

CONDITION MONITORING SYSTEM for the Oil and Gas Industry

Rugged Monitoring's Condition Monitoring solutions provide critical real-time insights for the oil & gas industry, significantly improving the performance, guaranteeing safety both onshore and offshore, and maximizing the Return of Interest (ROI) by ensuring smooth performance of all assets.

OUR SOLUTION

The Oil & Gas industry functions under immense pressure, constantly aiming to balance efficiency, safety, and profitability. In this high-stakes environment, even a tiny electrical malfunction can trigger a domino effect leading to production halts, safety hazards, and substantial financial losses. Rugged Monitoring caters to the unique challenges of the oil & gas industry, offering solutions designed to withstand the harsh realities of both onshore and offshore environments, be it during exploration (upstream), transportation (midstream), or refining (downstream) stages of your operations. Rugged Monitoring's condition monitoring solutions aid in informed decision-making, mitigating these risks and ensuring smooth operation.

Our systems function by continuously monitoring key parameters of critical electrical assets like



Transformers



Switchgear



Power Cables



Rotating Machines



Circuit Breakers

Our advanced monitoring systems consisting of monitors, sensors, and our Advanced Asset Performance Management (APM) System, RM EYE, continuously monitor key parameters like temperature, vibration, pressure, current, and power consumption assisting in the early detection of any anomalies. This allows for proactive maintenance before issues escalate into catastrophic failures. With this foresight, you can schedule a targeted repair, minimize downtime, and prevent a complete system shutdown that could cripple the entire production.



RM's Condition Monitoring Systems provide valuable insights into the overall health and performance of your electrical assets.



Benefits Of Condition Monitoring Systems In Oil & Gas:

- Enhanced safety of electrical assets
- Increased equipment lifetime
- Optimized Performance
- Reduced Downtime
- Cost Saving & High ROI
- Improved decision-making through predictive maintenance.
- Optimized Operations



R501 Rack Mount Comprehensive and Customizable Asset Monitoring Solution

R501, the customizable, rack mount, comprehensive electrical asset condition monitor is designed to monitor multiple electrical assets and its parameters enables a simple and user-friendly interface. R501 provides condition monitoring of electrical assets by focusing on preventing asset failures and reduce downtime. With our comprehensive monitoring solution, the health of assets can be determined, and maintenance activities can be scheduled. The R501, our versatile rack-mounted monitor, with its customizable features allow you to monitor multiple assets simultaneously, providing a user-friendly interface and an extensive range of parameters to track. The R501 focuses on preventing asset failures and minimizing downtime, empowering you to take proactive maintenance actions.



Features of R501

- Expandable with daisy chain & Field Upgradable to add different monitoring modules.
- Highly secure, web server-based visualization and configuration software
- Simple visualization & easy to configure.
- Equipped with most accurate & advance health assessment analytics.
- Range of communication options and protocol support; ethernet redundancy (PRP)

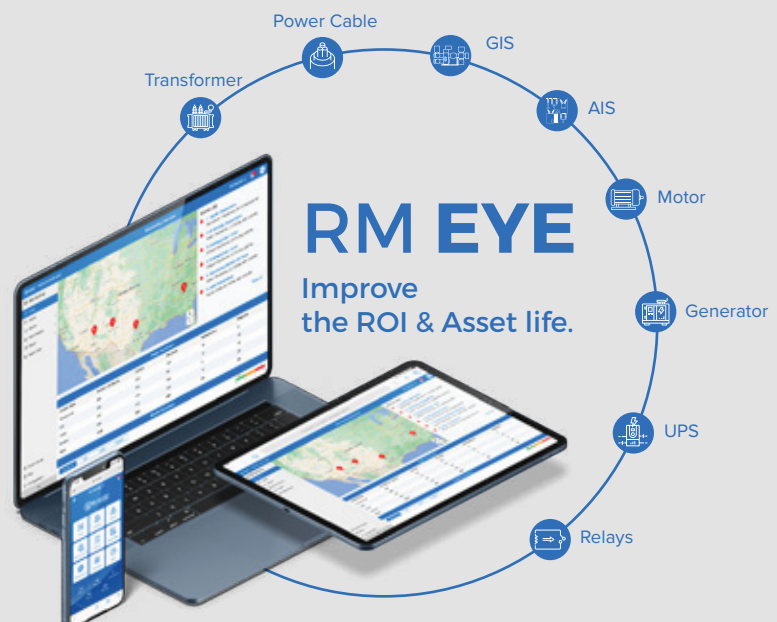
Benefits of R501

- Improved asset reliability
- Accurate predictive analysis
- Access asset data from anywhere
- One monitoring solution for multiple assets
- Increased asset lifetime
- Highest return on investment
- Field upgradable with no device downtime

RM EYE: Advanced Asset Performance Management System

We at Rugged Monitoring have developed an AI based comprehensive electrical asset condition monitoring system “RM EYE” with multiple analytical capabilities in asset condition monitoring that stands way apart in technological advancement.

