



# Introduction to Global Cranes & IoT Solutions

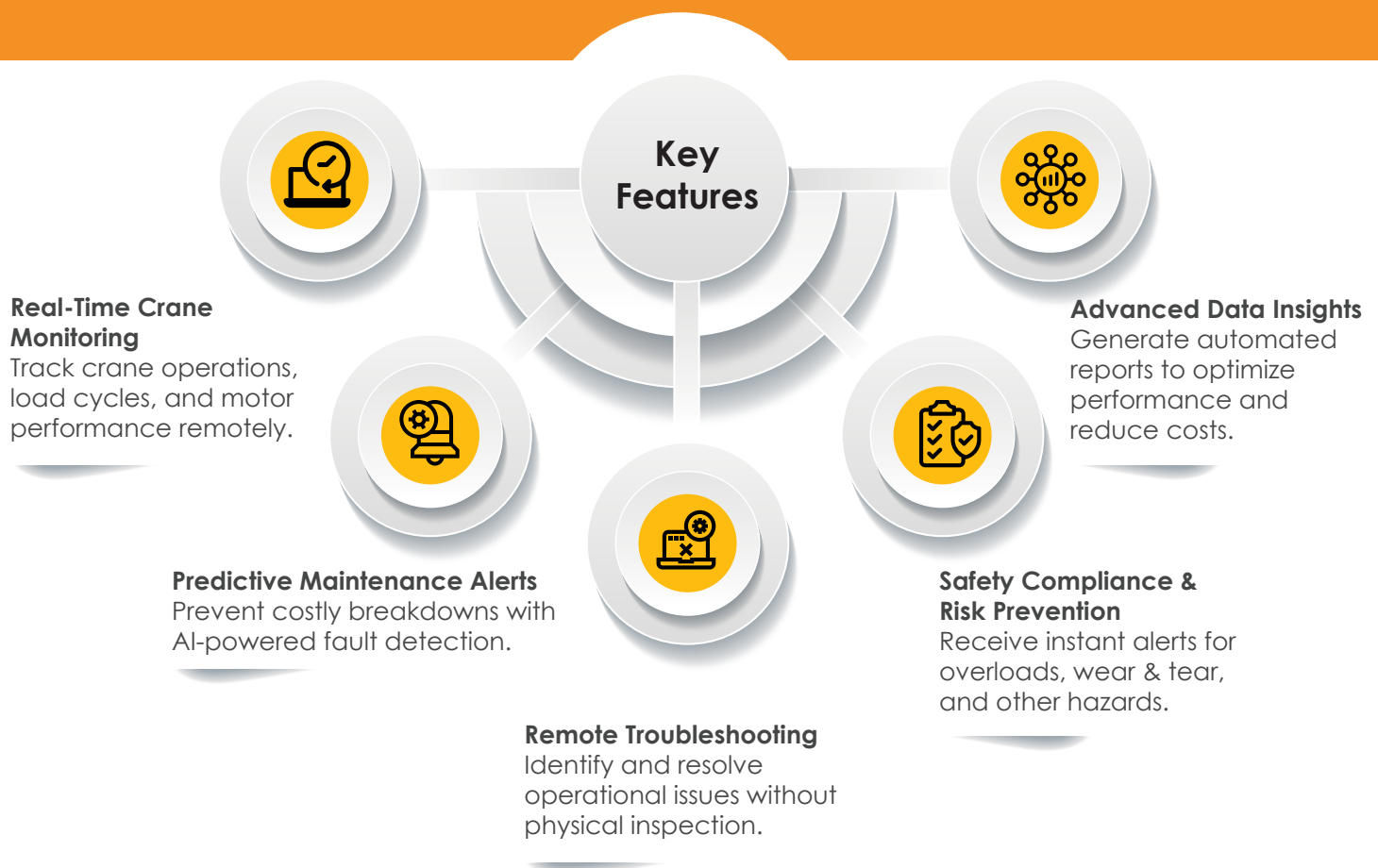
## About Global Cranes and Services

Global Cranes is a trusted name in crane manufacturing and industrial lifting solutions. With decades of experience in the industry, we specialize in delivering reliable, high-performance cranes for a wide range of industrial applications.

