

Hanwha Techwin's city surveillance solution helps keep the City of Turnov safe and sound



Global security company Hanwha Techwin has provided a city centre video surveillance system solution for the City of Turnov, Czech Republic. Demonstrating the flexibility and depth of the Wisenet range, Hanwha Techwin enabled police to closely monitor and respond quickly to any suspicious activity throughout the city.

Challenge

Turnov, located in the north of the Czech Republic, has traditionally been known as a centre for gemstone polishing, glass craftsmanship and arts. It is at heart of the Bohemian Paradise nature reserve which attracts large numbers of tourists throughout the year. The City of Turnov decided to invest in a new city centre video surveillance system in order to deter anti-social behaviour and create a safe environment for its 14,000 inhabitants. Although city officials wanted a cost-effective solution, they also wanted to take advantage of the latest advances in technology and were not prepared to compromise on quality or functionality.

Solution

The City of Turnov awarded the contract to supply the cameras to Hanwha Techwin, who worked closely with city officials and systems integrator, Telmo, to ensure the best Wisenet cameras were specified for each location. The wide range of Wisenet cameras allowed Hanwha Techwin to recommend 12 different models, with each offering the most cost-effective solution, whilst meeting the exact requirements for each camera location.

Within Turnov Square, the Wisenet PNM-9030V 15 megapixel panoramic camera was installed. Designed for large open areas, the Wisenet PNM-9030 is equipped with multi-sensors which enable it to capture superb quality seamlessly stitched 180-degree images. The exceptionally high resolution of the captured images allows control room operators to digitally zoom in to observe close-up detail of any incidents. The Wisenet PNM-9030 is also equipped with tampering detection as well as a number of different types of Intelligent Video Analytics (IVA), such as audio, loitering, motion, direction, enter/exit detection and object appear/disappear detection.

At the city's railway station, a 2 megapixel Wisenet XNP-6550RH was deployed, featuring a 55x optical zoom, a Gyro sensor for accurate stabilisation in windy conditions, Hanwha Techwin's unique optical 'Defog,' and built-in IR LEDs to capture high definition images at night at a distance of up to 500 metres. Its ability to capture clear, sharp images in daytime conditions, enables faces to be recognized from up to 170 metres. Both the Wisenet PNM-9030 and Wisenet XNP-6550RH also have an audio analysis function known as "Sound Classification," which recognises critical sounds—such as gunshots, explosions, screams and broken glass—and immediately sends an alarm for quick response to any emergencies.

In addition, Wisenet QNO-6070R 2 megapixel IR bullet cameras have been installed within and around the recently built city hall, which houses the police control room. Images from all the IP cameras are securely transmitted over the network to enable real-time monitoring via workstations or the control room's video wall. Operators are also able to retrieve video evidence recorded and stored on a Wisenet PRN-4011 Network Video Recorder (NVR). With 64 channels, the PRN-4011 will be able to handle a larger number of cameras should there be a need in the future to expand the system, whilst 8 Terabytes of built storage and RAID 5 support ensure all images can be stored for the required length of time. Version 2.10 of Wisenet SSM video management software has been integrated into the system to provide operators with a user-friendly and efficient method of managing and monitoring the cameras, as well as configuring which are displayed on the video wall.

The nearby village of Malá Skála, which does not have its own police force, has also contracted to use the services of the City of Turnov's control room. Operators within the control room monitor images captured by Wisenet QNO-6070R cameras installed throughout the village, as well the video and data captured by a Wisenet XNO-6120R bullet camera which incorporates ANPR technology developed by Hanwha Techwin's technology partner, FF Group. Using virtual enter/exit detection lines, with a 95% recognition accuracy whatever the environmental conditions and even when vehicles are moving at speeds of up to 150 km/h, the Wisenet XNO-6120R ANPR camera solution produces real-time reports on the number of vehicles entering the village, while generating alerts if vehicles on a black list are recognised. Images and data captured by the Wisenet XNO-6120R ANPR and Wisenet QNO-6070R cameras are recorded within the control room on a 32 channel Wisenet XRN-2011 NVR which is supported by SSM 2.10 video management software.

Result

As the City of Turnov chose to maintain a long-term partnership with Telmo and Hanwha Techwin Europe, it was able to effectively monitor and provide a safe environment for citizens, tourists, and even nearby villagers. The partnership was first formed in 2006 when Telmo designed and installed the city's first video surveillance system utilising analogue cameras and DVRs. In 2012, the city commissioned Telmo to replace the DVRs with Wisenet NVRs, which enabled them to initiate a programme of installing Wisenet IP network-based cameras. The final phase of the programme was completed at the beginning of 2019 along with a complete upgrade of the city's central control room. This excellent working relationship established over a long period of time has greatly contributed to Hanwha Techwin's capability to meet the requirements of the City of Turnov.

About Hanwha Techwin

Hanwha Techwin is a subsidiary of Hanwha Corporation, a South Korean based company. Hanwha Techwin offers total security solution which encompass network and analog cameras, recording solutions, access controls and video management software. Hanwha Techwin has solidified its leadership position in security solutions by building self-developed SoC chipset along with the optical, manufacturing and image-processing technology accumulated over 30 years. Now, Hanwha Techwin is preparing for the future by continuing to invest in AI and cyber security in order to provide convenient and safe security solutions to customers. With the representative brand, Wisenet, Hanwha Techwin will strive to serve security solutions that our customers can trust. For more information about Hanwha Techwin, please visit our website www.hanwha-security.com