

Powered by SmartNova Platform

200+

Projects

2013

Founded

BACnet/IP

Open Protocol

IN

Made in India

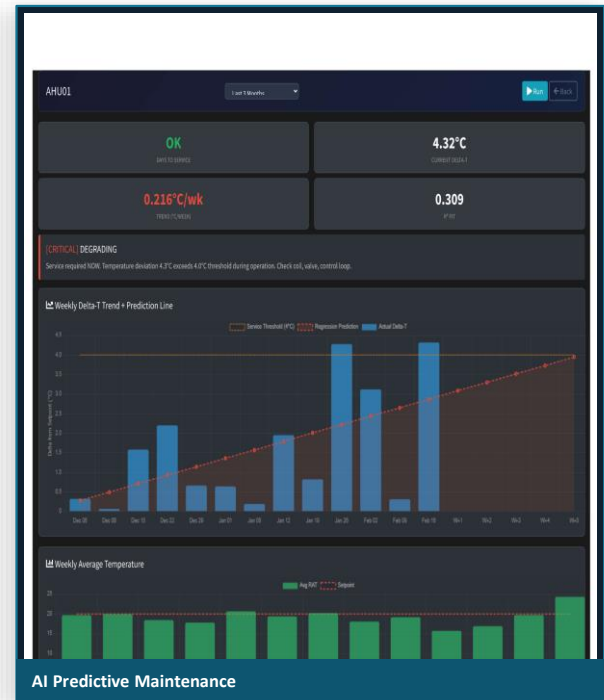
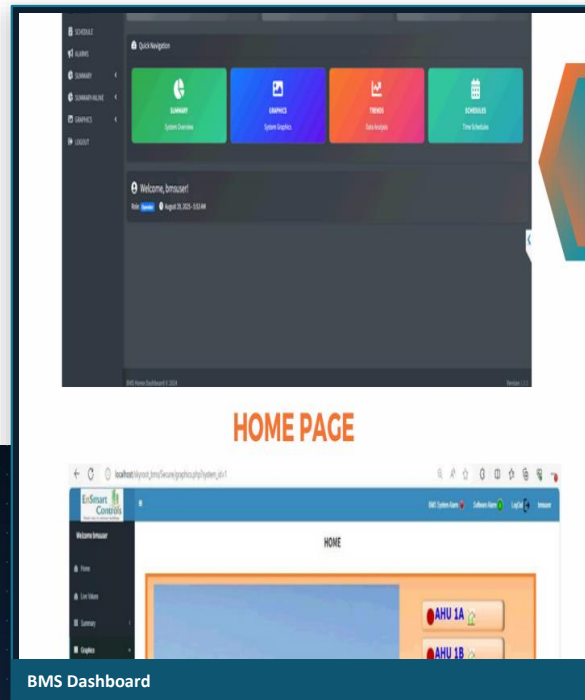
Web-Based · Multi-Site · 21 CFR · BACnet/IP Native

EB · DG · BTU · Water · Gas · BEE · ECBC 2017

Sub-Metering · Auto Invoice · Zero Disputes

ARM A53 · ASHRAE 135 · AAC Profile · CE/RoHS

On-Premises · Predictive · Efficiency · Anomaly



Our Mission

We are an outcomes company. Every product we build exists to deliver buildings that perform better, cost less and cause zero disputes — through SmartNova Platform.



No Lock-In

BACnet/IP open — any device, any vendor, forever



On-Premises AI

All AI inside your facility. No cloud dependency



18–27 Days Saved

Automated engineering — fastest delivery in India



Zero Compliance

BEE · ECBC · 21 CFR · GRIHA — all built in natively

Our Journey — 2013 to 2025

2013

EnSmart Founded

First open-protocol DDC controller manufactured in Anthiyur, Erode. SmartNova Platform founded on 23+ years of expertise.

2015

EMS & Tenant Billing

Nova Energy Management and Tenant Billing launched. Automated sub-metering becomes core to the platform.

2017

EnNode Gateway Released

Multi-protocol gateway — BACnet/IP, Modbus RTU/TCP, MQTT. Full open-protocol capability achieved.

