

FIBER OPTIC SENSING SOLUTIONS



Busway Temperature Monitoring



NFPA

70B

Recommended Practice for
Electrical Equipment Maintenance

2019



ANSI/IEEE 4.15.02

2021

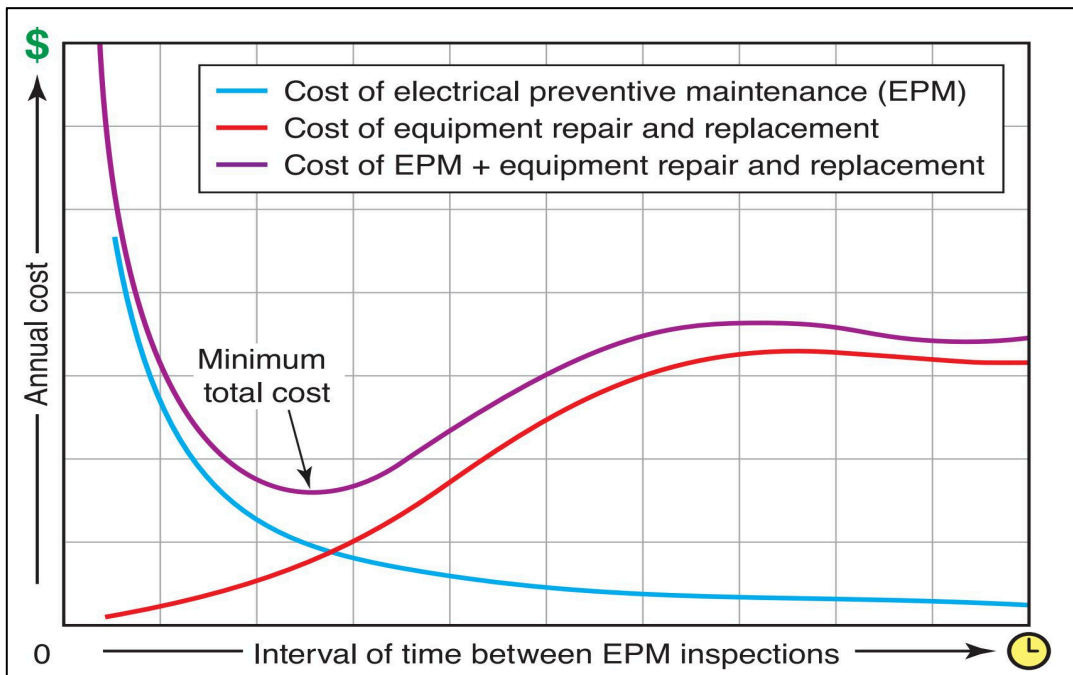
ATS

STANDARD FOR

ACCEPTANCE TESTING SPECIFICATIONS

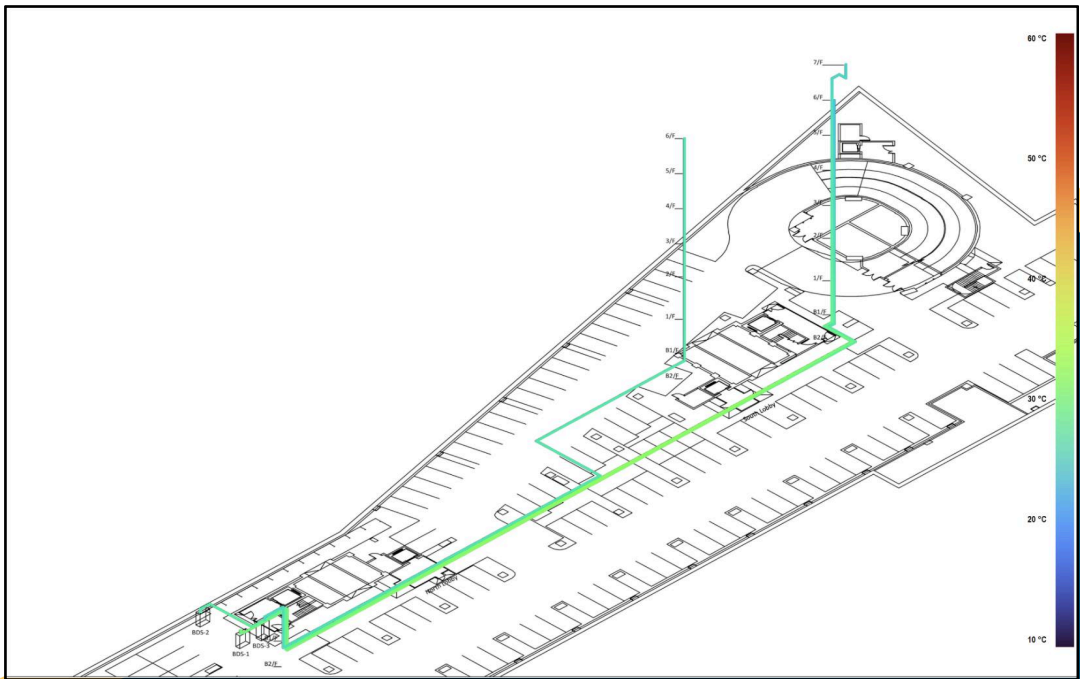
FOR ELECTRICAL POWER EQUIPMENT & SYSTEMS

NETA



Importance & Benefits of Electrical Preventive Maintenance

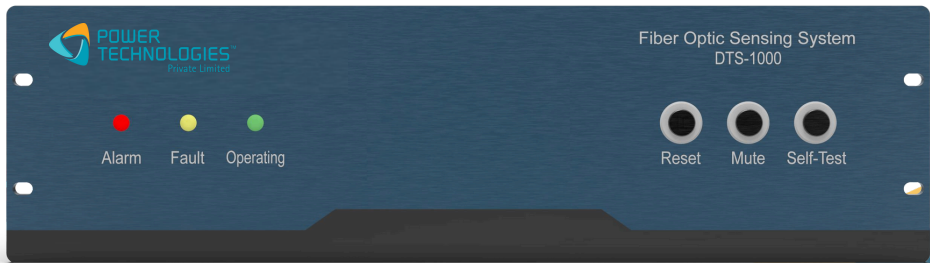
- Physical Inspection of the busway, in accordance with NETA recommends.
- Alignment issues, bowing or bracing, or required vertical spring hanger adjustments.
- Remove dust, dirt or other foreign matter.
- Remove moisture from leaks or condensation dripping from pipes.
- Infrared thermal (IR) Scan, in accordance with NFPA 70B reference 20.4.2.1.
- Spot trouble areas or changes in operating condition.
- Verify that nearby equipment is not giving off excess heat.



24x7 Online Monitoring by Fiber Optic Sensing System

Thermal profile is an important indicator of the operation condition of electrical busway. Fiber Optic Sensing System monitors the entire length of busway without blind spot and 24x7 continuously.

- Prevention is better than cure. Discover abnormalities at early stage.
- No blind spot. Monitor the thermal profile of entire busway.
- Easy to install. Simply attach fibre sensing cables to surface of busway.
- Intelligent. Online monitoring and data analysis.
- Integration. Supports integration with BMS / PQMS / CCMS / EMS.



High Performance Hardware

DTS-1000 optical unit series are specially designed with fiber optic sensing cables that provide continuous temperature sensing for long distances, and offer high reliability, accuracy, and quick update times to ensure 24/7 monitoring of the fiber temperature sensor application with no downtime for maintenance.

