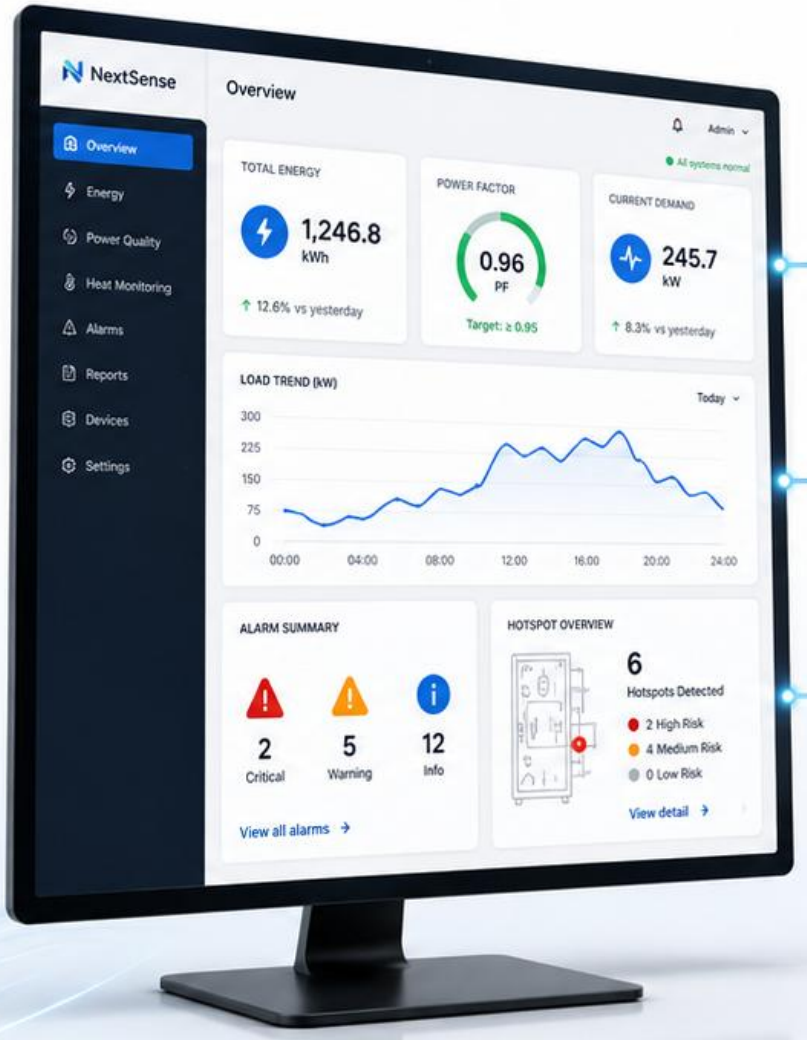
NextSense

NextSense Energy & Electrical Safety Intelligence

Monitor energy consumption, power quality, and electrical panel heat risk in one real-time dashboard.

A complete solution for energy monitoring and electrical safety.





ENERGY MONITORING

POWER QUALITY ANALYSIS

HEAT RISK DETECTION

PT Sinergi Teknologi Solusindo

SLIDE 2

Many Energy Problems Are Only Visible After the Damage Is Done

Electricity bills are increasing, but the source of waste is not clear.

Panels or machines are overloaded but not monitored in real-time.

Low power factor is only discovered after monthly evaluation.

Cables, terminals, or busbars **overheating** are not detected.

Alarms are still manual and reports are still using Excel.

Management finds it **difficult to make quick decisions** because data is scattered across different systems.

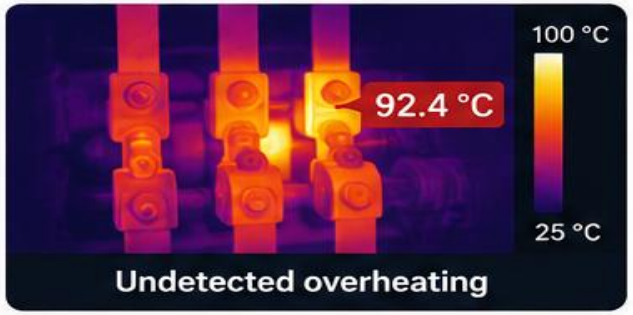


Bills keep rising


Overload not detected



Low power factor



Undetected overheating



Manual alarms


Reports in Excel

The result: Higher cost, unplanned downtime, equipment damage, and lost productivity.
All because the problems were found too late.

