
Research

REVIEW PAPERS

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Review of Fiber Optic Diagnostic Techniques for Power Transformers:

It is important constantly monitor transformers because when the age of power grid increase, the failure will increase. Normally, we use the electrical sensors to monitor the transformers; however, due to the high electromagnetic interface, it is difficult to monitor in the real time. As result, to overcome this problem we use fiber optic sensor to overcome this barrier. We can use fiber sensors to measure optical absorption, fluorescence refractive index, pressure, and strain. In this paper a variety and assessment of different fiber optic-based diagnostic techniques for monitoring power transformers are discussed.

Fiber optic sensors are classified:

1. Phase-modulated sensors:
2. Intensity-modulated sensors:
3. Wavelength-modulated sensors:
4. Scattering-based sensors:
5. Polarization-based sensors:

Fiber Optic Sensor for Electrical Parameters Assessment: