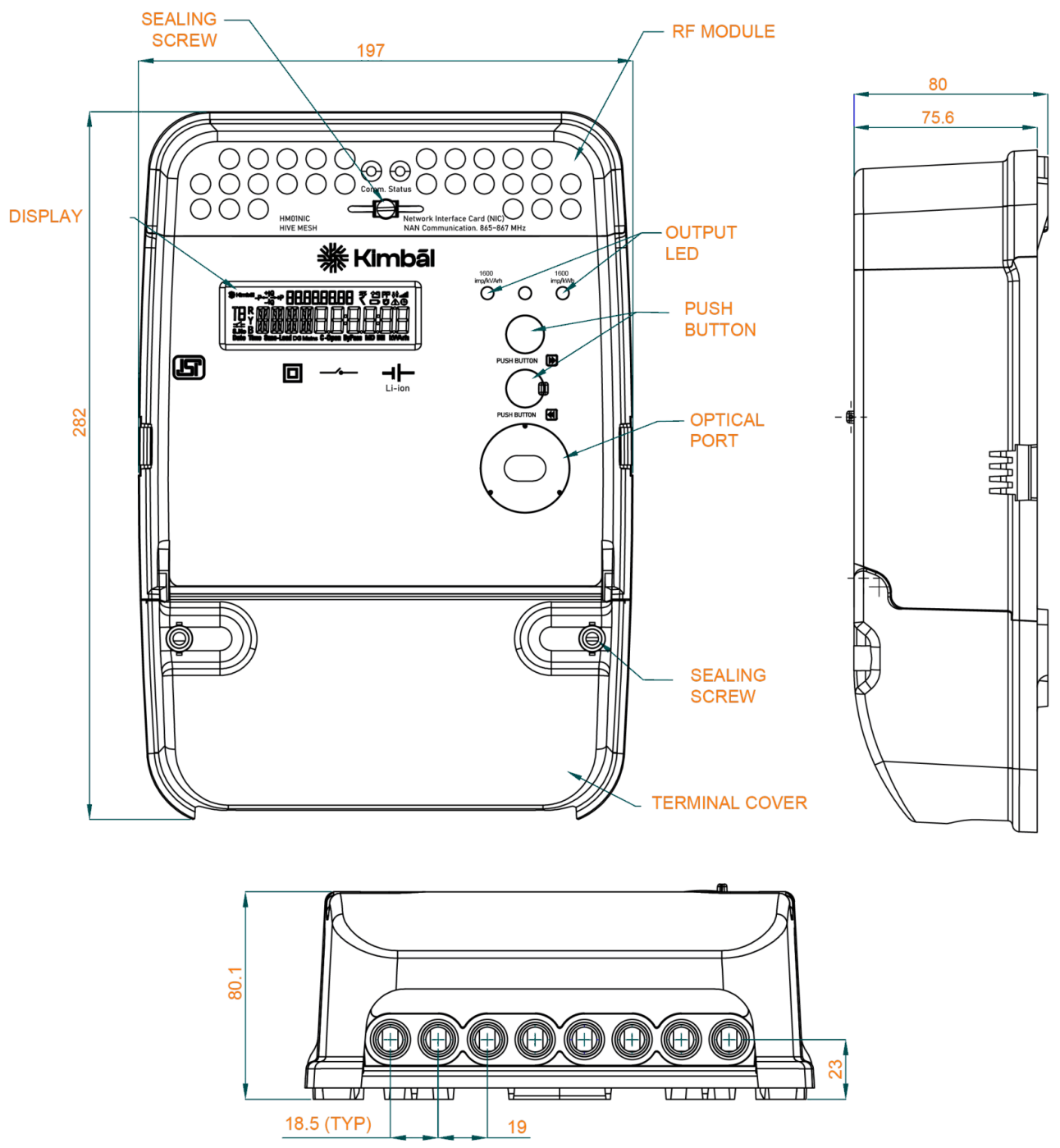
Country of origin	India
Applicable standards	IS 16444, IS 15959, IS 13779, CBIP 325
Reference voltage	3 × 240 V | +20% Vref to −40% of Vref
Current rating	10–60 A / 20–100 A
Starting current	0.2% of basic current (Ib)
Accuracy class	Class 1.0
Operating temperature range	−25 °C to +75 °C
Humidity	Up to 95% relative humidity (RH)
Frequency	50 Hz ± 5%
Load control (connect / disconnect)	Category UC1
Material	High-grade polycarbonate
Meter constant	1600 imp/kWh
Overload capacity	120% of Imax

Images are indicative and may vary with customisation and features requested by the customer. Guaranteed technical particulars & Net metering will be optional.