One Platform for Energy Monitoring & Electrical Safety

NextSense connects energy meters and temperature sensors into one real-time platform for monitoring, alerting, and reporting.

1 Field Devices



Energy Meter



Temperature Sensor

2 Gateway / Network



Gateway

- RS485 / Modbus
- Wireless
- Network

3 NextSense Cloud



NextSense Cloud

Secure, Scalable, Reliable
Real-time Data Platform

4 Dashboard / Alert / Report



Dashboard | Alerts | Reports

- Energy consumption by panel, area, machine, or production line
- Power quality: voltage, current, frequency, and power factor
- Electrical load and peak demand
- Abnormal temperature at cables, terminals, busbars, and panels
- Abnormal alarms and automated reports

Industrial Device Layer

*ADW, ADL, and ATE devices provide the **field data foundation** for energy monitoring and electrical safety.*

1 ADW Series

Multi-Circuit / Wireless Energy Meter



- Multi-point energy monitoring
- kWh, kW, current, voltage, power factor, demand
- Suitable for panels, feeders, and branch circuits

2 ADL Series

DIN Rail Energy Meter



- Compact DIN rail installation
- Energy, voltage, current, frequency, power factor
- Ideal for sub-metering and dedicated loads

3 ATE Series

Wireless Temperature Sensor



- Cable, terminal, and busbar temperature
- Early hotspot detection
- Supports electrical safety monitoring

Devices can be tailored to panel requirements, electrical capacity, and each site's architecture.