RM EYE is a versatile condition monitoring solution that can offer comprehensive analysis on various electrical assets spread across multiple industries. It considers every aspect in condition monitoring of different assets like transformer, cable, GIS, AIS, motor, generator, UPS, VFD, MV panel, battery, relays, etc and users to give the best recommendation for longer and better health of the assets.



Features

- **Advanced asset health monitoring** with analysis and recommendations to increase asset effectiveness in addition to maximizing equipment uptime
- **Modern remote monitoring solutions** provide valuable insights to Multiple Assets at Multiple Sites from time to time
- **Establish a real time and consistent monitoring** by getting the right information into right hands
- **Simple and user-friendly interface** providing easy and fast access to all the features
- **Everything about the asset at one place**
The raw data, analysis and recommendations
- **Advanced asset algorithms** for electrical assets to evaluate asset health
- **Advanced reporting technology with automated alerts**
- **An efficient, reliable partial discharge monitoring for all the assets**
- **A detailed comprehensive DGA analysis**
- **Built on well-established remote and cloud-based monitoring technology**
- **Quick configuration** so that you are not required to configure separately.
- **Protocols: IEC 61850, MODBUS, MQTT**
- **Robust integration with 3rd party systems and devices** with industry standard protocols
- **Bulk configuration imports for fast deployment**
- **Encompasses a secure access to data and configuration**
- **QR code scanner on mobile devices**
- **Accessible on web browser and mobile app**
- **Historical data storage and on demand access** via export feature
- **Extended multilingual support** to handle product inquires or troubleshoot problems proactively
- **Systematic fleet management analysis**
- **Offline test data integration and analysis**

Benefits



Company

- ✓ Single monitoring solutions for multiple assets
- ✓ Avoid unscheduled outages and increase asset utilization
- ✓ Extend asset life, with proper maintenance
- ✓ Reduce insurance premium with most advanced monitoring
- ✓ 24 x 7 remote monitoring, accessible from anywhere



Manager

- ✓ Decision support system for short term and long term planning
- ✓ Company, region, substation analysis on your fingertips
- ✓ Effective management and tracking of monitoring KPIs
- ✓ Identify problem areas with interactive dashboards
- ✓ Advanced and automatic management/regulatory reports



Asset Experts

- ✓ Deep analysis of diagnosed faults with advanced analytical tools
- ✓ Complete asset data at one location
- ✓ Customise and generate automatic reports for subscribed assets
- ✓ Ready access to historical data for root cause analysis



Operators

- ✓ Quick identification of problematic assets in the network
- ✓ Get real time alarm/ alert notifications
- ✓ Realtime updates about the assets on mobile, desktop and emails
- ✓ Quick access to assets with QR code scan on handheld devices