DIMENSION DRAWING

Kushal U3

Three Phase Smart Meter 3 Phase, 4 Wire, DLMS Category D2



All dimensions in mm

Images are indicative and may vary with customisation and features requested by the customer. Guaranteed technical particulars & Net metering will be optional.

Kushal Magna CCG2



Three Phase CT Operated Smart Meter

AC, 3 Phase, 4 Wire, -/5 A, Class 0.5S

KEY FEATURES

1. Real-time tamper alerts
2. Multiple tariff management
3. Power failure alerts
4. Firmware upgrade over the air (FOTA)
5. Field-swappable communication module

TECHNICAL SPECIFICATIONS

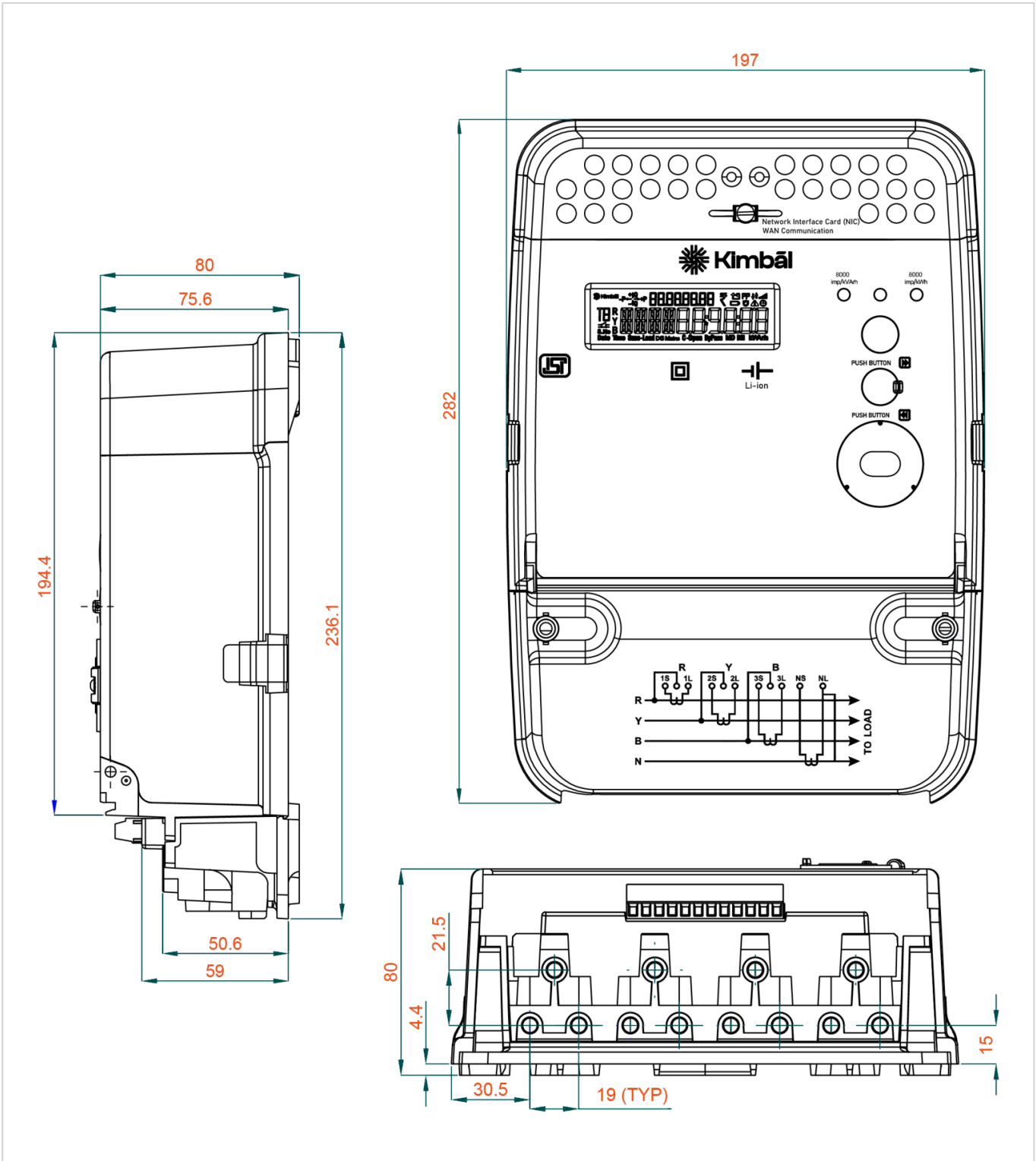
Country of origin	India
Applicable standards	IS 16444, IS 14697
Reference voltage	3 × 240 V | +20% Vref to −40% of Vref
Current rating	-/5 A
Starting current	0.2% of basic current (Ib)
Accuracy class	Class 0.5S
Operating temperature range	−25 °C to +75 °C
Humidity	Up to 95% relative humidity (RH)
Frequency	50 Hz ± 5%
Load control (connect / disconnect)	Category UC1
Material	High-grade polycarbonate
Meter constant	1600 imp/kWh
Overload capacity	120% of Imax