Energy Monitoring
Usage, load, and electrical parameters

Power Quality
Frequency, anomalies, and imbalance

Thermal Safety
Hotspot, connector, and panel temperature

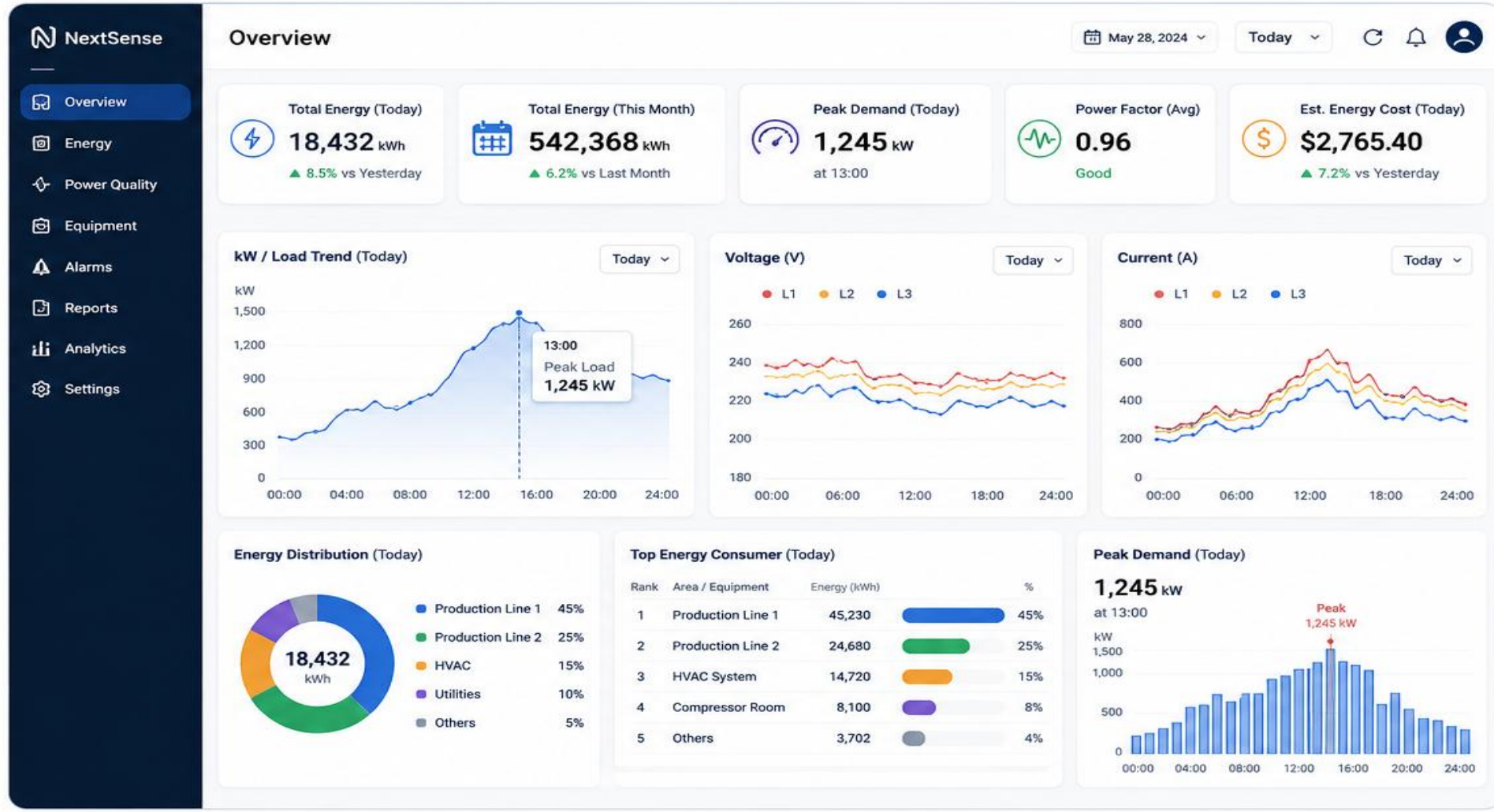
SLIDE 5

REAL-TIME ENERGY MONITORING

Gain full visibility of energy usage, power quality, and cost in real-time.

NextSense Dashboard Can Display:

- **Total kWh** — Daily, weekly, monthly
- **kW / Load Trend** — Per hour
- **Voltage & Current** — Per phase
- **Power Factor** — Real-time
- **Peak Demand** — Real-time & historical
- **Energy Distribution** — Per area / department
- **Top Energy Consumer** — By kWh consumption
- **Energy Cost Estimation** — Daily, weekly, monthly