RM EYE Enterprise APM Suite

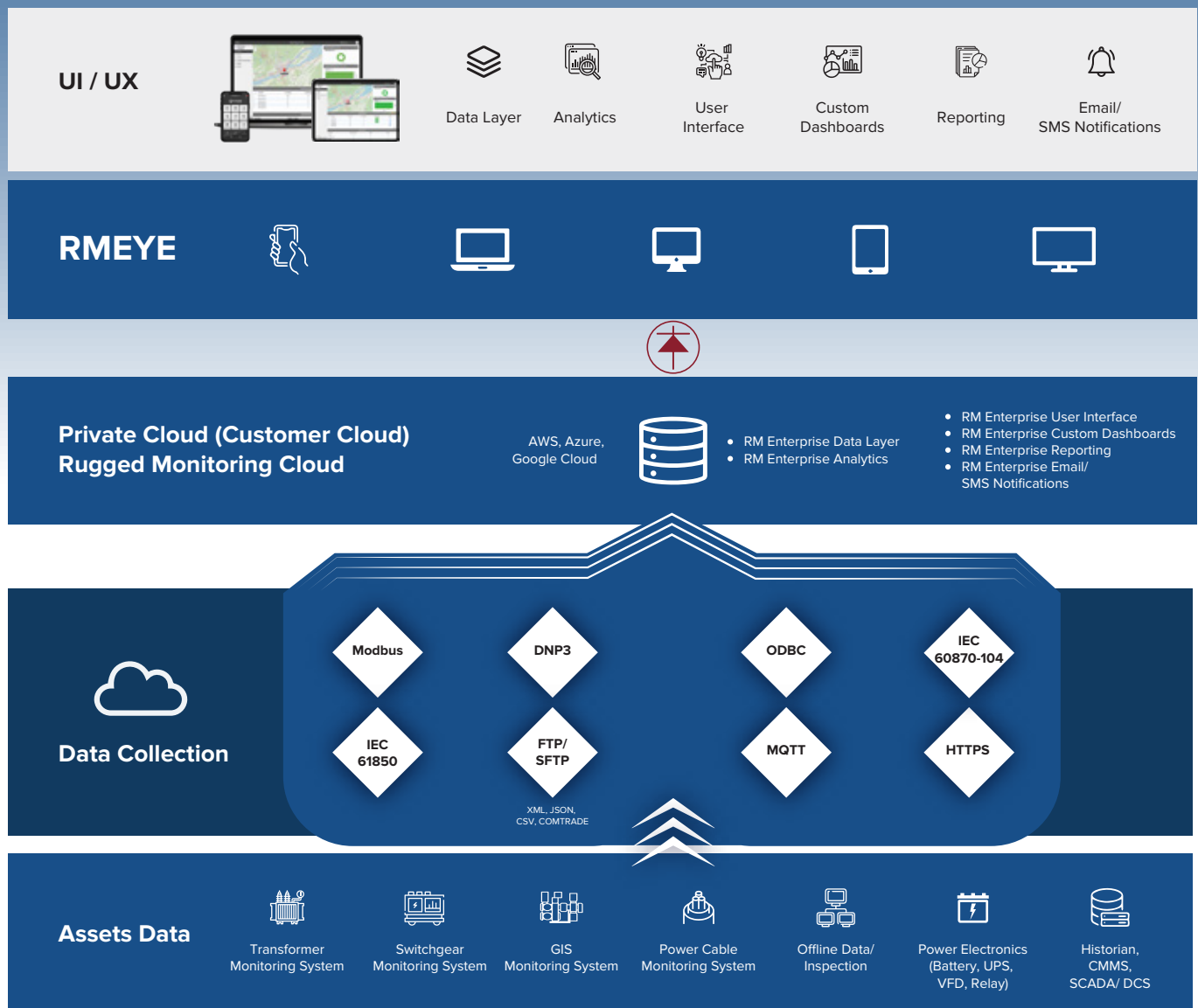
RM EYE is our advanced Asset Performance Management (APM) system designed to provide a scalable and future-ready solution for refineries undergoing digital transformation.

With AI-powered data intelligence, it offers comprehensive health indices for various assets across multiple locations. RM EYE surpasses traditional condition monitoring and facilitates a shift from reactive maintenance to predictive maintenance, maximizing asset lifespan and boosting ROI.

With its real-time remote monitoring capabilities, RM EYE equips experts, operators, SMEs, and engineers with real-time insights that support more informed, data-driven decisions. Through a combination of offline, periodic, and online assessments, it effectively lowers maintenance costs, helps avert unexpected failures, and enhances overall operational efficiency.



RM EYE' Architecture



A plan for Success

Our Customers are well satisfied with the advisory services that we offer to help them with best in class technological performance and a long durable life.



Experts only

We bring-in our diversified experienced team with over 100+ years of experience in Asset Monitoring

Why Customers Choose Us?

RM solution, the trusted monitoring solution for over 10000+ assets across 50+ countries. We are a leading High Value Electrical Asset Monitoring Company integrating fibre optic technology to the assets.



Money Matters

We protect you against currency fluctuation with competitive and fair market prices



Meeting Deadlines

Work with us, and you'll work with seasoned professionals – vigilant of deadlines, and committed to exceeding client expectations.



Our Presence **Across the Globe**



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Asia Pacific | China | India | Middle East and Africa | Europe | North America | Latin America

Certification



ISO 9001



ISO 14001



ISO 45001/
OHSAS 18000



Lloyd's
Register



ATEX
Certification



NIST
Certification

Rugged Monitoring Services

Rugged Monitoring provides customization of sensors, monitors & software. In addition we offer on-site commissioning services, maintenance contracts and technical support to all customers worldwide.

About Rugged Monitoring

Industry's leading team of asset condition monitoring experts with 100+ years of combined experience committed to delivering customizable solutions for challenging applications. We offer a range of reliable, high performance, customizable sensors and monitoring solutions that are immune to external influence.



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