

Expressway Lane Control System in South Korea



Project Introduction

Gyeongbu Expressway connects Seoul and Busan, the capital and the second largest city of South Korea. The 416 km-length expressway is the second oldest and most heavily travelled expressway in the country. The project is to build up the lane control system in Gyeonggi area by the end of 2013, integrating the LCS control and CCTV cameras.

System Requirements

1. Giga fiber connection for HD quality surveillance
2. Redundant ring protection
3. Bypass function for fiber network protection
4. Sustain from extreme temperature of continental climate from over 50°C to -15°C in device cabinet

Bypass function is not embedded in the standard model of IES-5408DFT, but Lantech is able to customize to satisfy the project needs. The 98 pieces of Lantech managed switches then were installed to expressway's Gyeonggi section, which is 80km long, in a ring topology. Each switch is connected to lane control system and several CCTV cameras. Two L3 switches are set in Suwon city, the provincial capital, and connected with control headquarter in a ring topology. The connection between ring and L3 switches of centre is further protected by dual homing.

Lantech Solution

1. Customized bypass model based on IES-5408DFT
2. ITU G.8032 redundant ring protection <50ms
3. Wide operating temperature from -40°C to 75°C
4. Giga speed fiber and IGMP v3 ensure smooth and real-time HD quality surveillance
5. Lantech user friendly UI for easy setup and powerful monitoring