KEY INSIGHT

Production Line 1 uses the highest energy today

45,230 kWh

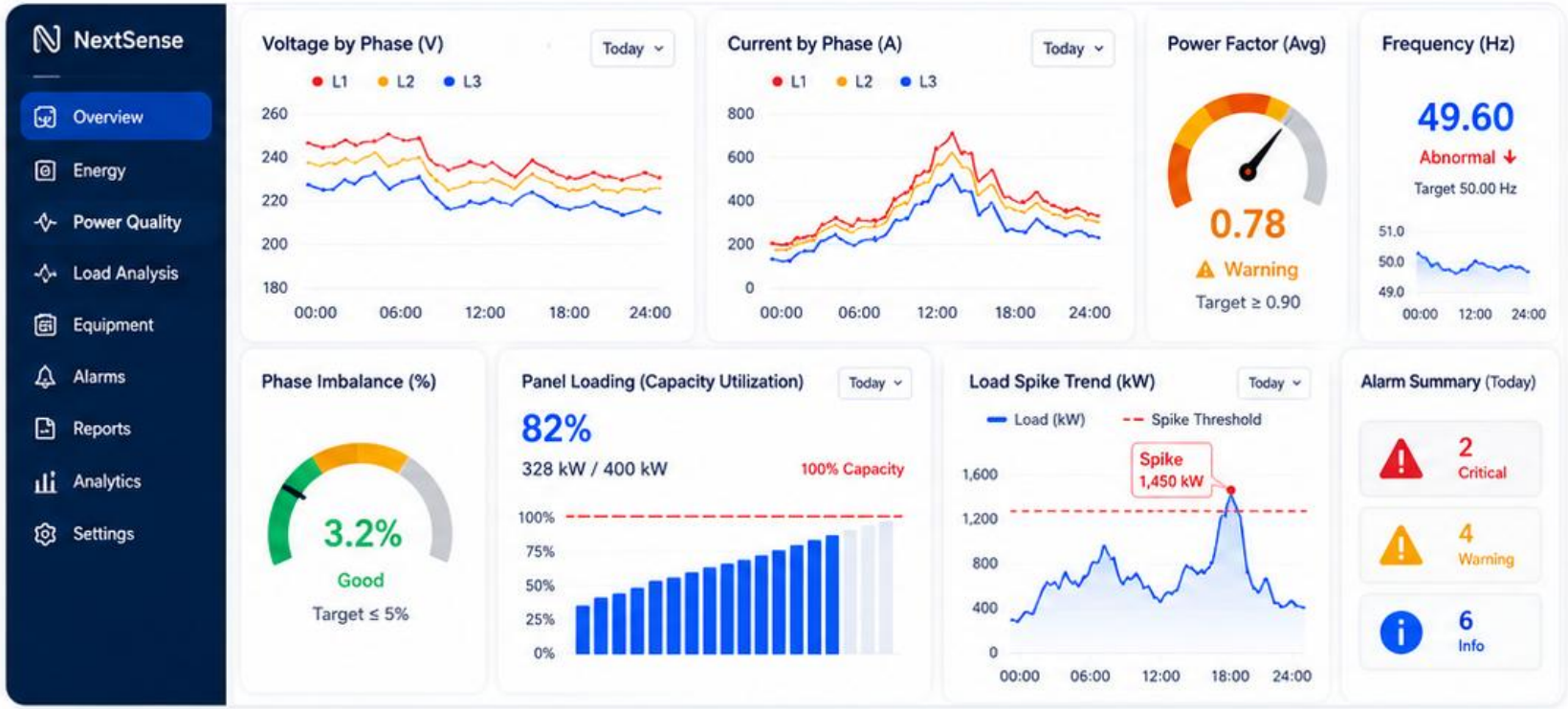
with peak load occurring at

13:00

→ Take action to optimize energy and reduce operational cost.

Power Quality & Load Analysis

Monitor power quality parameters and electrical load conditions in real time for engineering and mainenance teams.



Active Alerts

Parameter	Status	Risk
Power Factor 0.78	Warning	Risk of penalty / low efficiency
High Current	Critical	Overload risk
Voltage Drop	Warning	Machine performance disturbance
Phase Imbalance	Warning	Motor / panel overheating risk

Detect abnormal electrical conditions early

Identify issues before they impact operations.

Prevent overload and equipment stress

Monitor loads to protect assets and ensure safety.

Support engineering troubleshooting

Pinpoint root causes with real-time data.

Improve maintenance response time

Act faster, reduce downtime, and increase reliability.

Electrical Safety & Hotspot Monitoring

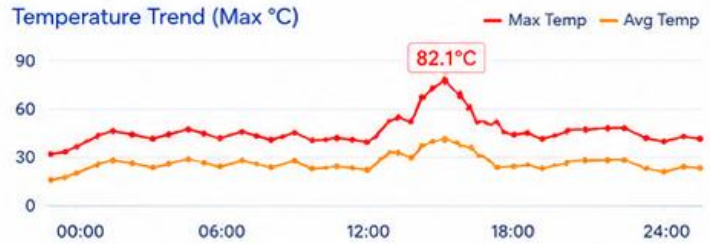
Detect heat risk in electrical panels before it causes downtime, equipment damage, or fire hazards.

Monitoring Points

- Incoming cable
- Breaker terminal
- Busbar connection
- Cable joint
- MCCB / ACB area
- Main panel & sub-panel

Hotspot Monitoring Overview

36	3	7	98%
Total Hotspot Points	Critical Alerts	Warning Alerts	Healthy Points



Thermal Status

Normal — High Risk



Detect abnormal temperature early

Identify hotspots before they escalate into critical failures.

Prevent panel overheating

Monitor critical points and keep electrical systems within safe limits.

Reduce downtime risk

Avoid unexpected breakdowns and costly production delays.

