CYANCONNODE

About CyanConnode

CyanConnode is the largest private player in India providing Smart IoT Communication solutions for AMI infrastructure. CyanConnode's RF Smart Mesh Networks are designed for rapid deployment, while giving exceptional performance and competitive total cost of ownership (TCO). CyanConnode has been active in India since 2009 and executed the first Smart Metering project in the year 2014. CyanConnode is currently active in 9 states in the country and has a current orderbook of

1.4 million nodes

of which **960 thousand** have been installed.

Ease of deployment
Efficient IT architecture with flexibility of both on-prem & cloud

Best optimized IT infra
In the industry for AMI applications

Very fast turn around time
Meter installation to HES onboarding

Hybrid communications
Only solution provider with NMS both on Cellular & RF

Plug & Play Comm module
Cellular & RF on the same meter

Interoperability
Integrated with multiple Meter OEMs and MDM providers through standardized REST APIs

Cost effective O&M
Reducing total cost of ownership (TCO) of utilities

>99% SLA in 4 hours on daily basis
Fully compliant to smart pre-paid environment

Our Journey

Year 2002
Founded in 2002 and listed on AIM in 2005. Headquartered in Cambridge, UK.
Centre of excellence in Cambridge UK with international operational centers.

Year 2009-2013
Expanded India operations in 2009
Introduced Blue-chip client base and partner eco-system validates technology offering.
Established CyanConnode Private Limited
UK Smart Metering Program (SMETS1 & SMETS 2)

Year 2014-2016
Bagged pilot projects in India
CESC, Mysore awarded for Best Smart Grid pilot project, India

Year 2017-2021
Acquisition of Connode, Sweden
Set up manufacturing facilities in India – reinforcing the 'Make in India' programme

Orderbook: > 1.4M
Installed: > 960K
Covering 9 states in India

Country Head Office

CyanConnode India

Tata Power, Mumbai, Maharashtra

Implemented in 2014 and under support

Total RF nodes deployed	17,000
Lead Bidder	L&T
Products offered	Ultimesh DCU, Omnimesh platform (HES & NMS)

One of the first smart metering project in state of Maharashtra

Meter partner L&T

CESC, Mysuru, Karnataka

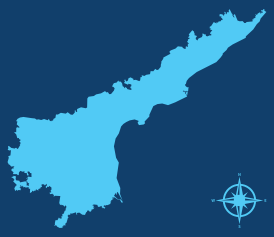
Implemented in 2015 and under support

Total RF nodes deployed	22,000
Lead Bidder	Enzen Global
Products offered	Ultimesh DCU, Omnimesh platform (HES & NMS)

One of the first smart grid roll-outs in India under National Smart Grid Mission| First project with multiple meter manufacturers on single RF mesh network

Meter partner El Sewedy, Elster and L&T

APSPDCL, Tirupati, Andhra Pradesh



Implemented in 2018 and under support

Total RF nodes deployed	3,000
Products offered	Omnimesh DCU, Omnimesh platform (HES & NMS)

One of the first smart metering project in state of Andhra Pradesh

Meter partner L&T

UGVCL, Ahmedabad, Gujarat

Implemented in 2017 and under support

Total RF nodes deployed	27,760
Lead Bidder	Genus
Products offered	Omnimesh GW, Omnimesh platform (HES & NMS)

First Omnimesh deployment in India on IPv6 under National Smart Grid Mission | ≥ 98% accurate & timely data

Meter partner Genus

MPWZ I, Indore

Implemented in 2018 and under support

Total RF nodes deployed	130,000
Lead bidder	Schneider
Meter partner	Schneider
MDMS	Esyasoft

MPWZ II, Indore

Start	2019
Current status	Under Implementation
Total meters required	350,000
Total nodes supplied	251,850
Lead bidder	IPCL
Meter partner	Schneider and Genus
MDMS	Esyasoft