Images are indicative and may vary with customisation and features requested by the customer. Guaranteed technical particulars & Net metering will be optional.

DIMENSION DRAWING

Kushal Magna CCG2

Three Phase CT Operated Smart Meter AC, 3 Phase, 4 Wire, -/5 A, Class 0.5S



All dimensions in mm

Images are indicative and may vary with customisation and features requested by the customer. Guaranteed technical particulars & Net metering will be optional.

RF Gateway



RF Mesh Gateway for Smart Meters

865–868 MHz RF mesh · 4G LTE backhaul

KEY FEATURES

1. Self-healing RF mesh to every meter
2. 4G LTE backhaul with 2G fallback
3. Battery backup through power cuts
4. Firmware upgrade over the air (FOTA)
5. IP65 enclosure for outdoor mounting

TECHNICAL SPECIFICATIONS

Country of origin	India
Application	Data collection from 1-phase and 3-phase smart meters
Power supply	140–288 V AC, 50/60 Hz (1-phase and 3-phase variants)
Power consumption	Up to 15 W
Battery backup	Li-ion 10.8 V, 2750 mAh | approx. 1 hour
RF mesh (meter network)	865–868 MHz, 200 kHz channels, +23 dBm max
Backhaul (to cloud)	4G LTE with 2G fallback
IP addressing	IPv4 / IPv6 dual stack, static or dynamic IP
Security	AES-128 (DLMS/COSEM), DTLS, private APN
Meters per gateway	300 recommended, up to 1,500
Enclosure	High-grade polycarbonate (PC-GF10), IP65
Operating conditions	−10 °C to +60 °C, up to 95% RH
Dimensions & weight	484 × 212 mm, approx. 4.4 kg
Compliance	TEC MTCTE, IEC 62368-1, CISPR 32, ETSI EN 300 220, IEC 60529

Images are indicative and may vary with customisation and features requested by the customer.

04

Trusted & Proven

Leading real-estate customers across North India run on Urjā today — backed by a wider energy platform and the Kimbal group's track record.

IN THIS SECTION

01 Real-estate customers on Urjā

02 Beyond metering solutions: our energy platform

03 C&I customers

04 Kimbal group customers

05 Awards & certifications

TRUSTED & PROVEN

Real-Estate Customers on Urjā

100+ residential and commercial projects across North India run on Urjā smart metering — a selection

Dual-source prepaid/postpaid meters

Mains + DG billing & recharge

Ojas mobile app

Vatika Group · 20 projects

· Vatika Town Square I & II
· Vatika Xpression & Sovereign Next
· Vatika City Homes & Seven Lamps
· Vatika Mindscapes, Faridabad
· Vatika Central Park, Jaipur

Ramprastha Group · 6 projects

· Ramprastha Primera
· The Edge & Aterium
· Ramprastha View & Vista
· The Hub (commercial)