Support safer maintenance action

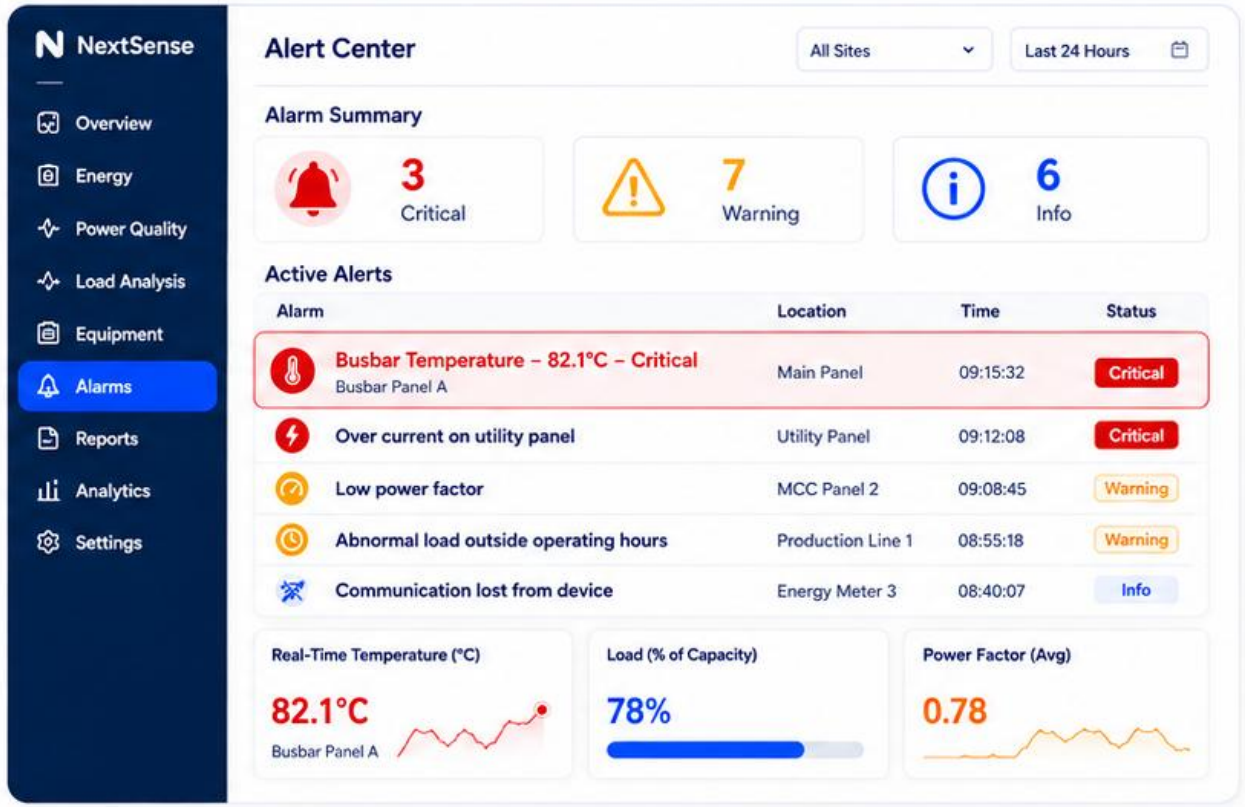
Enable data-driven inspections and proactive maintenance.

Real-Time Alarms & Action Recommendations

NextSense not only displays data, but also provides real-time alarms and practical recommendations for faster action.

Example Alarms

- High temperature on busbar — Critical
- Over current on utility panel — Critical
- Low power factor — Warning
- Abnormal load outside operating hours — Warning
- Communication lost from device — Info
- Peak demand approaching limit — Info



Action Recommendation

Busbar Temperature – 82.1°C – Critical

Busbar temperature has reached 82.1°C. Recommended actions: check connection tightness, terminal condition, load distribution, and the panel inspection schedule.

Immediate Attention

- Check connection tightness
- Inspect terminal condition
- Review load distribution
- Schedule panel inspection

Faster response time

Get notified instantly and act before small issues escalate.

Better maintenance prioritization

Focus on what matters most with smart alarm classification.

Reduced downtime risk

Address issues early to avoid unplanned outages.

