RUGGED MONITORING

MONITORING

MONITORING SIMPLIFIED

Tailored products to meet the specific needs of OEMs in various industries.

Innovative solutions for monitoring and diagnosing electrical assets across industries and locations.

RM's Solution for OEM's

Condition-based monitoring (CBM) is a proactive approach to maintaining electrical assets, focusing on collecting and analyzing data to detect potential issues before they escalate into failures. This strategy is highly valued by Original Equipment Manufacturers (OEMs) for its cost-effectiveness, minimizing unnecessary inspections and maintenance.

CBM involves the installation of sensors to monitor variables like vibration and temperature in electrical equipment. Data collected from these sensors is then transmitted to a computer, application, or cloud platform for analysis. This analysis enables personnel to identify anomalies and take corrective actions promptly.

The Industrial Internet of Things (IIoT) plays a crucial role in advancing CBM by leveraging connected digital technology to optimize maintenance routines. By enhancing reliability, efficiency, and safety of electrical systems, IIoT-driven CBM aligns with the objectives of OEMs in providing high-quality, reliable equipment to their customers.

Enhance your customer offerings by teaming up with us to provide cutting-edge remote monitoring solutions for the equipment you provide. Our innovative products and services cater to various industries, facilitating the monitoring and diagnosis of electrical assets across multiple locations. Our diverse range of products is meticulously crafted to meet the specific needs of OEMs.
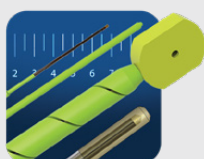
Features

- Predictive Analytics and Real time Monitoring
- Customizable Thresholds and Alarms
- Historical Data Analysis
- Scalabile and User Friendly Interface
- Compliance and Advance Reporting

Benefits

- Increased Reliability
- Minimised Downtime and Extended Lifespan
- Enhanced Customer Satisfaction
- Optimised Maintenance and Improved Safety
- Streamlined Operations and Data Driven Decision Making

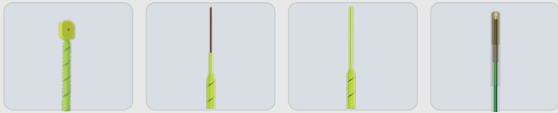## Our innovative and most advanced online/offline electrical asset monitoring solution for OEMs

Sensors

Monitors

Software

RM's **Products**

Sensors

Rugged Monitoring's high-quality sensors are designed to meet the specifications and requirements of the customers to sense the faults in electrical assets

- **FO Temperature Sensors**

- **HF Partial Discharge Sensors**

- **UHF Partial Discharge Sensors**

- **Dissolved Gas Analysis Sensor**
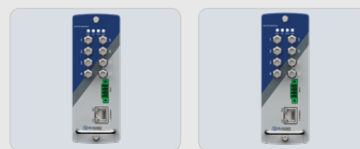

Monitors

- **Modular Monitors**

  Completely configurable rackmount monitoring solution with the option of 8 or 4 chassis

- **Online Partial Discharge Monitors**

  Specially designed high frequency and ultra-high frequency partial discharge monitors with 4 or 8 HF and UHF PD Channels

- **FO Temperature Monitors**

  Specifically designed for precise and advance online temperature monitoring devices for diversified electrical assets

- **Portable Partial Discharge Monitors**

  High Frequency and Ultra-High Frequency Portable Partial Discharge Monitor with various frequency responses
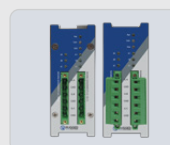

- **CBM Monitors**

  Most comprehensive and multi-functional monitors to monitor various parameters of the electrical assets