2019

100+ Projects

TCS, Infosys, Tidel Park, Prestige, Bafna, pharma and airports. CE/RoHS certified. INBAC membership.

2022

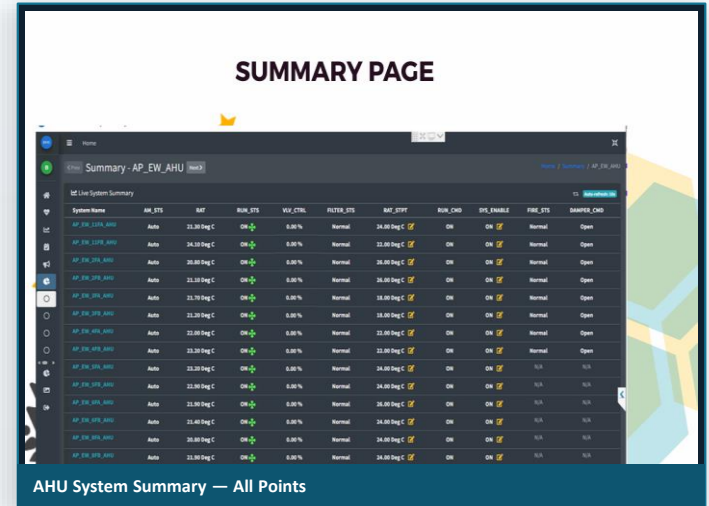
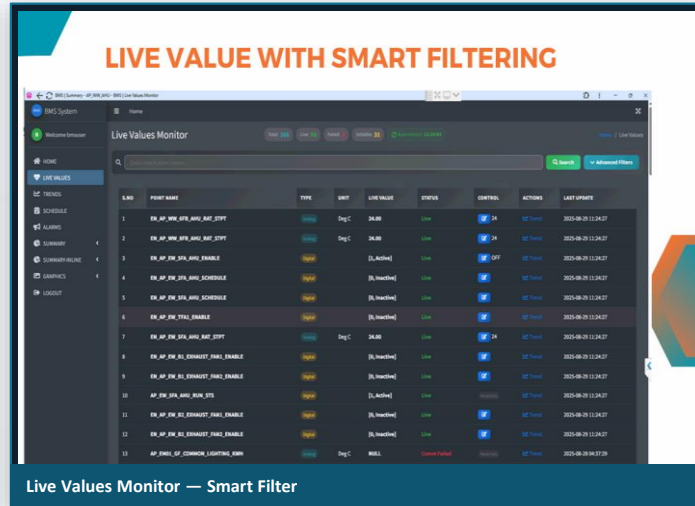
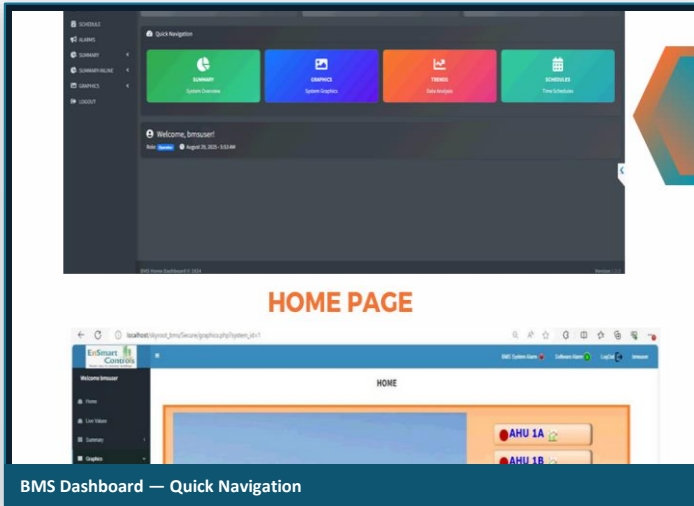
AI Analytics Deployed

First on-premises BMS AI system live at a pharma facility. Predictive maintenance, efficiency scoring, load forecasting.

2025

200+ Projects

PICS Statement prepared. BACnet/IP ASHRAE 135 native. SmartNova expanding — UAE, Singapore, Kenya.



