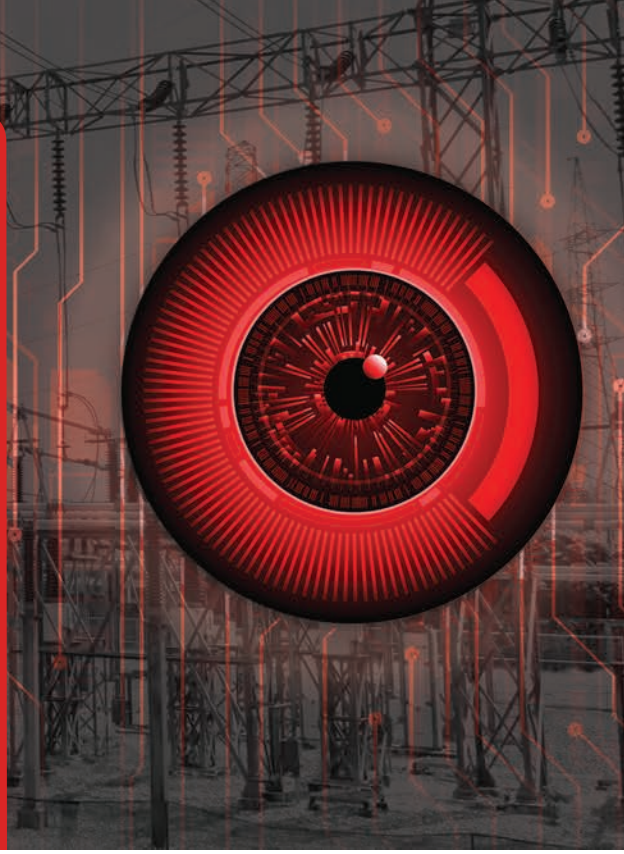
MITSUBISHI ELECTRIC POWER PRODUCTS, INC.

POWER-I®
INTELLIGENT SUBSTATION MONITORING SYSTEM



The innovative Power-I® computer-vision based analytics platform helps utilities reduce O&M expenditures while also providing real-time insight into the status of vital substation assets.

Mitsubishi Electric Power Products Inc. Power-I system is an advanced analytic platform that utilizes state of the art computer vision technology and machine learning to perform virtual inspections and analysis of electrical substations.

As equipment reliability, safety, and security needs escalate within electrical utilities, substations require advanced monitoring, virtual inspection, and autonomous surveillance capabilities. Operation of the system is easy. Substation personnel create "patrols" of vital substation assets using video-based data and acoustic signatures from a variety of fixed and/or mobile cameras including Mitsubishi Electric's concept for a Mobile Sensor Platform. Power-I then performs these patrols autonomously at a schedule specified by the operator. If an abnormality is discovered during a patrol, an alert is raised within the Power-I system and notifications are sent to the appropriate utility personnel. In addition, priority on demand patrols can be performed when inspection situations require live confirmation of a detected event.

The Power-I advanced analytics system allows for the reduction in frequency of traditional substation inspections while proactively monitoring vital substation assets. It's like having a person in your substation 24x7.

POWER-I BENEFITS

- Using visible light cameras to continuously check and alert for changes in equipment condition, oil leaks, vegetation, animal activity, criminal acts, intrusion, and analog gauges.
- Using thermographic cameras to continuously monitor and identify thermal changes of substation equipment that are outside of their normal operating ranges. In addition, identifying thermal incidents such as wild fires around the substation is possible.
- Using microphones to identify acoustic anomalies of equipment and analytics to identify the signature of events such as gunshot detection.
- Providing real time visual and thermal access to a substation and its equipment 24x7 without the need to roll a truck.

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Changes for the Better