- **Bushing Monitoring**

  Operating under high voltage substation environments with greater reliability BM201 measures Power Factor/Tan δ and Capacitance from the bushing test tap adaptors
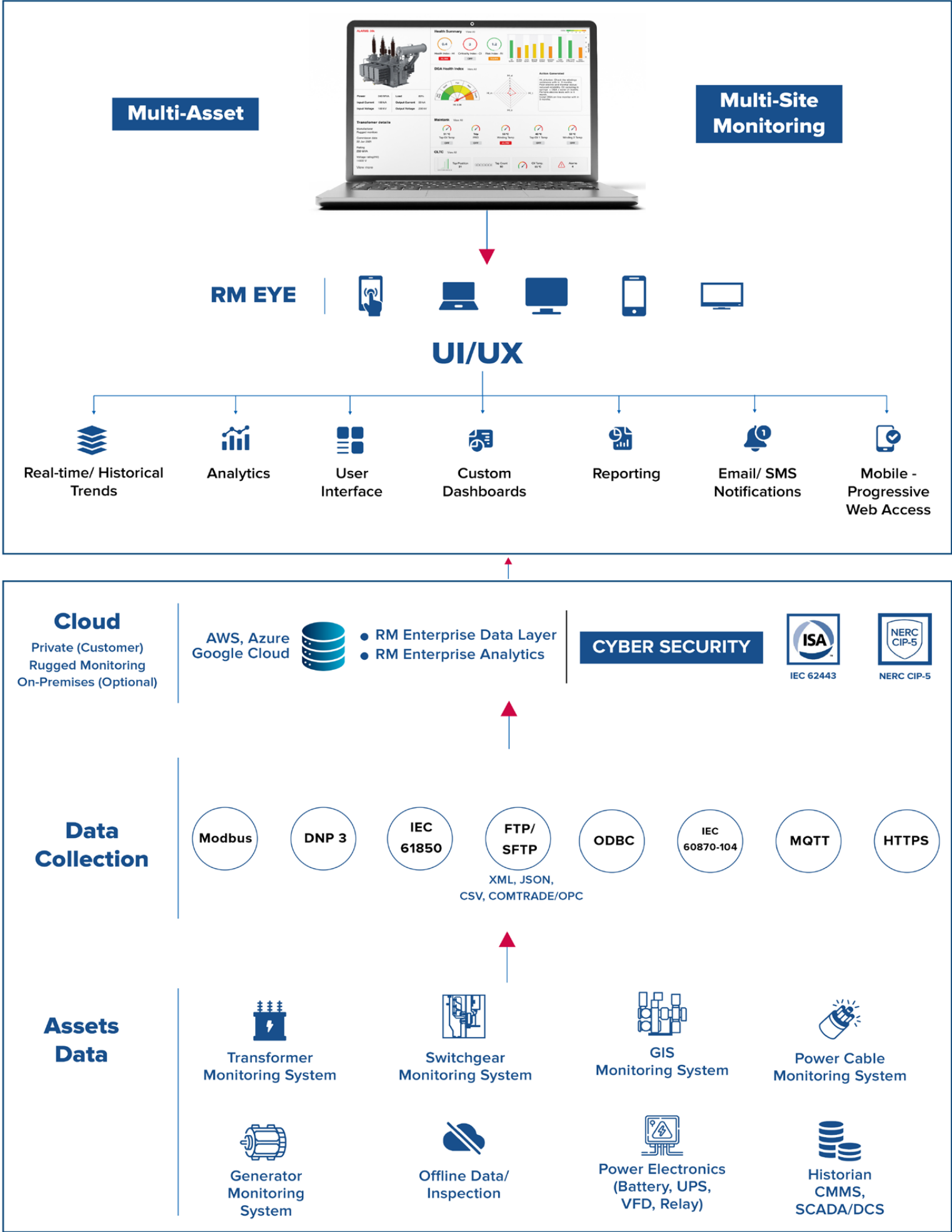