Truly Web-Based

Any browser · LAN or VPN · No client install required

Open BACnet/IP

ASHRAE 135 · AAC Profile · Any certified device globally

21 CFR Part 11

Tamper-proof audit trail · FDA pharma native

Multi-Site Portfolio

All buildings on one login · Role-based access

Smart Alarm Mgmt

Multi-level escalation · Email + SMS · Zero missed alarms

Environmental Monitor

Temperature · Humidity · IAQ · Air quality real-time

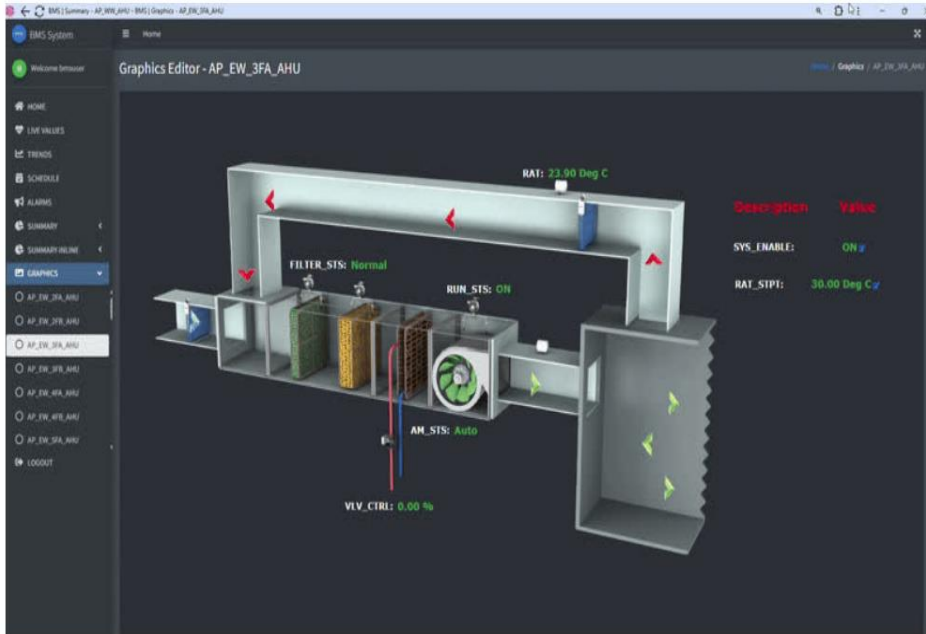
Trend & Reports

24hr · 7-day · 30-day · Custom range · Auto-generated PDF

Scheduled Operations

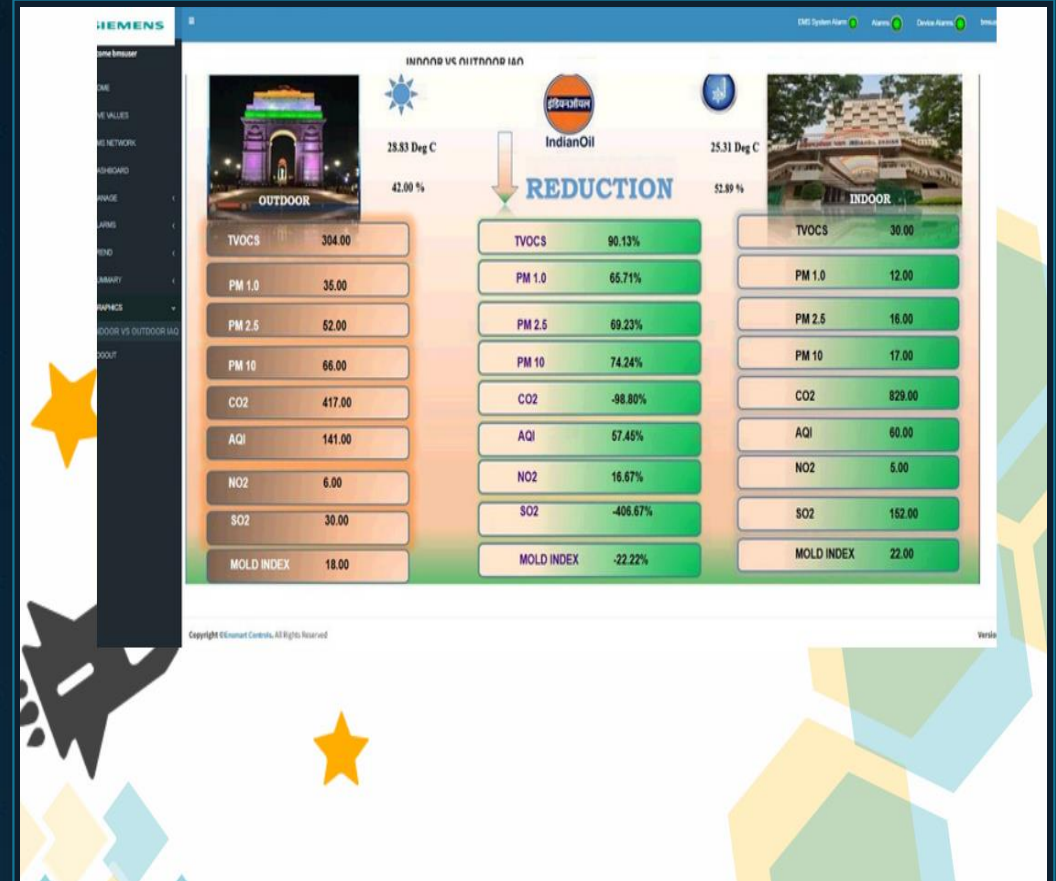
Time schedules for HVAC, lighting, equipment automation

AHU GRAPHICS



ENVIRONMENTAL MONITORING SYSTEM

AHU 3D Graphic — Live Equipment Status



Environmental Monitoring — Indoor vs Outdoor IAQ

3D AHU Graphics

Live animated equipment — filter, fan, valve, damper status overlaid

Env Monitoring

TVOCs · PM1.0 · PM2.5 · PM10 · CO₂ · AQI · NO₂ · SO₂ real-time

Site Graphics

Custom building floor plans — each system shown in context

Instant Alerts

Threshold alarms triggered when any parameter exceeds limit

DDC Controller — Made in India

Processor

ARM Cortex-A53 · 1.5GHz — high-performance embedded

