AUTOMATE. DIGITIZE. ANALYZE. INFORM.

UTONOMOUS ASSET INSPECTION



Around-The-Clock Monitoring of Your Critical Facilities and Equipment

Advanced,

Maintaining critical infrastructure and preventing unplanned outages are crucial for meeting electricity demands and regulatory standards. Mitsubishi Electric Power Products, Inc. (MEPPI) introduces the Power-I[®] platform, designed to ensure the reliability of your assets while reducing operational costs.

Why Power-I®

Power-I[®] delivers advanced, real-time intelligence for smarter asset management, ensuring your infrastructure remains operational, secure, and cost-effective.

Thermal Inspection Suite

Intelligent Thermal Analysis:

Leverage Power-I®'s ability to identify nominal equipment baselines, create analysis groups, or simply alert on temperature threshold deviations.

Visual Inspection Suite

Computer Vision and AI: Digitize data and transform it into useful information.

Gauge Reading & Station Perimeter Monitoring:

Visual recognition of analog oil and pressure gauge readings, fence sign and vegetation detection.

Data Management & Custom Alerts

Available data visualization tools such as charts, graphs, and mission logs to track asset conditions over time.

Real-Time Alerts

Receive Immediate Email Notifications of potential problems and initiate on-demand tours for verification.

Export Power-I[®] **Data**¹ to data historians (OSI PI), Asset Management Systems (work order



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MITSUBISHI

MITSUBISHI ELECTRIC POWER PRODUCTS, INC. Thermal Analysis

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automation), and Asset Performance Systems (inform asset health scoring programs).

Enhanced Reliability

Real-time monitoring and advanced insights help prevent outages and ensure continuous operation.

Proactive Response:

Quickly address equipment issues and reduce unexpected outages.

Remote Assessment:

Utilize remote sensors to gain situational awareness and improve preparedness prior to arriving at the site, reducing outage durations.

Extended Equipment Life:

Protect and maintain equipment effectively.

Cost Reductions

Decreases operations and maintenance expenses through efficient, automated monitoring.

Reduced O&M Costs:

Minimize the need for onsite inspections.

Reduced Repair Costs:

Identify anomalies, alert personnel, and act on corrective measures prior to equipment failure or damage.

Efficient Personnel Use:

Optimize staff deployment through automation of data collection, documentation, review, and work orders by way of technology integrations.

Real-Time Data

Additional Features Include:

Wide Integration: Compatible with Skydio Drones, FLIR, Boston Dynamics SPOT[®] Robot, and ONVIF Profile S.

Informed Decision-Making:

Access comprehensive real-time data for better maintenance planning.

Improved Security & Safety

Advanced visual and thermal data analysis improves facility security and employee safety.

Reduce Risk:

Reduce employee travel, exposure to inclement weather, and hazardous site conditions.

Innovative Technology

Developed with input from utility customers, Power-I[®] integrates cutting-edge computer vision and machine learning to inspect and analyze critical infrastructure.

Agnostic Data Collection

Fixed and PTZ Cameras:

Equipped with visible light (optical) and infrared sensors for comprehensive, continuous equipment monitoring to identify changes, damage, abnormal readings, etc.

Thermographic Cameras:

Utilize radiometric thermal sensors to track equipment temperatures, detect anomalies, and send alerts on potential issues.

Autonomous Mobile Robots:

Perform completely unsupervised, scheduled autonomous inspection rounds gather ground truth data and enhancing situational awareness.

Drones:

Utilize drone + dock systems to remotely supervise data collection missions, creating operational efficiency and enhancing data collection abilities in the field.

Manual Image Import Tool:

Manually upload images from any source for Power-I[®] analytic assessment.

¹via 3rd party integration.

Scalable: Adaptable to both small and large installations. Expert Engineering: Backed by Mitsubishi Electric's 30+ years in substation design and support.

Employee Safety