



الاتحاد للقطارات  
ETIHAD RAIL



FAST RESPONSE LEAK DETECTION SYSTEM

MONITORS 24/7 SUBSTATIONS, INSPECTIONS AND MAINTAINANCE BUILDINGS,  
NOCC AND ADMIN BUILDINGS



Project:	Etihad Rail Abu-Dhabi,
Location:	United Arab Emirates
Requirements:	Fast response and reliable liquid leak sensing system suitable for harsh environment. PAL-AT 30C with AGW-Plus sensing cable
Results:	Installed in entire substations, inspection areas NOCC & ADMIN Building
Completion Date:	January 2023

## OVERVIEW

Etihad railway project is one of the major landmark infrastructure projects in the UAE. As part of a comprehensive railway network in the Gulf region, the Etihad railway plays an integral role in enabling economic growth by facilitating efficient transport of passengers and trade.

To ensure optimal railway operations, Etihad Railway require reliable 24/7 monitoring of its chilled water pipe network across all critical facilities of its rail network which included:

1. Substations
2. Inspection and maintenance building
3. NOCC and ADMIN Buildings.

## KEY REQUIREMENTS

Due to remote nature of some of these facilities, the project required leak detection system that is:

- a. Reliable to operate with minimal maintenance.
- b. Highly ruggedized sensor designed to survive installation and ongoing operation in harsh & remote location.
- c. Will not cause false alarm due to dust and dirt buildup overtime.

The customer was looking for a dependable and quick responding state-of-the-art leak detection system that would monitor the critical locations of their facility 24/7.

## **THE SOLUTION**

PermAlert was selected as the preferred leak detection technology provider due to industry recognized reliability and long track record of leak detection systems deployed in harsh conditions across the Middle East especially with various pipeline projects.

The installed PAL-AT control panel is equipped with TDR based technology that provides continuous monitoring across all the critical facilities with fast response time and accurate locating capability. The highly ruggedized AGW series sensing cable is ideal for harsh environment applications while requires no ongoing maintenance that lowers client total cost of ownership when compared to other solutions. Additionally, PermAlert is a reliable partner to the customer with unmatched local technical support presence from PermAlert team as well as our parent company Perma-Pipe's facilities / resources in Abu Dhabi, Dubai and Fujairah.



**ETIHAD RAIL  
NETWORK IN ABU-DHABHI  
VARIOUS DEPOT STATION  
CASE STUDY**

cable with the ability to identify growing leaks.

**PermAlert Leak Detection  
Intelligent · Accurate · Reliable**

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