A photograph of a large industrial transformer with three prominent bushings. The transformer is silver and has a corrugated top section. The bushings are black and cylindrical. The background is a bright blue sky with white clouds. The text 'Bushing Monitoring' is overlaid in white on the transformer.

Bushing Monitoring

Cost-effective Solution for avoiding bushing failure

Bushing Monitoring Solution

Rugged Monitoring presents an advanced bushing monitoring solution that gives predictive diagnostics to help users prevent malfunctions or breakdowns in wide range of power transformer bushing equipment. Our self-operating system and remote monitoring solutions present real-time diagnosis and allow utilities to work towards solving problems rather than finding them.

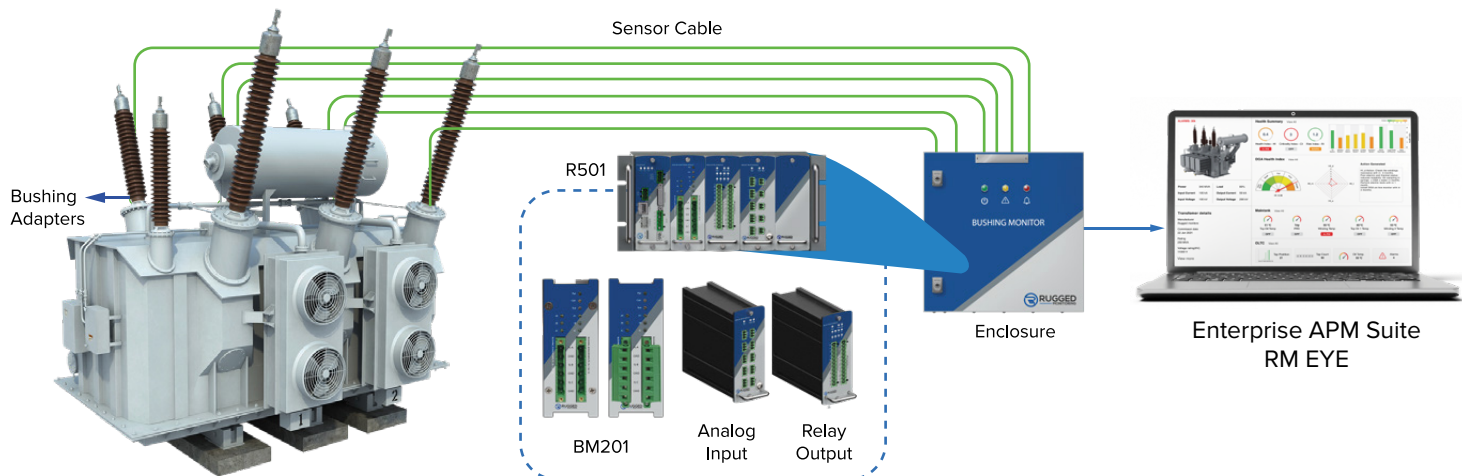
Routine maintenance, early replacement and traditional off-line testing have been used to

address difficulties in bushing failures in the past. With the recent technology asset owners can detect failures and can directly reduce their maintenance downtime and costs.

We at Rugged Monitoring are motivated to provide innovative and exceptional quality products, our vision remains focused on meeting customer requirements while anticipating and exceeding the needs of a continuously changing dynamic market.



RM's Comprehensive Bushing Monitoring Solution



Option 1: R501 Comprehensive Electrical Asset Monitoring System

R501 comprehensive Transformer Monitoring system with integrated Bushing Module can be used as complete bushing monitoring solutions. The R501 can be expanded to add monitoring of temperature, Partial discharge, OLTC, Cooling System and Relay outputs.

Option 2: BM201 as a Standalone Bushing Monitoring Module

BM201 is a standalone single Module solution for up to 6 bushings. The Din-Rail mount module connects with the bushing adapters and provides serial Modbus output using RS-485 port.

- **Grid Reliability**

Maximize the grid reliability by locating downed conductors, monitoring, and addressing unplanned grid-edge transformer load and overload.

- **Maximum Uptime**

Can notify operators of power interruptions, enabling faster location of outages, and accelerating restoration.