As industries evolve, so do their needs. Traditional crane operations often struggle with manual monitoring, unexpected breakdowns, and inefficiencies that lead to downtime and high maintenance costs. To address these challenges, Global Cranes introduces an advanced IoT-based solution that transforms the way cranes are managed, monitored, and maintained.

## What is the IoT Solution for Cranes?

The Global Cranes IoT Solution is a cloud-connected monitoring and management system that provides real-time data analytics, predictive maintenance, and remote diagnostics for industrial cranes.



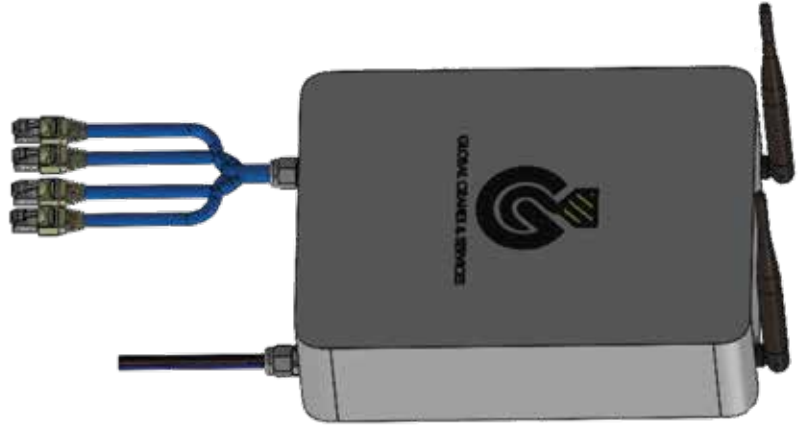
By integrating IoT technology into crane management, businesses can achieve higher efficiency, reduced downtime, and enhanced workplace safety.



# Vision & Mission

## Our Vision

To redefine industrial crane operations by integrating smart IoT solutions, ensuring seamless automation, maximum safety, and cost-efficient performance in heavy lifting environments.



## Our Mission



### Empower Industries

Provide real-time visibility into crane operations for smarter decision-making.



### Optimize Maintenance

Shift from reactive repairs to predictive maintenance, reducing downtime.



### Enhance Safety

Minimize operational risks through AI-driven safety alerts and compliance monitoring.



### Maximize Efficiency

Utilize real-time analytics to improve overall crane productivity and energy consumption.



### Sustainable Innovation

Reduce carbon footprint by optimizing energy usage in crane operations.



Our commitment is to bridge the gap between traditional crane operations and modern, data-driven industrial management.

# Industry Challenges in Crane Management

Crane operators and industrial facility managers face numerous operational and maintenance challenges that impact efficiency, safety, and costs.

## Unplanned Downtime

**Challenge:** Sudden failures lead to expensive downtime.

**IoT Solution:** Continuous monitoring detects early signs of wear & tear, preventing unexpected failures.

## High Maintenance Costs

**Challenge:** Traditional maintenance is reactive, resulting in frequent, costly repairs.

**IoT Solution:** Predictive analytics anticipate faults in advance, reducing unnecessary maintenance expenses.

## Safety & Compliance Risks

**Challenge:** Manual monitoring of overloads, structural integrity, and motor performance increases accident risks.

**IoT Solution:** Automated alerts for overload conditions, improper usage, and wear ensure compliance with safety standards.

## Inefficient Energy Consumption

**Challenge:** Inefficient crane operations lead to excessive energy waste and high operational costs.

**IoT Solution:** Data-driven insights help optimize energy consumption, reducing power costs.

## Limited Remote Access & Control

**Challenge:** Manual inspection of crane health and performance is time-consuming and labor-intensive.

**IoT Solution:** Remote diagnostics allow operators to track crane performance and resolve issues from anywhere.

These challenges emphasize the need for an intelligent, data-driven crane management solution—which is exactly what Global Cranes IoT Solution delivers.