Protocol

BACnet/IP Native · ASHRAE 135 / ISO 16484-5

Standard

AAC Profile · PICS Statement Available

Certifications

CE Certified · RoHS Compliant · FDA · 21 CFR Part 11

Temperature

-40°C to +60°C — tropicalized for Indian climate

Connectivity

BACnet/IP · Modbus RTU/TCP · MQTT · HTTPS API

IO Support

14 EN Series IO modules — DI · DO · AI · AO

Compliance

ISO 16484-1:2024 · INBAC Member · BEE Audit-Ready

IN Designed and manufactured in Anthiyur, Erode, Tamil Nadu

EnNode Gateway — EN-MRTU-BIP-LX

Protocol Bridge

BACnet/IP ↔ Modbus RTU/TCP — seamless translation

Connectivity

MQTT · Pulse · DLMS · HTTPS API — multi-protocol

TCP Clients

8 simultaneous TCP connections — high concurrency

Power

5–36V DC input — flexible installation anywhere

Use Cases

Legacy Modbus devices → BACnet/IP network upgrade

IO Modules

14 EN Series: EN4DI4DO · EN8DI8DO · EN16DI and more

Supported Protocols & Standards

BACnet/IP

Modbus RTU

Modbus TCP

MQTT

HTTPS/API

BACnet MSTP

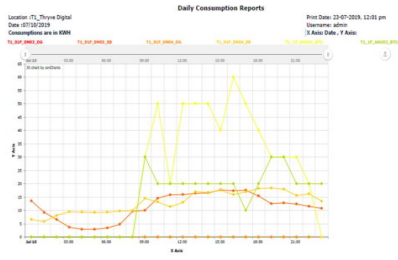
Pulse/DLMS

MySQL · PHP

Nova Energy Management System

Energy Management is the key to measuring and manage Energy efficiency and cost Management