- **Integrated Solution**

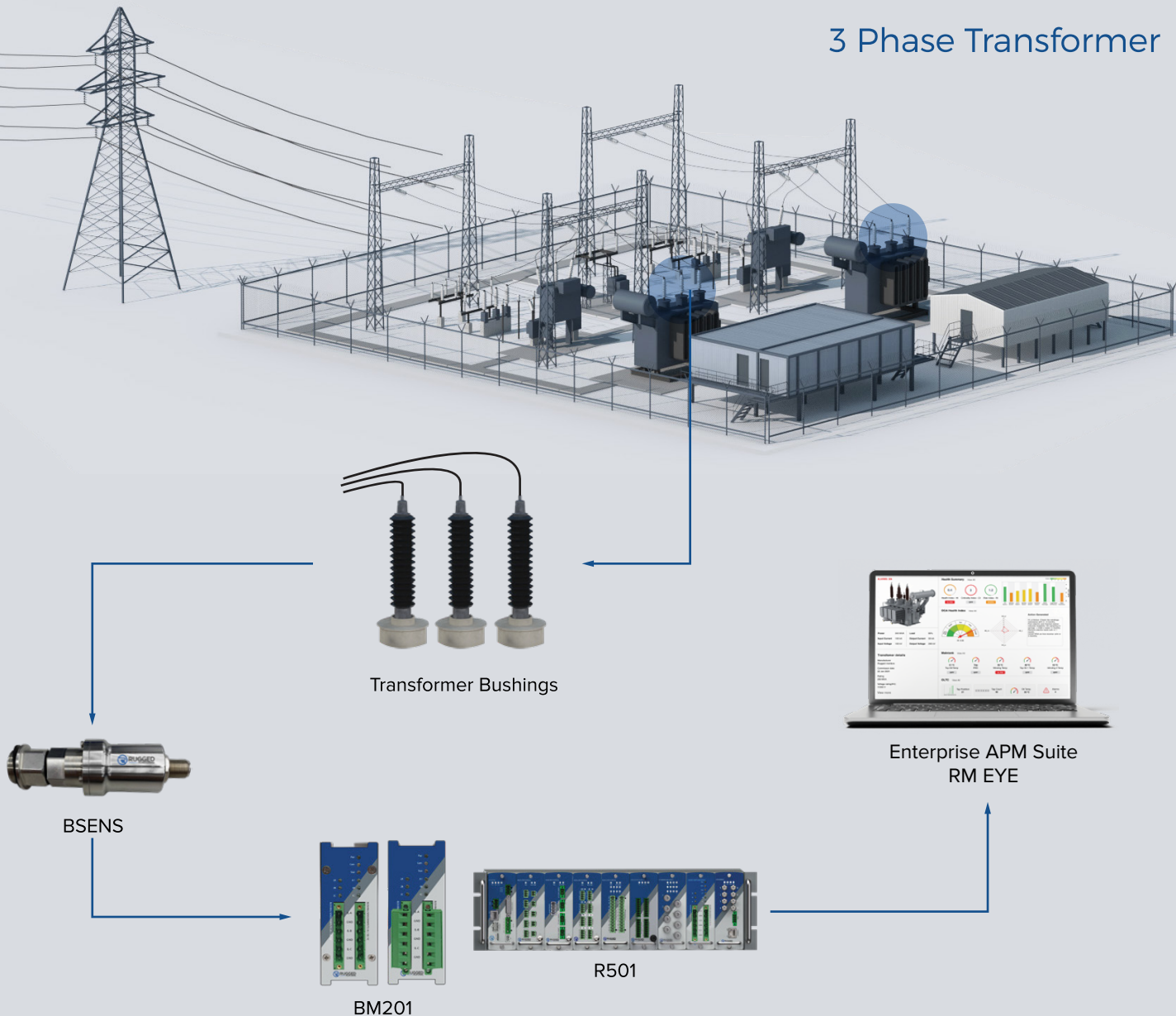
Monitors bushing conditions and detects PD activity in the main tank

- **Increased Value Proposition**

RM can offer its customers with a comprehensive bushing evaluation and monitoring package for new or retrofitting transformers