M3M

· M3M Cosmopolitan
· M3M SCO 113 & SCO 84, Gurugram

Bestech

· Park View Grand Spa & Sanskruti
· Brahma Athena (commercial)

Pioneer

· Pioneer Park & Pioneer Araya
· Pioneer Presidia, Gurugram

Mahagun

· Mahagun Mirabella, Noida
· Mahagun Mywood, Greater Noida

Jubilee Walk

· Jubilee Walk, Mohali

Malls & commercial

· Scottish Mall · EDM Mall
· Eastern Mall, Ranchi

MORE CUSTOMERS ON URJĀ

BPTP Park Serene · Ireo Skyon · Elan Miracle · Parsvnath La Tropicana & Regalia · M2K Corporate Park · Heritage One & Max · Corona Graciux · Microtek Greenburg · Antriksh Golf View · Shipra Srishti · Rishabh Cloud9 · Ace Aspire · Parx Laureate, Noida · Risland Sky Mansion, Delhi · Pacific Golf Estate, Dehradun · RPS Palms, Faridabad · Janpath Green, Ludhiana · The Green County, Jalandhar · Ninex City · VVIP Address & Mangal

Beyond Metering Solutions

The same Urjā platform runs six solution lines — proof of our depth in energy applications

Smart Metering (IIEMS)

Residential projects · builders · malls · campuses

- Dual-source (Mains / DG) prepaid/postpaid metering on RF mesh
- Automated billing, recharge and low-balance alerts
- Ojas Energy Watch mobile app for every user

Meter Data Management (MDM)

Metering operators · utilities · campuses

- Wallet and tariff engine with daily fixed charges
- Remote connect / disconnect on balance rules
- Monthly, bulk and site-level bill generation

Energy Intelligence Platform

Plants · commercial buildings · multi-site

- 15-min electrical data from every meter
- Daily 6 AM report and AI monthly insights
- Web + mobile app, alarms, ToD and demand analytics

Power Procurement Optimisation

Open-access-eligible HT consumers

- ML demand and IEX price forecasts
- Block-wise landed cost vs DISCOM across DAM, GDAM, RTM
- Predicted vs actual savings, reported daily

Urjā OTC — Bilateral PPA Marketplace

C&I buyers · generators with untied capacity

- Live marketplace for bilateral PPAs
- Reverse auction or nomination, by project lead time
- Transparent price discovery for both sides

Renewables, Storage & Microgrids

Plants planning solar / BESS · island grids

- BESS sizing for peak shaving and demand reduction
- Rooftop solar and open-access advisory
- Island Grid Console for PV + BESS + DG microgrids

Proof point: at a 30 MW particle-board plant, procurement savings rose from 2.6% to 7.1% of the monthly bill after deployment (Aug-25 to Mar-26).

TRUSTED & PROVEN

C&I Marquee Customers

Commercial & industrial (C&I) customers running on Urjā's Energy Intelligence platform

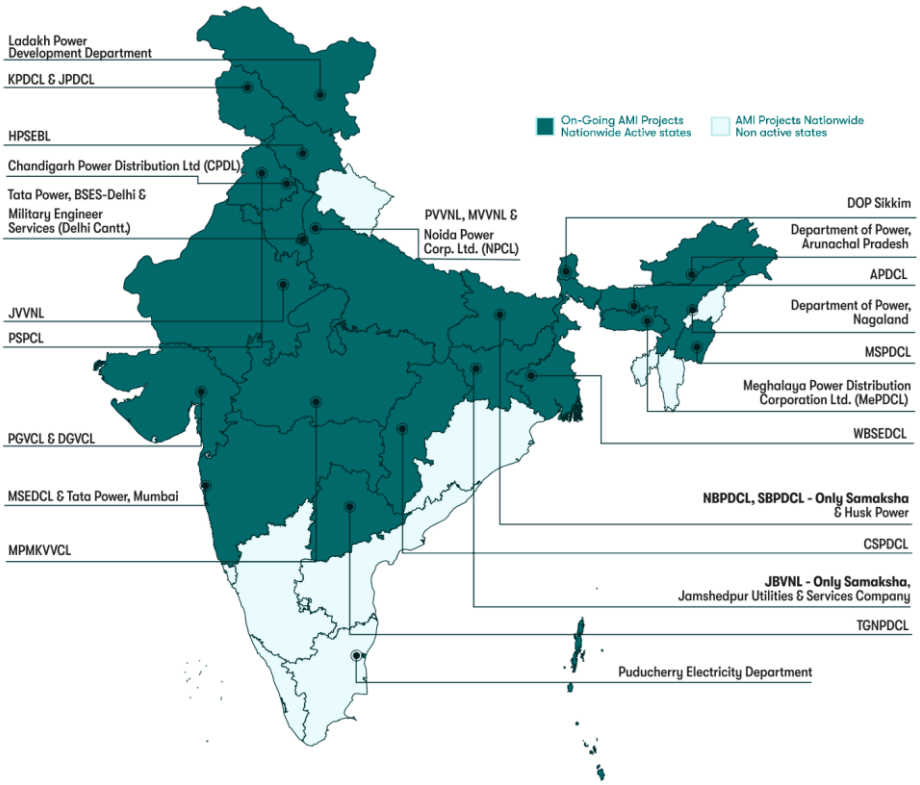
125+	300+	11	450+ MVA
C&I customer sites	Smart meters live	States & UTs	C&I contract demand