Daily Consumption Graph Report



Daily Consumption Graph — EB · DG · BTU

Multi-Energy

EB · DG · BTU · Water · Gas · Solar — all on one dashboard

BEE Audit-Ready

LEED v4 · GRIHA · ECBC 2017 · ISO 50001 — one click

ENERGY CONSUMPTION REPORT

Shell India Markets Private Limited
RMZ Eco World Rd, Adarsh Palus Retreat,
Bellelaur, Bengaluru,
Karnataka 560103

FROM: 2023-12-01 09:00
TO: 2023-12-01 23:00

4AB_AIRTU

Energy Meter	Meter Type	Initial reading(A)	Final reading(B)	EB Consumption(C-A)
KAR_SF_B_C_AIRTU_02	Energy	66,229.9	66,207.2	77.3
KAR_SF_C_C_AIRTU_03	Energy	2,781.9	2,901.1	119.2
KAR_SF_D_C_AIRTU_04	Energy	8,868.8	8,921.9	60.1
KAR_SF_A_C_AIRTU_01	Energy	60,153.4	60,670.9	87.4
KAR_SF_B_B_AIRTU_02	Energy	91,021.6	91,073.6	54.0
KAR_SF_C_C_AIRTU_03	Energy	7,460.5	7,466.6	96.1
KAR_SF_D_C_AIRTU_04	Energy	16,602.6	16,602.6	0.3
KAR_SF_A_A_AIRTU_01	Energy	32,011.9	32,042.3	30.3
KAR_SF_B_B_AIRTU_02	Energy	5,940.6	6,022.3	59.7
KAR_SF_C_C_AIRTU_03	Energy	61,846.7	61,848.4	79.7
KAR_SF_D_C_AIRTU_04	Energy	61,337.0	61,423.1	86.1
KAR_SF_A_A_AIRTU_01	Energy	16,887.5	16,707.0	38.5
KAR_SF_B_B_AIRTU_02	Energy	69,880.5	69,999.8	100.3
KAR_SF_C_C_AIRTU_03	Energy	89,306.3	89,426.0	119.7
KAR_SF_D_C_AIRTU_04	Energy	60,309.3	60,433.5	93.2
KAR_SF_A_A_AIRTU_01	Energy	32,771.6	32,864.1	88.5
Total Consumption				1,194.76

Shell India — Per-Floor Consumption Report

20–35% Savings

Sub-metering, peak shifting and load management

Auto Reports

Daily/monthly/yearly auto-emailed — zero manual work

⚡ Electricity 🛢 Diesel DG 🌡 BTU 💧 Water 🔥 Gas ☀ Solar

Nova Tenant Billing System

Sub-Metering

Per-floor, per-zone, per-tenant — every kWh fully attributed

Zero Disputes

Automated calculations — no manual spreadsheet errors ever

Multi-Tariff

Domestic, commercial and industrial tariff structures built in

Auto PDF Delivery

Reports emailed to tenants on schedule — zero manual effort

GHG Scope 1 & 2

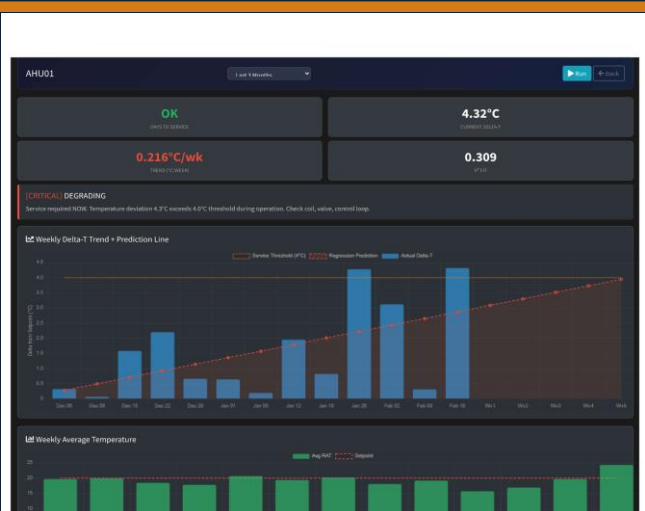
Carbon footprint per tenant — LEED v4 green building ready

5-Year Archive

All historical billing data stored — always retrievable

Deployed: TCS · Infosys · Tidel Park · Brigade · Shell India · GHCL · Technopark

All AI runs on-premises inside your facility. No cloud. No data leaving the building. Pharma-safe. Live at Bafna Ph2 — 37 AHU systems.