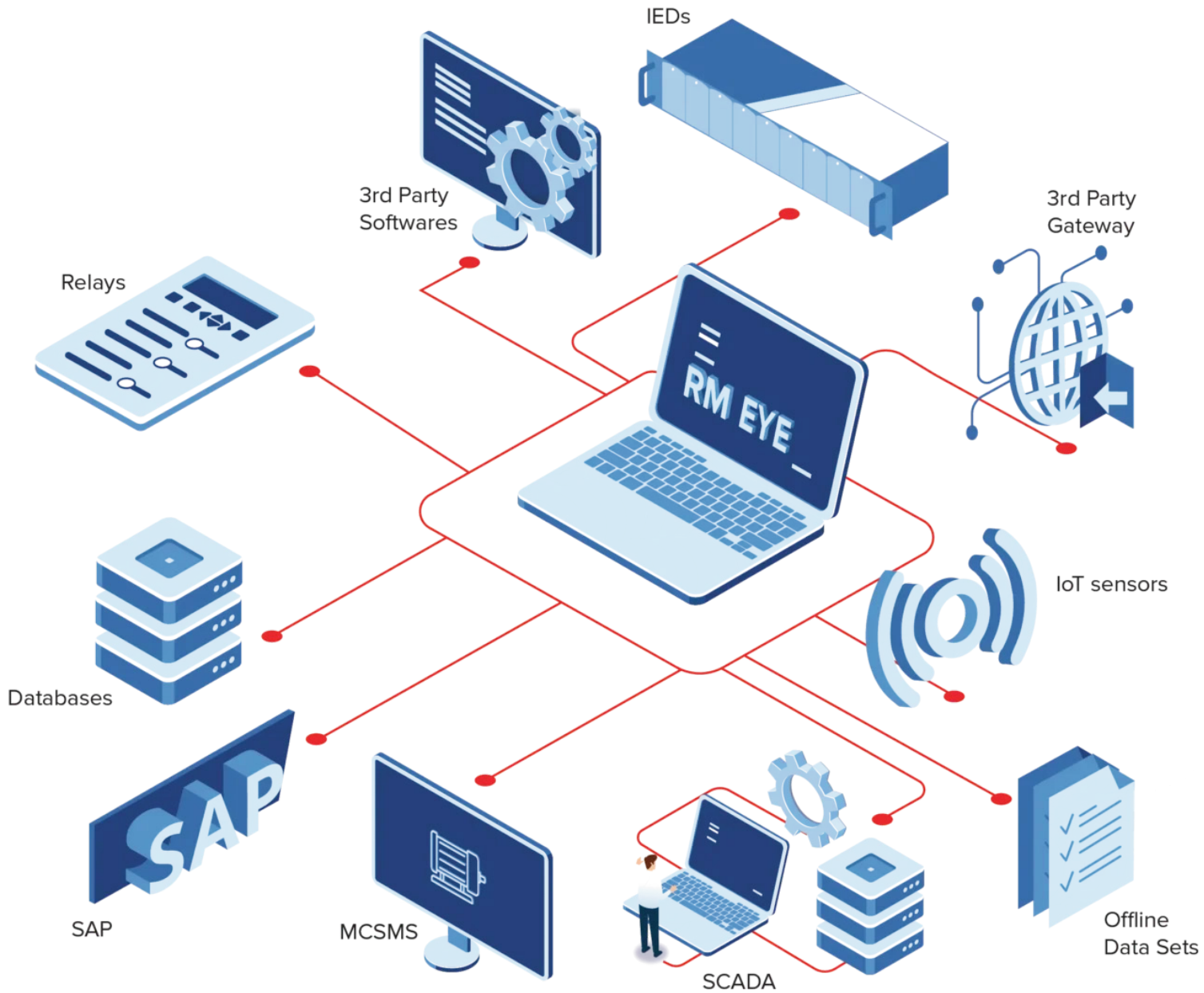
RM's Bushing Module Solution

3 Phase Transformer