Data-driven corrective action

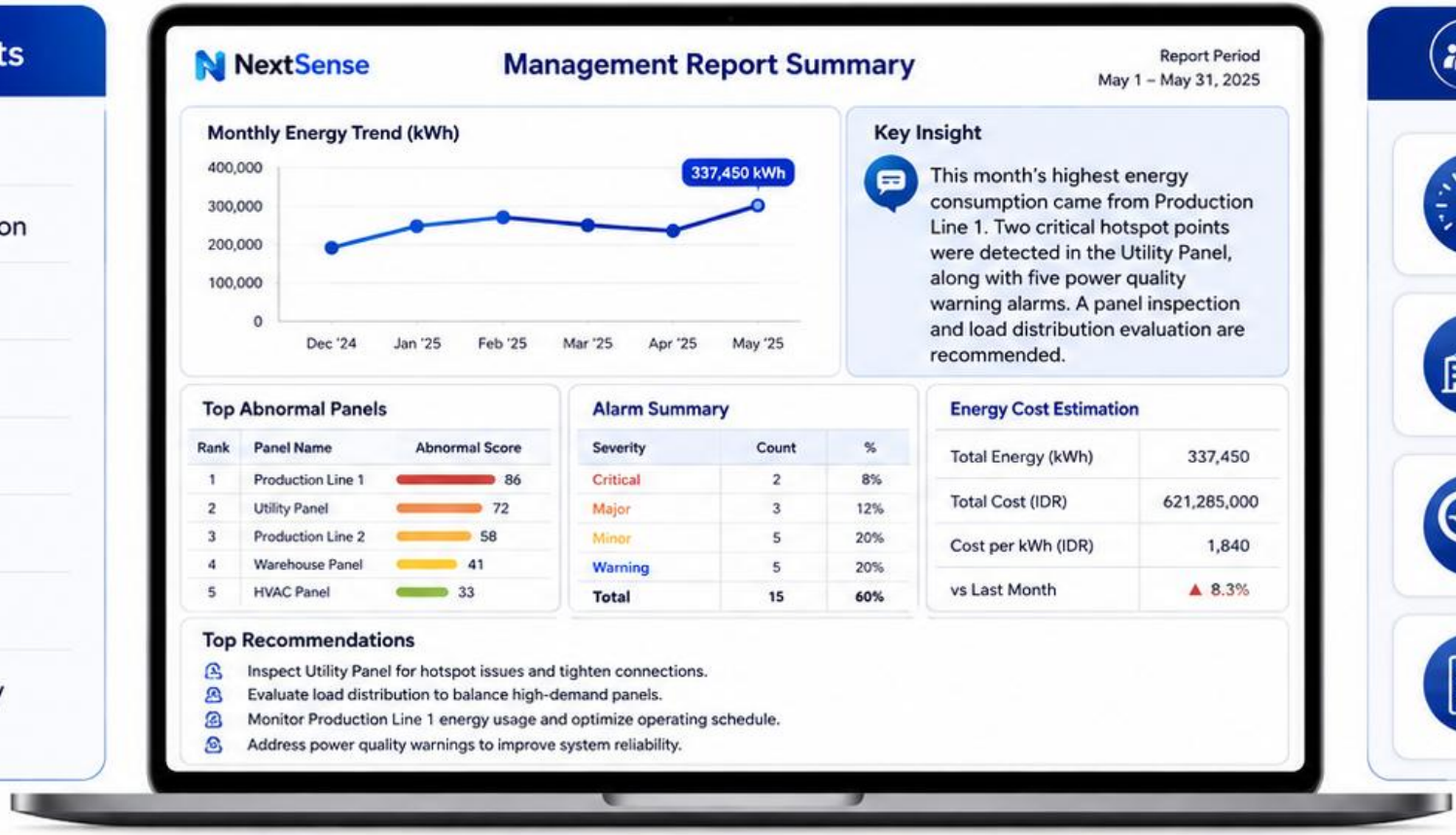
Make informed decisions based on real-time insights and trends.

Automated Reports for Faster Management Decisions

Turn operational data into structured reports for management review, action planning, and continuous improvement.

Generated Reports

- Daily Energy Report
- Monthly Energy Consumption
- Energy Cost Estimation
- Power Quality Report
- Electrical Safety Report
- Alarm Summary
- Top Abnormal Panels
- Recommendation Summary



Management Value

- Faster review and decision making
- Consistent reporting across sites
- Better visibility of abnormal conditions
- Actionable recommendations for follow-up

- Executive-ready reporting
- Reduced manual recap work
- Better cross-team alignment
- Data-driven management action

SLIDE 10

Suitable for Various Industries

NextSense helps industries monitor energy, power quality, and electrical safety in real-time.

