

# Industry

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## NAVIGATOR

SUSTAINABLE DEVELOPMENT  
STRATEGIES FOR T&D

CONFERENCE 2025

# New Possibilities with Cargolog® 3rd Gen

Real-Time Monitoring for Sustainable Transport in T&D

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## Introduction to Transport Monitoring Devices

Transport monitoring devices track and record various environmental and physical factors that can affect goods during transit. These factors include temperature, humidity, shock, vibration, pressure and angle / leaning, which can damage or deteriorate sensitive cargo if not properly monitored. By using sensors and data loggers, transport monitoring systems capture real-time data, allowing businesses to detect potential issues as they happen, such as sudden impacts or extreme temperature changes.

- *This proactive approach not only prevents damage but also supports sustainability by extending the life of critical equipment.*



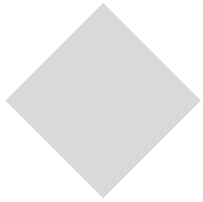
# Mobitron AB



- Made in Sweden
- Trusted since 1991
- Highly recommended
- Quality products
- World-wide supplier

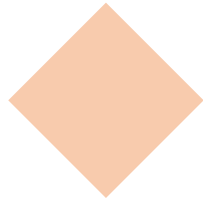


# Challenges in Transportation



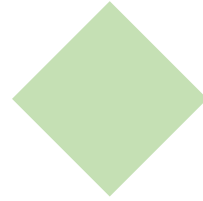
## Storms and severe weather conditions

Ships encountering violent storms can cause excessive movement or jarring of cargo, risking equipment damage.



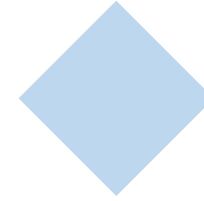
## Failure of lifting equipment

Cranes or hoists that malfunction during loading or unloading can cause sudden drops or shifts, which can severely damage sensitive components.



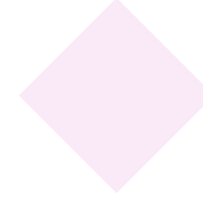
## Poor road conditions

Transporting heavy equipment on poorly maintained roads can create excessive vibrations, jolts, and misalignment, risking equipment integrity.



## Damage during railway shunting

Shunting railway wagons can cause significant shock loads, resulting in physical damage to sensitive equipment if mishandled.



## Handling issues during loading and unloading

When mishandled during loading/unloading, improperly secured cargo can slip, tip over, or damage components.





# Advanced Applications of Monitoring

## Predictive Maintenance

Advanced data analytics detect early warning signs of potential failures, enabling proactive maintenance to reduce unexpected downtime, minimize repair costs, and extend equipment lifespan.

## Integration with IoT & Cloud Solutions

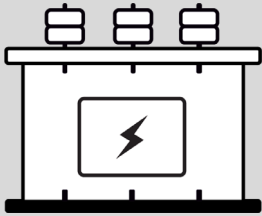
Smart monitoring systems provide seamless, real-time access to data worldwide. Real-time data enhances remote monitoring, enables instant alerts, and supports faster, data-driven decision-making.

## Data-Driven Insights

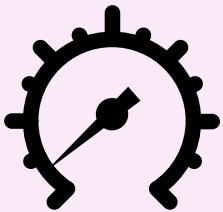
Continuous monitoring generates valuable performance trends and usage patterns. By analyzing this data, businesses can optimize operational efficiency, extend asset longevity, and implement more sustainable practices.



## Advanced Applications of Monitoring



**External mounting:** Captures vibrations, shocks, and impacts during transit  
**Internal mounting:** Monitors the core's response to external forces



By integrating pressure monitoring, operators can ensure the transformer is well-preserved during transit and storage, and quickly address any problems that could jeopardize its functionality or lifespan.



# Sustainability Benefits

By monitoring and recording critical impact and shock events, the recorder provides valuable data that helps mitigate potential issues early in the process.

**Timely Detection**

**GPS Integration**

**Proactive Error Prevention**

**Insurance Documentation**



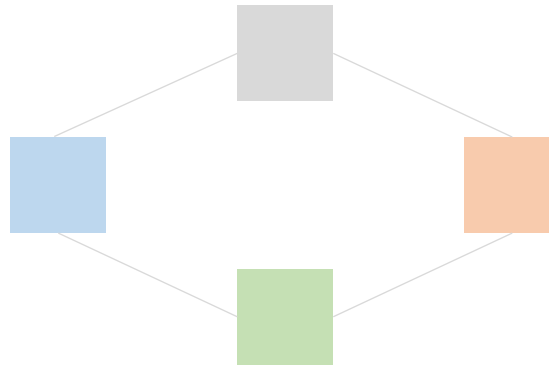


# Reducing Workforce with Real-Time Data

**Enhanced Predictive Maintenance**  
Improves operational reliability and helps anticipate maintenance needs before issues arise

## Online Data Transmission

Eliminates the need for manual data retrieval, streamlining the process



## Real-Time Analysis

Eliminates the need for manual data retrieval, streamlining the process

## Cost Reduction

Reduces workforce costs by automating data collection and analysis, improving overall efficiency



# Case Studies & Real-World Impact



**Pre-Deployment  
Planning**



**Training and Knowledge  
Sharing**



**Customization of  
Templates**



**Enhancing Documentation  
and Reporting**



**Real-Time Data  
Transmission**



**Post-Deployment  
Monitoring**



**Predictive  
Maintenance**



**Collaboration with  
Stakeholders**



# Conclusion to Transport Monitoring Devices

Reduced  
Environmental  
Impact

“To measure is to know”  
—it's the only way to ensure  
the right actions are taken  
with certainty

Enhanced  
Decision-Making

Cost  
Efficiency

Proactive  
Maintenance

Let's work together to  
enhance sustainability  
through advanced monitoring  
solutions. Reach out to  
discuss how we can support  
your efforts.

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