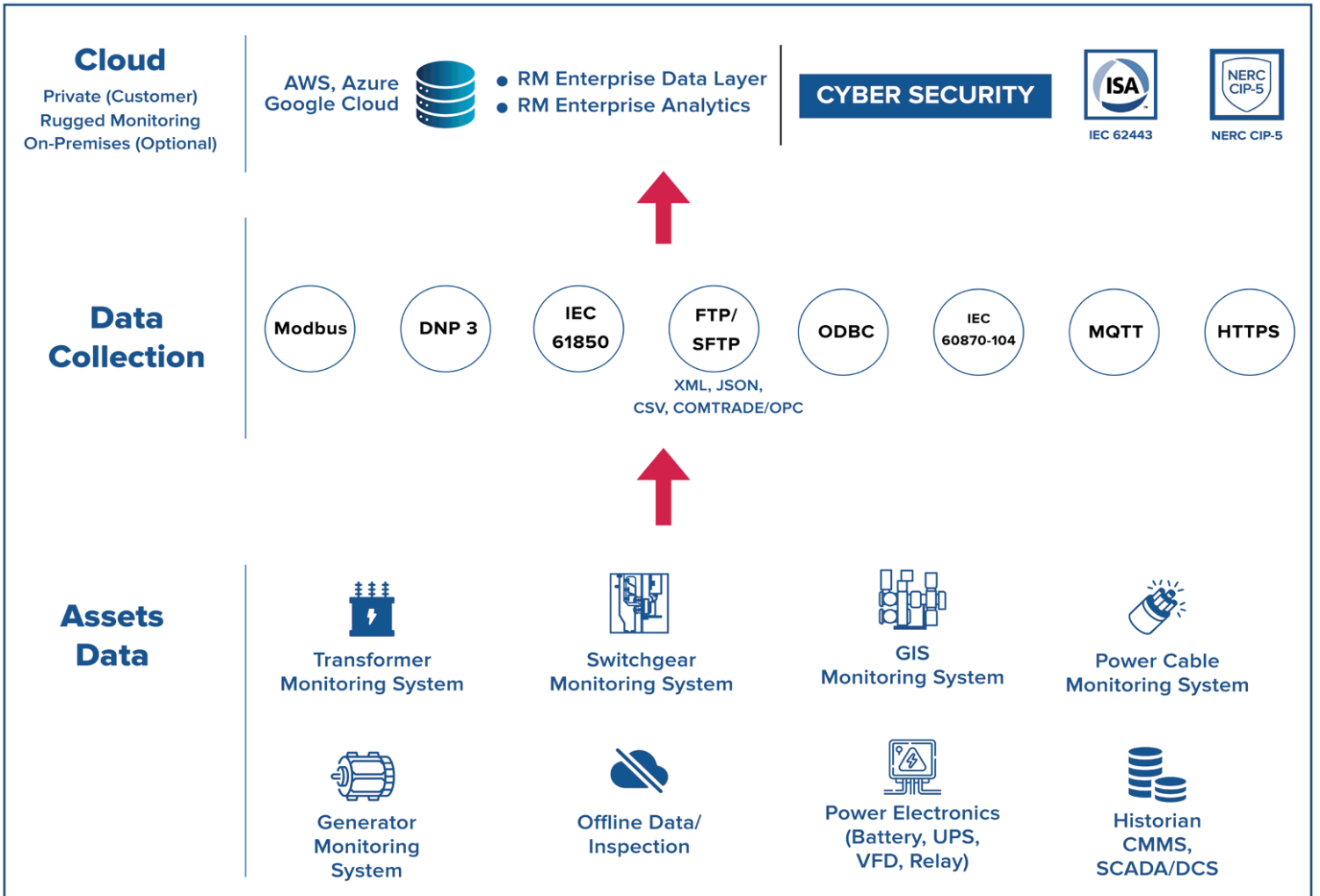
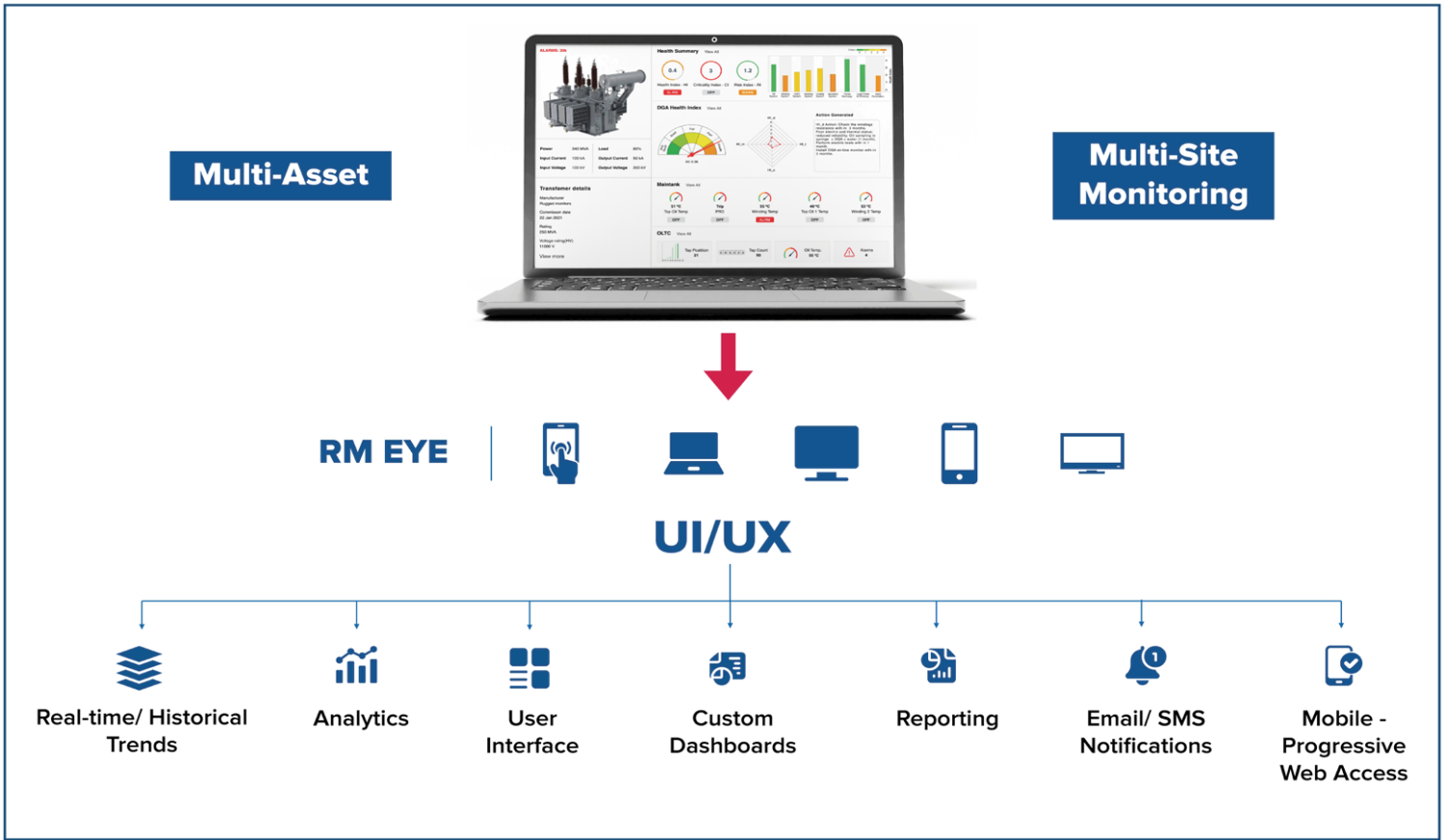
Enterprise APM Suite: RM EYE

