



Enhancing Surveillance Infrastructure at a Leading International Airport in Gujarat

Overview

Situated in Gujarat, a significant airport undertook a major upgrade to its surveillance infrastructure to meet increasing security demands. The airport, experiencing growth in passenger and cargo traffic, recognized the necessity of a state-of-the-art CCTV network to ensure the safety and security of its operations. With a focus on deploying a robust and reliable surveillance system capable of withstanding harsh outdoor conditions, the airport management aimed to enhance overall security across its extensive premises. The Zyxel Networks' industrial grade switch RGS200-12P has played a pivotal role in fortifying the security infrastructure of the international airport in Gujarat. Its robust design, coupled with advanced features for scalability and redundancy, has set a new standard in ensuring high levels of security and operational efficiency.

Challenges

The airport faced significant challenges in modernizing its surveillance capabilities. Traditional indoor switches proved inadequate for outdoor use, threatening the reliability of the CCTV network required for extensive coverage. Gujarat's harsh climate—characterized by extreme temperatures and humidity—demanded equipment resilient enough to operate flawlessly under such conditions. Moreover, the airport needed a scalable solution to accommodate future expansion, with a streamlined installation process and maintenance efficiency being paramount.

Ensuring continuous connectivity and power redundancy was another critical challenge. The airport required a system that could maintain seamless operations during power fluctuations or primary link failures, necessitating robust backup solutions for both power and data connectivity.

Customer

International Airport in Gujarat

Industry

Airline

Location

Gujarat, India

Customer Background

This busy airport in Gujarat is a crucial hub for domestic and international travel. With rapid growth in passenger and cargo traffic, it features state-of-the-art facilities and plays a vital role in the region's connectivity and economic development. Its strategic location and modern amenities make it essential to Gujarat's transportation network.





Solutions

After rigorous evaluation and consultation, the airport opted for the Zyxel Networks' industrial grade switch RGS200-12P. This choice was driven by the switch's rugged design, specifically engineered to endure harsh outdoor environments without compromising performance. Equipped with Power over Ethernet (PoE), the RGS200-12P simplified installation by delivering power and data over a single Ethernet cable to CCTV cameras, thereby reducing complexity and costs. Twelve units of RGS200-12P were installed resulting in a smooth transition.

The switch's scalability and advanced management features provided flexibility for future expansion and seamless integration with existing infrastructure. To ensure uninterrupted connectivity, the RGS200-12P implemented Rapid Spanning Tree Protocol (RSTP), creating a resilient ring network that automatically switches to a backup fiber link in the event of a primary link failure. Dual DC power supplies further fortified the system against power disruptions, maintaining operational continuity.

Product List



• RGS200-12P GbE Managed PoE Switch

Results

The Zyxel Networks' RGS200-12P has been crucial in fortifying surveillance capabilities of the international airport in Gujarat, ensuring high standards of security and operational efficiency. The switch significantly enhanced the airport's surveillance infrastructure. RGS200-12P also enabled seamless outdoor CCTV camera operation, enhancing surveillance coverage. Its ruggedized design ensured reliable performance, even in harsh conditions, reducing downtime risks. PoE functionality eliminated the need for separate power cables, cutting installation costs and simplifying maintenance. The scalable solution allowed easy expansion of the surveillance system, ensuring readiness for future growth and security needs.





Application Diagram