- Largest RF-based smart metering implementation in India covering ~ **8% of the total consumer base of MPWZ**
- Consistently delivering ≥ **99% of SLAs. MPWZ-1 project is under AMC for last 45 months, witness every possible harsh environment**
- Collection of 15 minutes-Instantaneous Parameters, Block Data and Daily Energy Data Totaling to **193 Samples per Meter per Day**
- **Billing Efficiency Improvement by ~24%, Collection Efficiency by ~ 12%, AT&C loss reduction by ~ 22%, CRPU improvement by ~ 30%**
- RoI within 2.5 years of implementation
- MPWZ has won many prestigious awards for its AMI implementation and has become a case study for the rest of the utilities

Deployment & Impact

TN-71, JVVNL, Rajasthan

Start	2020
Status	Under implementation
Total meters required	2,86,320
Total RF nodes deployed	2,50,455
Lead bidder	Genus Power
Products offered	Omnimesh GW, Omnimesh platform (HES & NMS)
Meter partner	Genus
MDMS	BCITS

- Project awarded under IPDS (TN 71) and NSGM(TN -72)
- Communication infrastructure based on RF mesh network
- Significant Improvement in billing and collection efficiency
- About 99% SLA

TN-72, JVVNL, Rajasthan

Start	2020
Status	Under implementation
Total meters required	1,49,730
Total RF nodes deployed	1,11,523
Lead bidder	Genus Power
Products offered	Omnimesh GW, Omnimesh platform (HES & NMS)
Meter partner	Genus
MDMS	BCITS

TANGEDCO, Tamil Nadu

Start	2020
Status	Under implementation
Total meters required	142,825
Total nodes supplied	1,02,588
Lead bidder	Genus Power
Products offered	Omnimesh GW, CNIC, Omnimesh platform (HES & NMS)
Meter partner	Genus
MDMS	Esyasoft

- First smart meter project in the state under smart city mission
- Improvement in Billing efficiency & revenue collection
- Demand forecasting from consumer level to substation level
- Theft detection, through real time monitoring leads to increased system transparency
- > 99% SLA, reached 100% billing data in HES & 99.73% SLA in GO LIVE sections

HPSEB, Himachal Pradesh

Start	2021
Status	Under implementation
Total meters required	151,740
Total nodes supplied	146,740
Lead bidder	Schneider
Meter partner	Schneider
MDMS	Esyasoft

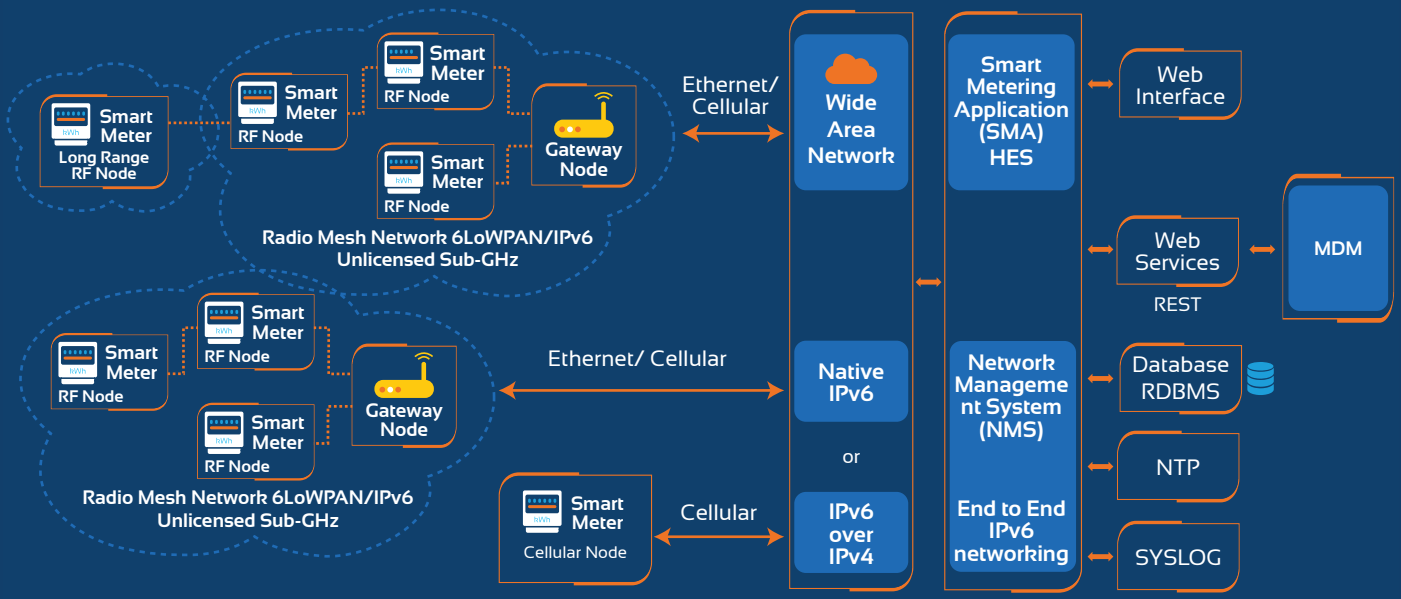
- First smart meter project in the state under smart city mission
- 1.25 lakh smart meters in Shimla and 26,000 in Dharamsala under the Shimla Smart City project
- CyanConnode's first project in hilly terrains of the country
- Achieved a range of 4.2 KMs through RF mesh in Shimla
- Omnimesh architecture is the best solution for Smart Metering in India with best possible coverage of dense, hilly, urban & semi-urban areas