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



One Solution for Multi-Site Multi Asset Monitoring

Manage different industrial assets on one platform
without human intervention

Features

- **Advanced and Exceptional Reporting**
Technology with automated alerts
- **Modern remote monitoring solutions** provide valuable insights to Multiple Assets at Multiple Sites on real-time
- **Robust asset health monitoring** with analysis and recommendations support asset effectiveness in addition to maximizing equipment uptime
- **Establish a real time and consistent monitoring** by getting the right information into right hands
- **An efficient, reliable partial discharge monitoring** for all the assets
- **A detailed comprehensive DGA Analysis**
- **Lifetime Consumption details.**
- **Built on well-established remote and cloud-based monitoring technology**
- **Simple user-friendly interface** providing fast access to all the features and commands
- **Quick and easy 1 step configuration setup**
- **Encompasses a secure access to data and configuration**
- **Advanced asset algorithms** based on standard ones with new ideas
- **Systematic fleet management and analysis**
- **Extended multilingual support** to handle product inquires or troubleshoot problems proactively
- **Up System Level Reporting**
- **Industrial IoT**

Features Specific to Bushing Monitoring

- Bushing monitoring for HV, LV, and MV side
- Online and Periodic Capacitance & Tan delta analysis in the realtime
- Temperature monitoring with Sensors and Thermal cameras
- Get Alarm notifications for individual bushing parameters over Email, sms and push notificaions
- Advanced DGA analysis for the Oil filled Bushings for fault identification
- Partial Discharge monitoring and Analysis
 - PRPD : Phase resolve partial discharge
 - Partial Discharge Amplitude and Discharge rate trend analysis
 - Partial Discharge Fault localization
 - Artificial Intelligence based PD fault Identification
- Analytics on Online, and offline test data

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.

CERTIFICATIONS



ISO 9001:2015



ISO 14001:2015



ISO 45001:2018



Lloyd's Register



Atex Certification



NIST Certification

Canada

1415 Frank-Carrel, Sulte , 230, Quebec, QC-G1N , 4N7, CANADA

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

+1-418-767-0111

info@ruggedmonitoring.com

www.ruggedmonitoring.com