Energy & bio-fuels	Reliance Bio Energy — compressed-biogas plants across UP, Haryana, Rajasthan and Maharashtra
Banking, retail & workspaces	Punjab National Bank (6 offices) · Cinepolis · Pacific Mall · Smartworks · Artha Infratech
Transport & infrastructure	Indian Railways — Electric Loco Sheds, Kanpur & Juhi · Shaheed Bhagat Singh International Airport, Chandigarh · Transworld Terminals · RDC Concrete (10+ plants)
Electronics & engineering	Syrma SGS Technology · Optiemus Electronics · Elin Electronics · ILJIN Electronics · JBM Group (Neel Metal Products) · BAXY Engineering · RACL Geartech
Metals & steel	Swarup Steel · Sidhbali Steels · Bansal Wire Industries · Kubair Steel & Power · Hindupur Steel & Alloys · Nawla Ispat
FMCG, textiles & paper	Patanjali Food & Herbal Park · Lakshmi Mills · Gulshan Poly · Chamunda Paper · Pashupati Group
Education & healthcare	Vellore Institute of Technology · Medical College, Muzaffarnagar · Pure & Cure Healthcare

Live in: Uttar Pradesh · Uttarakhand · Haryana · Delhi · Chandigarh · Rajasthan · Maharashtra · Karnataka · Tamil Nadu · Andhra Pradesh · West Bengal

Kimbal Group Customer Base

As a Kimbal company, Urjā stands on Kimbal's AMI projects with utilities across India



AMISP PARTNERS, UTILITIES & GOVERNMENT



Awards & Recognitions

Recognition earned by Kimbal — the smart-metering company behind every Urjā deployment



2024 **Advanced Metering Infrastructure Company of the Year**

Bharat Electricity — Powering India Awards



2025 **Recognised by CII as an Emerging Eco Organisation of the Year**

CII — ITC Centre of Excellence for Sustainable Development



2025 **Ranked #34 among India's top 50 mid-size workplaces for millennials**

Great Place to Work® India



2026 **Recognised by Tata Power-DDL for exemplary performance & significant contribution**

Tata Power-DDL Business Associate Meet

Certifications

Quality, security and BIS approvals held by Kimbal for the meters and systems we deploy

CBIP 325

Capability Maturity Model Integration (ML 3)

NABL Accreditation

ISO 9001:2015

ISO 27001:2013

OHSAS 18001:2007

ISO/IEC 17025:2017

Great Place to Work-Certified™

IS:13779

IS:16444

IS:15959 DLMS

Urjā by Kimbāl

Every unit matters.
Every decision counts.
Every outcome starts here.

Ready to make your project smart? Talk to us for a site survey and a proposal tailored to your towers, tariffs and DG set-up.

Talk to us about your project

Head office

Floors 1–4, C-117 Arise Building, Naraina Industrial Area Phase 1, New Delhi 110028

Manufacturing (Kimbal Mega Plant)

20, Think Next Village, Knowledge Park III, Greater Noida, UP 201306

ITC, Service & Support Partner

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