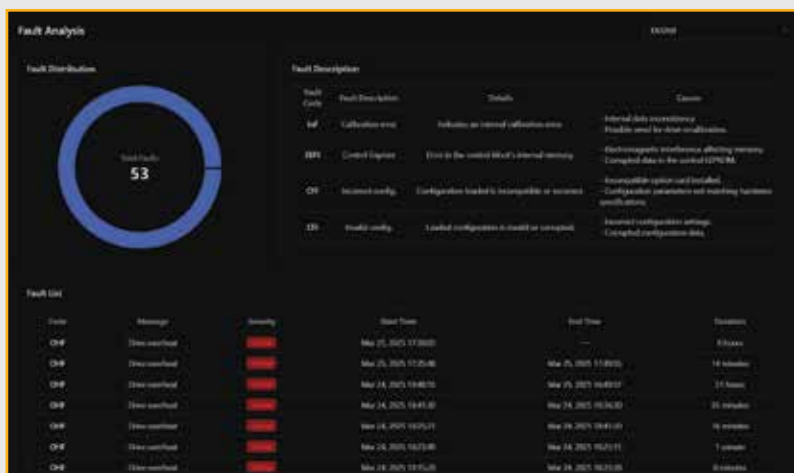
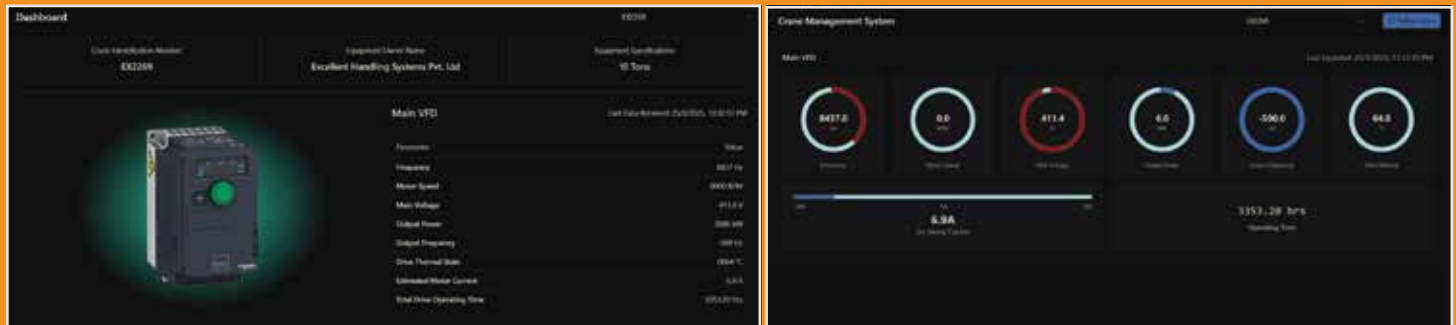


# Working of Global Cranes IoT Solution

Our IoT-powered Crane Management System is built to solve real industry problems with smart automation and real-time insights. Here's how:

## Live Performance Tracking

Monitor crane activity 24/7 – Track crane movements, motor speed, and load handling through a cloud-based dashboard.

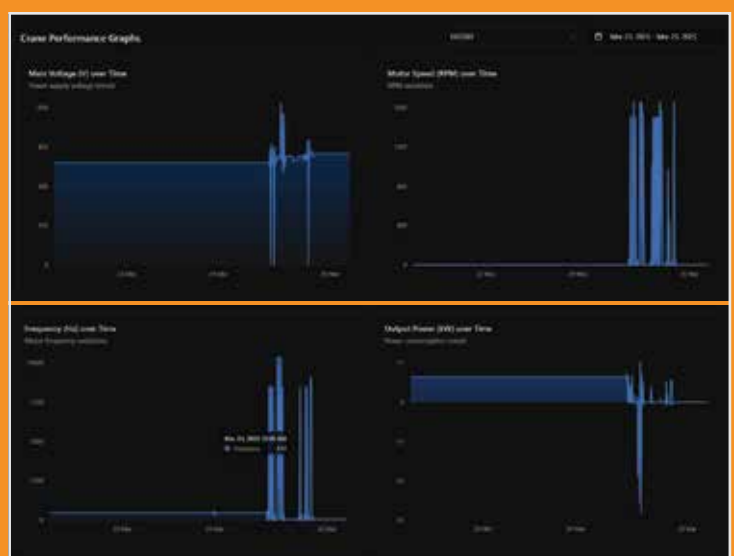
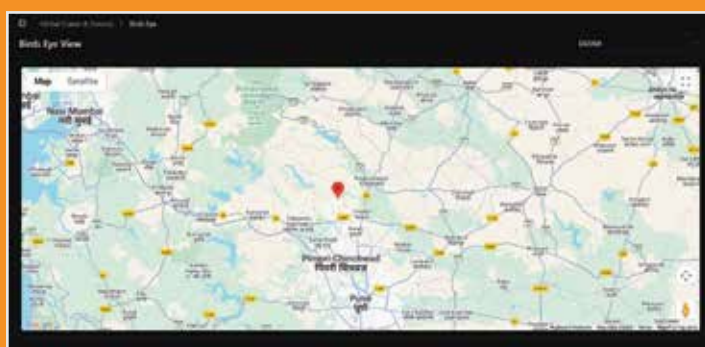


