

Xinxing Elementary School

Site Name	Xinxing Elementary School
Country/ City	Taoyuan, Taiwan
Industry	Education
Solution	DTV HD Digital Surveillance System
Solution Provider	Fuho Technology Co., Ltd
Reasons of Adoption	<ul style="list-style-type: none">■ System Expansion by Daisy Chaining■ Cabling cost reduction■ Long-distance transmission■ Full HD video quality



CUSTOMER NEEDS AND PROBLEMS

Founded in 1956, Xinxing Elementary School is a small school with 300 to 400 children. The school is surrounded by rice patties, vegetable farms, and bamboo patches. The lush green makes the school more than just a school. It was rewarded as a school of sustainable development and environment in Taoyuan County, the green partner school of Ministry of Education, and a school of green environment promotion in Taoyuan County.

Because the school is surrounded by farms and rural properties, its neighborhood is sparsely populated. For parents who are busy in farming or working and have no time to pick up their children, it is always their concern about the safety of the children going to and coming back from school. To prevent accidents from happening, the school decided (1) to install surveillance cameras along the paths on which most children travels and (2) to improve the video quality of the existing campus surveillance system.

Considering the sparsely distributed old cameras with insufficient viewing angles, the school decided to add more cameras at critical locations such as the front gate, rear gate, side gates, and surrounding walls. A group of teachers who were very concerned about their students started surfing online looking for information and found DTV products. They even invited related suppliers to come to present and submit a bid. Since Xinxing Elementary School is a public school, it is subject to the law that all major purchases require public bidding. In addition to DTV suppliers, suppliers of other products such as IP-based and analog systems also participated the bidding.

After long discussion and considerations from many aspects, the school finally chose the 16-channel DTV digital HD surveillance system.

BENEFITS

DTV products use ccHDTV chips developed by ITE Tech. in Taiwan. The technology behind is digital TV transmission technology. Each camera is like a TV station and the videos sent out from the cameras occupy different channels. One single coaxial cable is capable of carrying multiple videos or channels. Not only that, new cameras can be easily added to the existing infrastructure physically with splitters sold in typical hardware stores. As an example, the installer replaced the old analog camera at the front gate with a DTV HD camera and added the second and third cameras with the above-mentioned splitters, each pointing at a different angle. The overall settings results in zero blind spot.

Besides, the outputs of DTV products are digital videos. For one thing, there is no discoloring, noise, or snowflake in the videos as the cables deteriorate over time; and for the other, there is no need for amplifiers for long distance transmission because the transmission technology is very robust. The transmitted video is as clear at 1000m as at 1m. In this case, the farthest camera from the control center is located at the front gate. However, the distance makes no difference to the quality of the videos. The feature makes DTV perfect for schools with a large campus to cover but limited budget to do it.

Because of the geographical environment, most of the school children's parents are farmers who know little or nothing about hi-tech products nor the differences between analog and digital systems. However, as soon as they see the surveillance videos at the security guardroom showing fine details of license plates and even human hairs, they all feel somewhat relieved about their children's safety.