

# **CASE STUDY**

EEnhancing Railway Security: A Case Study of Badnera-Maharashtra Railway Coach Yard



## PROBLEM STATEMENT

The Railway faced challenges in securing its vast perimeter, particularly in preventing theft, sabotage, and unauthorized access to the railway workshop. The need for a robust sensing system that could provide long-perimeter protection without relying on a constant power supply was evident.

#### SOLUTION

To address the identified issues, the Railway sought a solution that combined advanced sensing technology with an integrated video monitoring system. The chosen solution involved the implementation of a Fiber Optic Perimeter Intrusion Detection System (FOPIDS) controller.

The key components of the solution included:

- ·FOPIDS Controller: The FOPIDS controller was strategically placed along the railway perimeter to detect any unauthorized intrusion or suspicious activity. Its unique capabilities allow for precise and efficient monitoring without the continuous need for a power supply.
- ·Integration with Cameras: The FOPIDS controller was seamlessly integrated with surveillance cameras placed at critical locations within the site. Upon detecting an intrusion, the system triggered an immediate video popup, enabling real-time monitoring and assessment of the situation.
- ·Command and Control Center Integration: The FOPIDS system was integrated with a centralized Command and Control Center, providing railway authorities with a comprehensive overview of each location. This centralized monitoring facility allowed for swift decision-making and response coordination.

#### FEEDBACK

After the successful implementation of the security solution, the customer expressed satisfaction with the overall performance and support provided by the FOPIDDS. The system is now set to be installed along the railway boundaries and perimeter.



Site Location Of Railway Coach, Badnera (16 zone system)

### CONCLUSION

The integration of FOPIDS controllers with surveillance cameras and centralized monitoring at Badnera-Maharashtra Railway Coach Yard has significantly enhanced the security measures. The proactive approach to preventing unauthorized access, theft, and sabotage has not only safeguarded valuable assets but has also instilled confidence in the railway authorities. The success of this case study demonstrates the effectiveness of innovative security solutions in addressing complex challenges within railway environments.