APDCL, Assam

Start	2022
Current status	Under Implementation
Total meters required	100,000
Total nodes supplied	6,000
Lead bidder	IntelliSmart
Meter partner	Schneider
MDMS	Esyasoft

- First prepaid meter installed on 26 April 2022, marking the first RDSS meter of the country
- CyanConnode will supply One lakh Omnimesh Modules for deployment of Advanced Metering Infrastructure, standards-based hardware, Omnimesh Head-End Software, and Services. This involves the AMC for complete project duration of 10 years
- Covers both Urban and Rural areas of Assam

Omnimesh Architecture & Features



Endpoints - Meters + NIC

- Smart Meter - IS 16444
- Internal Bistable relay for connect/ disconnect
- Prepaid /Postpaid
- OTA firmware upgrade
- NIC: RF Mesh @ 865-867MHz/Cellular

Gateway

- Pole/Wall mountable with external antennas
- RF 865-867 MHz
- Join Mesh N/w with Smart Meters
- 300 + Smart Meters per Gateway

Omnimesh - HES

- Web based software for data acquisition
- Stores and visualize data
- Monitors and Alerts to exceptional conditions
- SQL Server, XML Web Services
- Standards for interfacing with MDMS

MDMS

- Web based Meter data management system
- Interfacing with ERP System
- Perform Validation ,estimation and editing on meter reading data

Omnimesh solution meets the technical requirements for AMI in India as per IS 16444

- Fully certified WPC compliant network elements
- Reliable & Secure communication with 24*7 data availability of >99%
- Rapidly locate and resolve outages
- Deep penetration through all terrains - no "not-spots"
- Best coverage for last mile - no single point of failure

Cost effective | **Simple to deploy** | **Build as you go network**

A true winning solution for Utilities, Consumers and Government

Presence in SGKC

Dedicated space for CyanConnode in Virtual Smart Grid Knowledge Centre (SGKC) by National Smart Grid Mission & Power Grid Corporation of India, Ltd. (both under Ministry of Power, Govt. of India). SGKC is a Knowledge Centre platform, set up by Union Ministry of Power, demonstrating excellence in Smart Grid which CyanConnode is proud to be a part of.

https://sgkc.powergrid.in/cyanconnode.php

Scan the QR code to visit

Awards & Recognition

For more information visit www.cyanconnode.com | Or scan QR code

@CyanConnode_Ind

linkedin.com/company/cyanconnode-india

For enquiries, please mail to
Nitin.Chittora@cyanconnode.com
sales@cyantechnology.com