FOC-120A fiber optic cables are specially designed for distributed temperature sensing system. Fiber core is protected by double-layer stainless steel armored sheath, with high-performance tensile resistance, pressure resistance, torsion-proof, waterproof and moisture-proof, soft and tough, suitable for various harsh use environments. The fiber optic cable has a simple structure and high mechanical strength, which coordinates the contradiction between the thermal conduction speed and the strength of the optical cable to the greatest extent.



Secure and Flexible Local & Cloud Deployment

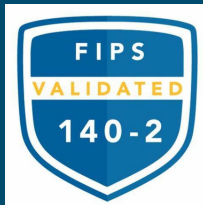
The server of the fiber optic sensing system can be deployed locally and on Cloud.

- Industrial server series are customized configured, prioritize long years of service and reliability, they have excellent environmental resistance and durability, and can provide stable operation over long periods.

- Server hardening is ready to ensure the system meet the IT security compliance.



CIS Benchmarks
Certified





Web Application for Multiple Platforms

A smart system that can monitor, analyze and communicate based on data to achieve preventive maintenance.

- **Intelligent Analytics.** The system provides spatial data display and analytics based on IEC61439, IEC60287 and etc.
- **Cross Device.** The system offers access over corporate network and / or Internet. It gives facility management the benefits of secure and convenient access anywhere.
- **Integrated Platform.** All fier optic systems can be integrated to one platform, which can also communicate with other sensors and systems.

CONTACT



POWER TECHNOLOGIES PRIVATE LIMITED

61 Kaki Bukit Avenue 1,
#05-02 Shun Li Industrial Park,
Singapore 417943
Phone: +65 6443 5086

