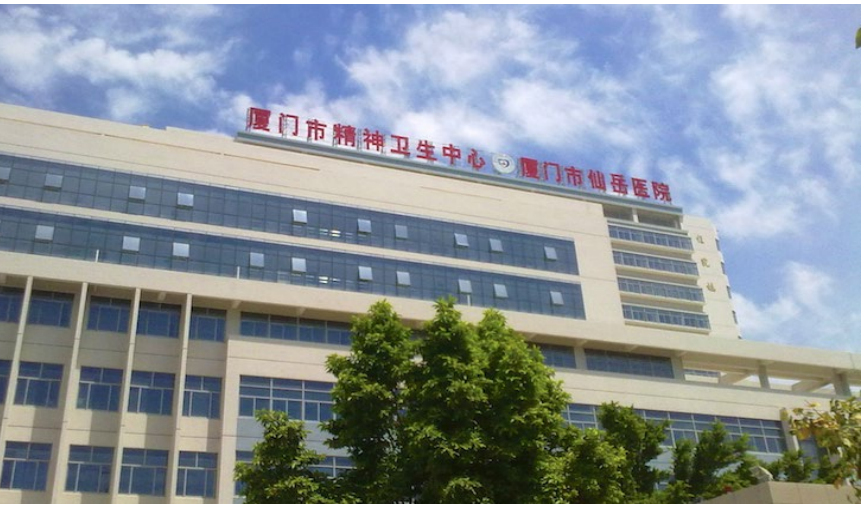
aimetis | Case Study

Xiamen Xianyue Hospital

> After careful considerations and a multi-faceted selection process, we have selected Axis Communications for this project. It is proven that the network video surveillance system installed by Axis is able to meet the high standards of our hospital, with a high level of stability, reliability, and artificial intelligence. It has greatly improved the management efficiency of our hospital, providing the patients and our staff with a strong security system.

Nie Xiaowei
Chief of the IT Department



Customer Profile

Xianyue Hospital is located south of Xianyue Park in the central region of beautiful Xiamen Island. Situated beside hills and the sea, Xianyue Hospital was established in 1960. It is currently the only third-level grade-A psychiatric hospital, responsible for the hospitalization, outpatient treatment and other medical care for mental patients both within and around the Xiamen area, and mental patients who are non-Xiamen residents in dire need. The hospital covers an area of 50,000 square meters. There are 300 additionally planned hospital beds, with 345 beds already opened for patient use. There are over 2400 patients checking in and out annually. There are also over 120,000 annual out-patient visits.

Mission

Xiamen Xianyue Hospital's out-patient building monitoring system includes the routine medical monitoring system and the monitoring system for the hospital's in-patient care area. Due to the specific nature of this hospital, it has more frequent internal emergencies, thus there is also a higher demand on the monitoring system.

Therefore, Axis Communications cooperated with partner Xiamen Waynet Technology to design a stable, reliable, and high-resolution real-time network monitoring system for the Xianyue Hospital.

Solution

According to the actual needs of Xianyue Hospital, the network video surveillance system needed to include a monitoring system for healthcare procedures and the office area. This system uses digital network cameras to provide real-time and effective monitoring, video display, and recording of all entrances, office areas, the warehouse area and the entrance and exit of personnel. Meanwhile, the network video surveillance system also uses advanced decoding, storage and network transmission technology to realize the functionalities of remote control, video transmission, intelligent control and historical data query.

The network video surveillance system is based on the newly planned specialized network for monitoring, which can achieve 10 gigabit bandwidth for the backbone and 1 gigabit bandwidth to the workstations. It is

an advanced high-speed network that can simultaneously support the integrated transmission of data and video. A control room was also set up in the monitoring center which can perform information gathering, storage, analysis, and examination of each control point of the building.

For the design of Xianyue Hospital's monitoring system, different camera models were selected for each surveillance area based on individual needs:

- Office area: AXIS 216FD Network Cameras and AXIS 215 PTZ Network Cameras for manage- ment of daily medical work.
- Elevator hall: AXIS 241Q Video Server integrates special analog cameras for the security manage- ment of the elevator hall.
- Main entrance and corridors: AXIS P1311 Network Camera is used for the security management of the main entrance.
- Parking lot: AXIS M1114 Network Camera is used for the security management of the parking lot.
- Wards: Discreet, fixed AXIS M1011 Network Cameras are distributed throughout the in-patient wards.

A total of more than 250 network cameras are connected with the various areas within the building using LAN cables, and are centrally managed through the back-end management platform.

Back-end management:

- Center management server: The integrated video surveillance management platform of the Canadian company Aimetis was installed, which provides a centralized management for the encoders and the various system modules.
- Storage server: Provides centralized management of video which supports a variety of recording and retrieval methods.
- Streaming media server: Improves the concurrent streams of equipment to save bandwidth.

Result

The Axis network cameras depend directly on an IPbased network (LAN/intranet/internet) to transmit digital video images. With sufficient bandwidth, users can browse through SD and high-definition real-time videos through a client on any one of the networked computers, anywhere, anytime. This allows for a visualized management system, increasing the diversity of the system. A brand-new monitoring network that is both simple and flexible has been built by using Axis network cameras, which is also highly scalable. This system can meet the growing demands of the hospital's surveillance system. Through adding new load-balancing network video servers or new network cameras, this system can be flexibly extended to meet new needs.