Predictive Maintenance

- [CRITICAL] DEGRADING alert with 24–72 hour prediction window
- Delta-T trend · 0.216°C/week degradation detected
- Service required BEFORE occupants feel it
- Avoids emergency calls and equipment damage
- ₹1,00,000 per service event avoided



HVAC Efficiency Scoring

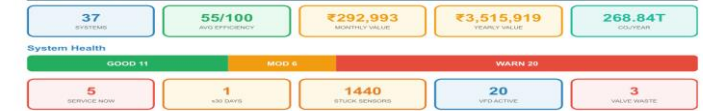
- 0–100 score per AHU — 57/100 example shown
- Setpoint adherence · Temperature stability · Comfort band
- Sensor health monitoring — 100% sensor check
- Prioritise maintenance with data — not guesswork
- Improves efficiency 10–20 points per corrective action

Live ROI — Bafna Ph2 Pharma

BMS AI Analytics — ROI Business Case

Bafna Ph2 | 37 systems | Generated: 25 Feb 2025

1. Executive Summary



Executive Summary — AI ROI Report · 25 Feb 2026

₹35.2L

Annual Energy Value Identified

56.6%

VFD Energy Reduction

268.84T

CO₂ Avoided Per Year

5,433

Anomalies Auto-Detected









24–72h

Fault Prediction

37

AHU Systems Monitored

Equivalent to 12,802 trees planted

Hardware	Compliance	Green Building	Sectors We Serve	
CE Certified	FDA Registered	LEED v4 Ready	 IT Parks & SEZs TCS · Infosys · Tidel Park	 Commercial Brigade · DLF · CBRE · Prestige
RoHS Compliant	21 CFR Part 11	GRIHA Reporting	 Pharma / 21 CFR Aurobindo · Natco · Aspiro · J&J	 Healthcare Hospitals · Diagnostic labs
ISO 16484-1:2024	GxP Validated	ISO 50001 Ready	 Industrial Tata Chemicals · GHCL · Voltas	 Retail & Malls R-City · Brigade Malls
ASHRAE 135 / ISO 16484-5	INBAC Member	GHG Scope 1 & 2	 Hotels Star hotels · Corporate chains	 Data Centres Critical infrastructure
AAC Profile Capability	BEE Audit-Ready	BEE Star Data		
PICS Statement Available	ECBC 2017 Aligned	ECBC 2017 Aligned		

IT Parks & SEZs

TCS

Infosys

Tidel Park CBE

Tidel Park Chennai

Tidel Park Pattabiram

Acropolis

Technopark TVM

Commercial & Real Estate

Brigade

DLF

CBRE

Prestige

Bafna

R-City

Umiya

Pharma & Healthcare

Aurobindo Pharma

Natco Pharma

OneSource

Aspiro

Laurus Labs

J&J

NATCO

Industrial

Tata Chemicals

Tata Electronics

GHCL Textiles

Voltas

Shell India

ATPC

Infrastructure Partners

Honeywell

Siemens

Trane

Carrier

Chubb (API)

L&T Metro

GAR

Let's Build Something Smarter Together.

200+ buildings · AI-enabled · Open BACnet/IP · Made in India

Request a Live Demo

See SmartNova BMS + AI on your building type — real data

Free Site Assessment

Submit IO list — ROI potential within 48 hours

Download Datasheet

Full specs at ensmart.ai/datasheet

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+91 70104 35068 / 9043010015

Coimbatore

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ELCO SEZ, Vilankurichi Road — 641014
+91 99410 42612

Certifications & Standards

CE / RoHS

ISO 16484-1:2024

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