## AI-Driven Predictive Maintenance

Automated health analysis – IoT sensors detect early signs of overheating, or faulty operations, preventing costly breakdowns.

## Remote Troubleshooting & Support

Access crane diagnostics remotely – Resolve performance issues, reduce repair time, and avoid unnecessary service visits.



## Safety Alerts & Compliance Monitoring

Instant notifications for safety risks – Overload, overheating, or abnormal crane movement alerts help prevent accidents.



## Smart Data Analytics & Reporting

Detailed insights for performance optimization – Generate reports on crane usage, efficiency, and maintenance needs, allowing businesses to reduce costs and improve productivity.



## Crane Management System – Everything at a Glance

A single platform to track, analyze, and optimize crane operations.

- **Live Dashboard** – Get a clear view of crane performance in real time.
- **Location Tracking** – See where your cranes are at a glance.
- **Performance Trends** – Spot inefficiencies, reduce downtime, and boost productivity.
- **Instant Alerts** – Get notified about faults before they become problems.
- **Usage Reports** – Understand working hours and load history to plan better.

# Technical Specifications

Category	Specification
Processor	ARM Cortex-A7 Dual Core- Embedded Linux-based Edge Processor
Memory	512MB DDR3 RAM, 4GB eMMC Flash (Expandable via microSD)
Operating Voltage	9V to 36V DC input (wide range industrial power support)
Power Protection	Reverse polarity protection, surge protection, over-voltage and short-circuit protection
Connectivity	4G LTE with 2G fallback; Ethernet 10/100 Mbps; Wi-Fi 802.11 b/g/n
Serial Interfaces	RS485 (Modbus RTU supported)
Digital Inputs	Yes (Can be used based on requirements)
Digital Outputs	Yes (Can be used based on requirements)
Analog Inputs	Yes (Can be used based on requirements)
SIM Card Interface	1 x Nano SIM slot
Antenna Interfaces	1 x 4G LTE (SMA/U.FL); 1 x Wi-Fi (SMA/U.FL)
Storage Expansion	microSD Card Slot (up to 32GB)
LED Indicators	Power, Network, Communication, Status LEDs
Operating Temperature	-20Â°C to +70Â°C
Dimensions	Approx. 290 x 180 x 75 mm
Weight	~1.75 kg

## Global Cranes – Complete Crane Solutions with IoT Technology

We are your trusted partner for all types of crane services, combining expertise with smart IoT solutions for safer, more efficient operations.

### Erection & Commissioning

- Expert installation and setup for all types of cranes.
- Ensuring safety, precision, and efficiency from day one.



### Maintenance & Breakdown Assistance

- Regular servicing to keep your cranes in top shape.
- Quick response for urgent breakdowns, minimizing downtime.