Enterprise APM Suite: RM EYE

RM EYE represents a paradigm shift in enterprise asset performance management through the condition monitoring of electrical assets. It uses an AI-driven approach to assess the health and performance of diverse assets, delivering transformative and sustainable outcomes related to their health, performance, energy efficiency, and integrity.
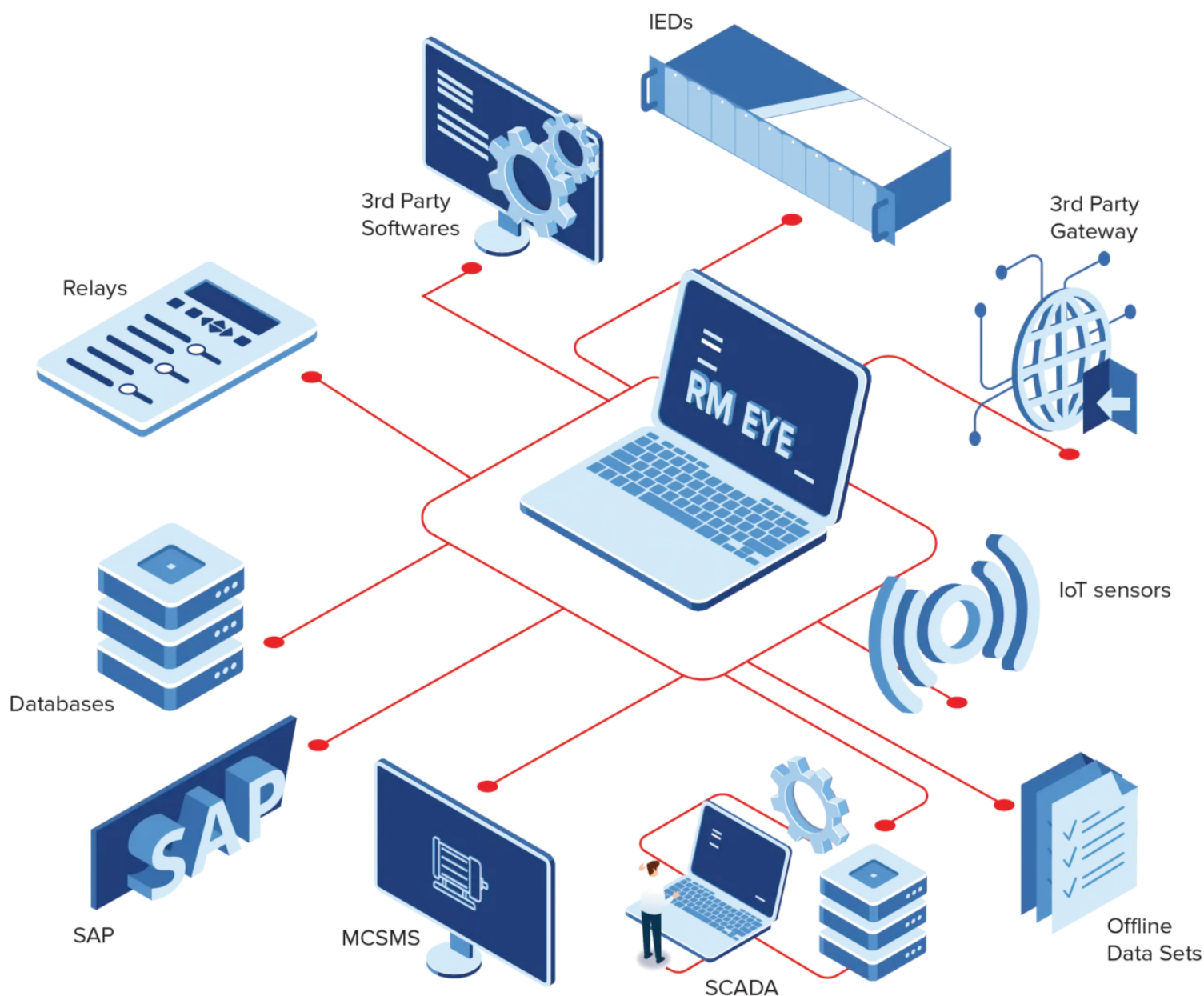
Rugged Monitoring's RM EYE transforms traditional time-based maintenance into a proactive approach, equipping businesses with real-time insights into the health of their electrical assets. By detecting potential issues early on it helps create a dependable and efficient predictive maintenance system.

RM EYE Architecture

Multi-Asset

Multi-Site Monitoring

RM EYE | UI/UX

| Real-time/ Historical Trends | Analytics | User Interface | Custom Dashboards | Reporting | Email/ SMS Notifications | Mobile - Progressive Web Access |

Cloud
Private (Customer)
Rugged Monitoring
On-Premises (Optional)

AWS, Azure Google Cloud
- RM Enterprise Data Layer
- RM Enterprise Analytics

CYBER SECURITY

ISA — IEC 62443

NERC CIP-5 — NERC CIP-5

Data Collection

Modbus | DNP 3 | IEC 61850 | FTP/ SFTP | ODBC | IEC 60870-104 | MQTT | HTTPS

XML, JSON, CSV, COMTRADE/OPC

Assets Data

Transformer Monitoring System

Switchgear Monitoring System

GIS Monitoring System

Power Cable Monitoring System

Generator Monitoring System

Offline Data/ Inspection

Power Electronics (Battery, UPS, VFD, Relay)

Historian CMMS, SCADA/DCS

One Solution for Multi-Site
Multi Asset Monitoring

RM Eye - Unified platform to monitor entire network of electrical 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**

Why Customers Choose Us ?

Expertise You can Trust

Backed by 100+ years of experience. we understand the unique demands of critical asset management across diverse industries.

Focus on Sustainability

Our Solutions are designed to help you reduce energy consumption, minimize waste, and align with your sustainability goals.

Money Matters

We offer competitive and transparent market pricing to protect you from currency fluctuations.

Customer Centric Approach

From consultation to deployment and beyond, we are committed to delivering exceptional support, personalized service, and timely project completion.