#### About us

Optics11 is a high-tech company that offers fiber-optic sensing systems for partial discharge monitoring, condition monitoring, structural health monitoring and non-destructive testing.

The unique expertise in interferometry and transducers design allowed the company to develop fiber optic sensing solution for partial discharge detection.

To date Optics11 sensors are installed and being tested for deployment in high voltage assets, nuclear facilities, wind turbines, high-speed trains, deep-sea measurements, mines, border monitoring and R&D.

### Fiber Optic PD monitoring for harsh environments

Partial discharge monitoring saves from unplanned outages and costly repairs.

If PD goes undetected, catastrophic damage to electrical equipment may occur and cause serious safety issues in the workplace such as Arc Flash.



## **OptimAE PD**



### **Contact us**



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#### Fiber Optic Partial Discharge Monitoring System

One system to monitor all critical high-voltage equipment and components

#### Fiber Optic PD monitoring system

OptimAE PD is a ground-breaking system that enables online partial discharge monitoring of critical, high voltage electrical equipment and components in challenging conditions.



#### HOW DOES IT WORK?

OptimAE PD detects partial discharge by measuring the ultrasonic acoustic waves generated in solids by microscopic electrical discharges. It uses fiber optic sensors and acoustic emission measurement

# Reduce maintenance costs & improve safety

- Immune to electromagnetic interference (EMI) and high voltage fields
- Completely passive sensor
- Acquisition unit and sensors can be **kilometers** apart
- No power or preamplifiers required
- Simple, fiber optic cabling across long distances
- Uninterrupted equipment operation during installation
- Sensors are **small & easy** to install
- Long system lifetime
- No complex training required



#### WHAT CAN BE MONITORED:

- Power Transformers
- Rotating Machines
- Power Cables & Terminations
- Switchgear
- High-voltage components



Fiber cable & optic sensors

## OPTIMAE PD IS FOR YOU IF YOU WANT TO:

1. Maximize uptime and reduce scheduled downtime

2. Eliminate possibility of failure occurring between periodic tests

3. Avoid unplanned outages, high repair or replacement costs, and lost production



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