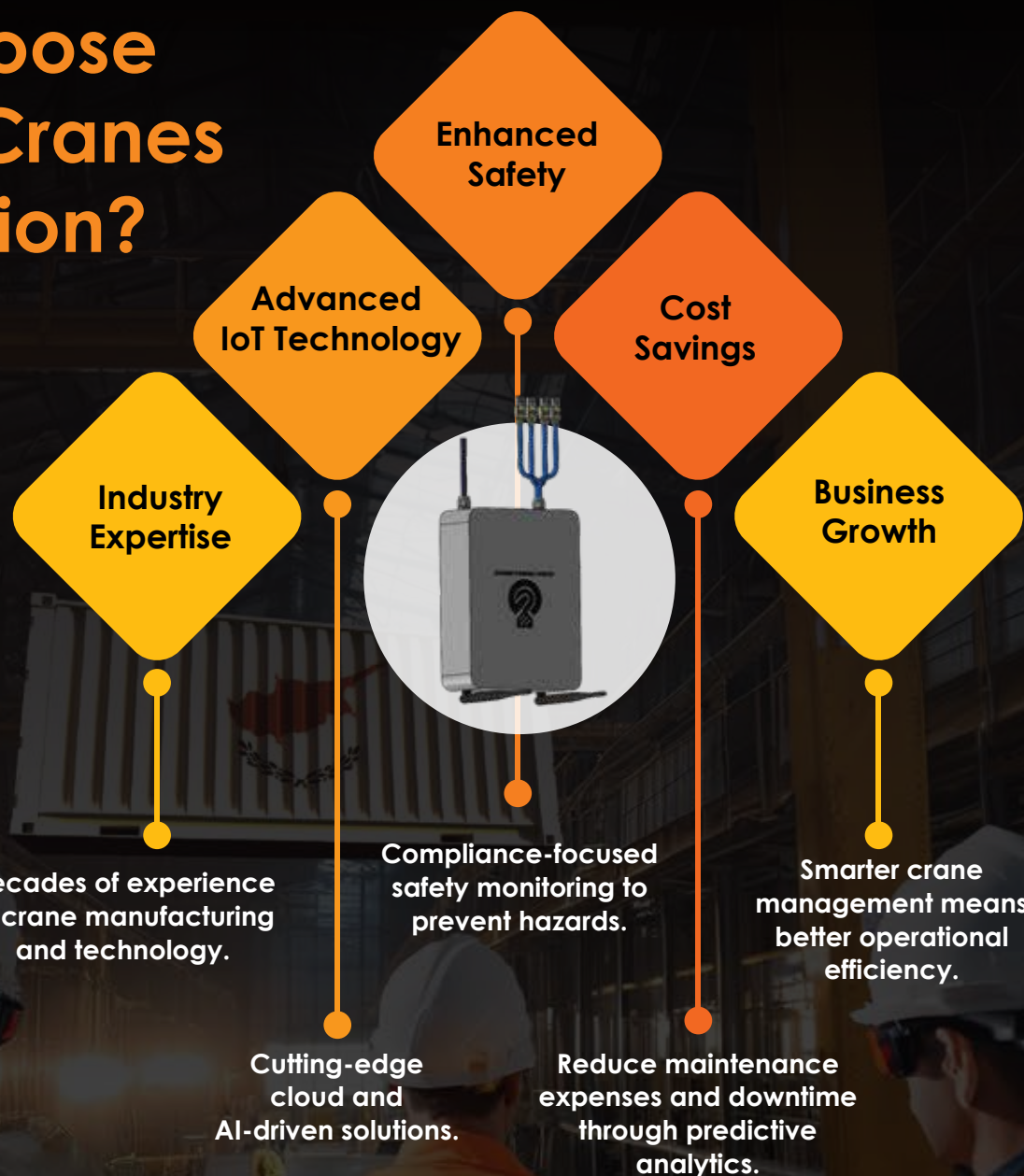
### Crane Manufacturing

- Designing and building high-performance cranes.
- Custom solutions tailored to industry needs.





# Why Choose Global Cranes IoT Solution?



With Global Cranes IoT Solution, businesses can experience safer, smarter, and more reliable crane operations, ensuring maximum uptime, efficiency, and cost savings.

**Smart Cranes. Smarter Operations.**  
**Let's build the future of crane technology together!**

**Mahesh Sutar (CEO) | Amit Jadhav (MD)**

**Head Office:** 205, A-wing, 2nd Floor,  
Jain Ganesh Vision, Akurdi, Pune  
- 411035

☎ +91 90679 07909

✉ mahesh@globalcranes.in

🌐 www.globalcranes.in

**GST : 27BILPS4165C1Z2**

**Office Address :** 324, Exiito Building  
Jahangir Pura, Surat, Gujarat 395005

**Dipan Kishorbhai Patel : +91 99241 83099**

**Office Address :** Off no 3, 1st floor, Opp SBI  
Bank, Kachanayakhalli, Bommasandra Indl  
Area, Bangalore 560099

**Manjunath : +91-9666113115**



GLOBAL CRANES & SERVICES