



Inspector™ Application note

Using Inspector™ For Busway Monitoring



INSPECTOR™ for Busway monitoring

Busway systems are a critical part of power distribution in data centers, industrial plants, and large commercial facilities.

While busways offer flexibility and high current capacity, they also require continuous monitoring to ensure safe operation, load balance, and high power quality.

Inspector™ provides an intelligent monitoring layer for busway systems, enabling real-time visibility, early fault detection, and data-driven operation—without modifying the busway design.

Why Busway Monitoring Matters

- Load imbalance across phases
- Power quality issues affecting sensitive loads
- Localized overheating at joints and tap-off points
- Limited visibility after system commissioning

Inspector™ as a Busway Monitoring Solution

Inspector™ is installed at the busway feeder or tap-off point to continuously monitor electrical and environmental conditions across the busway line.



What Inspector™ Monitors

- **Electrical Performance**
 - o Phase currents and voltages
 - o Load balance and power factor
 - o Energy consumption and demand trends
- **Power Quality**
 - o Harmonics and disturbances
 - o Voltage dips, swells, and interruptions
- **Thermal & Environmental Conditions**
 - o Temperature and humidity near busway joints
 - o Early detection of abnormal heat rise
- **System Events**
 - o Real-time alarms with accurate event recording

All data is collected non-invasively, ensuring zero impact on busway operation.

Value for Busway Companies

- **For Busway Manufacturers**
 - o Add smart monitoring as a value-added solution
 - o Enhance system reliability and safety
 - o Support customers with actionable operational data
- **For End Users & Operators**
 - o Prevent overheating and overload conditions
 - o Improve power quality for critical loads
 - o Reduce unplanned downtime
 - o Enable predictive maintenance strategies

Seamless Integration

Inspector™ easily integrates with:

- Building Management Systems (BMS)
- Data Center Infrastructure Management (DCIM)
- Energy management platforms

Supporting standard industrial communication protocols for smooth system integration.

Applications

- Data center busway distribution
- Industrial production lines
- Commercial buildings and malls
- Hospitals and mission-critical facilities



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