INDUSTRY		USE CASE
MANUFACTURING		**Monitor energy by production line and machine panel** Track energy consumption, load, and power quality for each line to improve efficiency and reduce cost.
PALM OIL		**Monitor utility panels, boiler area, sterilizer, press, and kernel station** Monitor key palm oil mill processes to ensure energy availability and prevent downtime.
MINING		**Monitor workshop, crusher, conveyor, and utility panel** Track load and power quality on heavy equipment to maintain operational productivity.
BUILDING		**Monitor tenant, chiller, pump, lift, and main panel** Track energy consumption by tenant and critical systems to improve building efficiency and comfort.
MARINE		**Monitor vessel electrical panels, auxiliary systems, and utility load** Ensure the vessel's electrical system operates optimally, safely, and efficiently during and comfort.
DATA CENTER		**Monitor load, power quality, panel temperature, and alarms** Maintain system reliability and data center uptime with real-time monitoring and smart alarms.

One Solution. Many Industries.

NextSense adapts to your environment and delivers actionable insights for better efficiency, safety, and lower operating cost.

SLIDE 11

BUSINESS IMPACT

NextSense delivers measurable value for your operations, maintenance, and management.

Identify Energy Waste

Know where and how energy is used so you can reduce unnecessary consumption and cost.

Reduce Downtime Risk

Monitor electrical conditions in real-time to prevent failures and unexpected downtime.

Detect Panel Overheating Early

Temperature monitoring helps you find potential hotspots before they become critical.

Support Engineering Team

Provide accurate data and insights to take preventive actions and improve system reliability.



Reduce Manual Reporting

Automated reports save time for your team and ensure data accuracy and consistency.

Real-Time Visibility for Management

Management can see real-time performance, KPI, and alarms anytime, anywhere.

Foundation for Energy Efficiency & Electrical Safety

Use data as a strong foundation for energy efficiency programs and electrical safety improvement.

NextSense helps companies see energy not just as a cost, but as operational data that can be controlled, analyzed, and optimized.

- **Lower Energy Cost** through better monitoring and efficiency
- **Improve Reliability** and reduce the risk of downtime
- **Increase Safety** by preventing electrical hazards and overheating
- **Improve Productivity** with stable operations and faster decision-making
- **Data-Driven Decision** for continuous improvement and long-term savings

SLIDE 12

IMPLEMENTATION APPROACH

A structured and proven approach to deliver success from start to finish.

1 ASSESSMENT



- Survey electrical panels
- Identify monitoring areas
- Define data requirements
- Determine sensor points

2 DEVICE INSTALLATION



- Install ADW / ADL / ATE based on panel needs
- Connect current transformers (CT)
- Install temperature sensors at critical points

3 DATA INTEGRATION



- Connect devices to gateway
- Secure data transmission
- Send data to NextSense server
- Ensure data accuracy and availability

4 DASHBOARD CONFIGURATION



- Setup areas, panels, and device mapping
- Configure threshold and alarm rules
- Set user roles and access rights
- Customize widgets and reports

5 TESTING & TRAINING



- Test real-time data and alarm
- Validate reports and notifications
- Train users (operation & maintenance team)
- Ensure system ready for production

6 GO LIVE & OPTIMIZATION



- Go live and start monitoring
- Monitor performance and system health
- Analyze data and provide insights
- Continuous improvement based on data

OUR APPROACH DELIVERS:

- Safe & Reliable Implementation
- Minimize Disruption to Operations
- Faster Time to Value
- User Adoption & Capability
- Continuous Optimization

From assessment to optimization, NextSense ensures a smooth implementation and measurable results.

NextSense

ENERGY & ELECTRICAL SAFETY INTELLIGENCE

Start Monitoring Your Energy & Electrical Safety

NextSense Energy & Electrical Safety Intelligence helps companies monitor energy consumption, power quality, and electrical panel heat risk in real time.

Let's turn operational data into safer, smarter, and more efficient decisions.

Request Demo

Schedule Site Assessment

Discuss Your Energy Monitoring Requirement



Enhance Safety
Reduce electrical fire and downtime risk

Improve Efficiency
Optimize energy use and reduce costs

Drive Performance
Real-time insights for smarter decisions

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