

Dayalbagh Educational Institute implements smart security surveillance.

Institute designs a solar powered surveillance solution from Axis to provide total protection and prevent untoward incidences in the campus.



Organization:
Dayalbagh Educational Institute

Location:
Agra, India

Industry segment:
Education

Application:
Campus safety and security, remote monitoring, crime prevention

Mission

Dayalbagh Educational Institute (DEI) is an esteemed university and one of the most recognized institutes providing quality education in the field of arts, commerce, science and technology. It is located on the outskirts of the historic city of Agra with a 100 acre campus. The NAAC-accredited DEI University continuously innovates and upgrades its methods of imparting education. It has introduced open laboratories, which allow students to deploy technology in real-life scenarios.

Dayalbagh Educational Institute has 10,000 students and staff across its campus, and wanted to ensure a safe and secure environment. It aimed to design an intelligent surveillance system that could be operated on solar power, reducing the carbon footprint and dependence on electricity.

Solution

Dayalbagh Educational Institute's management decided to set up an Open Security Laboratory, to design its own unique solar-powered surveillance solution system. This would involve the students and faculty in creating and implementing their independent surveillance solution. The students were given an opportunity to build an integrated security system, which also provided them with hands on training.

Initially, the project was implemented on a small scale to understand its capability and later, after an extensive process of selecting the best network cameras, DEI chose an Axis network video solution. This provided superior image quality and exceptional compression capabilities available at competitive price points. Real-time monitoring of the campus, residential facility, campus and administrative offices were made possible with the deployment of Axis fixed network outdoor cameras with outstanding light sensitivity.

“We wanted to deploy a surveillance system which could be integrated with our design, provide agility and reduce total cost of ownership. We are very impressed with the high definition images provided by Axis cameras. This is an immense value add to our University and we look forward to implementing the same in our other campuses going forward.”

Dr. C.M. Markan, Department of Physics & Computer Science, Dayalbagh Educational Institute Agra.

Result

Dayalbagh Educational Institute has greatly benefited from this installation of the surveillance system which completely relies on solar energy for its power supply reducing the carbon footprint for this project to zero. There is a data center for recording and storage with distributed monitoring units in four directions connected by 12 kms of underground optical fiber. The project has been conceptualized so that it allows easy identification and immediate action.

Smart monitoring

The DEI project has been able to efficiently monitor the campus round-the-clock, zoom-in and closely observe and provide real-time images to the authorities to tackle emergency situations when necessary. This is reflected in the fact that more than 60% of the students at DEI are girls, as omnipresent security surveillance has helped boosted the confidence of the students.

The security surveillance system at DEI is fully powered by distributed solar plants spread across the campus. DEI has nearly 20 solar plants using roof top solar panels generating nearly a Megawatt of power. DEI has the distinction of being the only institute which is 100% powered by solar power, using Hydel power only as a backup.

The monitoring of the camera feed is done in a community participation manner. Student volunteers participate in this 24x7 vigilance in a 'Learn while you earn' scheme. It may be noted community participation is a generic strength of Dayalbagh community where the residents share civic responsibilities in the form of voluntary weekly duties which includes manning entry gates, night vigilance and rapid response teams.

DEI is known for its work experience courses which run alongside standard curriculum. This Skills Development initiative has been in practice since its inception from 1981. In tune with this theme - the design, deployment and maintenance of the optical Fiber network, and the video surveillance system is an ideal platform for skill development in this area for the students. A recent visit by Telecom Sector Skills Development council CEO Lt. Gen Kochhar was pleased to see the government's policies on skill development already being practised in letter and spirit at Dayalbagh and has offered to partner DEI in this national initiative.

