

Asia's largest Mega Hub Terminal to install intelligent video surveillance solutions matching its cutting edge facilities



"Thanks to Hanwha Techwin's Wisenet security solution, we were able to build a safe video surveillance system that can match the size and the cutting edge facilities of 'Asia's largest logistics terminal'," and added, "We are satisfied that we can now safeguard every corner of our terminal including vehicles, parcels, and personnel not to mention indoor and outdoor spaces."

- Official at Mega Hub Gonjam, CJ Logistics

Challenge

With its nine decades of endless innovation, Korea's No.1 logistics service provider CJ Logistics is leaping forward to become a global leader by expanding its global networks to over 94 locations and entering the market in four countries such as Thailand, Malaysia, China, and the Philippines. In June 2018, CJ Logistics opened Asia's largest Mega Hub Terminal in Gonjam, Gyeonggi-do, South Korea. The terminal consists of two buildings with four floors above ground and two underground, occupying nearly 300,000m² - almost the size of 40 football stadiums -, with its total length of conveyer belts reaching almost 43km, as long as a full-course marathon. The terminal also has an automation system, the first of its kind in Korea, increasing the company's daily handling capacity to 1.72 million parcels, four times higher than its competitors. CJ Logistics looked for a top notch surveillance solution that can match the terminal's grand scale and the state-of-the-art automated facilities.

Solution

After testing cameras from different manufacturers in the market, CJ Logistics finally named Hanwha Techwin its partner and installed around 1,660 Wisenet cameras throughout the terminal, in recognition of Hanwha's own advanced technologies well received in the global stage. Hanwha Techwin's IR PTZ cameras XNP-6330RH were installed along the building exteriors, providing periphery monitoring 24/7. The camera boasts 33x optical zoom, fast pan/tilt (400°/300° per sec), and auto tracking that enables precise monitoring across long distances, while the IR feature provides visibility up to 350m even at night. Inside the buildings, around 1,400 Hanwha Techwin's Wisenet Q series cameras were set up on the ceilings and the walls. The cameras can detect any problems occurring to the automated conveyer system with a total

length of nearly 43km and a mass flow of parcels on them. They also oversee the movement of over 1,500 vehicles in the terminal and improve monitoring of the safe working environment. Hanwha Techwin's IR license plate recognition cameras XNO-6090RH were installed at the main gate of the terminal to enhance security at entrances and exits. Equipped with powerful LED lights, the cameras can provide highly accurate recognition of license plates even when vehicles are moving fast, while 2 megapixel high resolution images with IR feature enable effective vehicle monitoring both day and night in the terminal where cargo moves in and out around the clock. The cameras are particularly useful in monitoring the main entrance as they can identify objects from 100m away at night. Hanwha Techwin's Wisenet X series cameras, XNO-6120R and XNP-6120H, were installed at indoor staircases and corridors of the office building. The X series offers intelligent video analytics and sound classification features to help create a safe environment that enables swift responses to detected events. The 12x zoom lenses and 150dB WDR ensure sharp images are captured in locations where there may be strong contrasting lighting conditions.

Result

An official at CJ Logistic's Mega Hub Terminal said, "Thanks to Hanwha Techwin's Wisenet security solution, we were able to build a safe video surveillance system that can match the size and the cutting edge facilities of 'Asia's largest logistics terminal'," and added, "Now we can safeguard every corner of our terminal including vehicles, parcels, and personnel not to mention indoor and outdoor spaces."



Periphery monitoring for the mega-sized logistics terminal

The vast size of CJ Mega Hub Terminal posed challenges for the security personnel in physically checking the entire site. Although indoor facility surveillance was critical, outdoor monitoring was as equally as important to the security. Therefore, CJ Logistics decided to deploy around 20 units of 33x zoom IR PTZ cameras outside the buildings. The cameras can clearly identify objects from a long distance that are not visible to the human eye, with their IR lenses providing clear footage both day and night with visibility up to 350m at night. In addition, hand-over and auto tracking features provided enhanced security by allowing cameras to detect and track movement in pre-set locations that required more detailed monitoring.