

Cubi e Perina invests in an innovative and efficient intrusion detection system.

A solar plant in the Province of Bologna has been equipped with Axis thermal cameras for round-the-clock security.



Organization:

Cubi e Perina

Location:

Bologna, Italy

Industry segment:

Critical infrastructure

Application:

Perimeter protection

Axis partners:

ItaSicurezza S.r.l.,
Technoaware

Mission

The new photovoltaic solar park at Castello d'Argile (Bologna), with an overall power output of two megawatts, produces electricity that is then fed into the national electricity grid. Located in the open countryside and with practically no lighting, the solar park needed an intrusion detection system that ensured precise and effective control of the entire perimeter, both day and night.

Solution

The Austrian company that owns the solar park engaged Cubi e Perina to build and commission the plant. In turn, this Venice-based company called on ItaSicurezza for the design and installation of an intrusion detection system.

The chosen solution was not a traditional intrusion detection system with typical detectors, but a system composed of eleven AXIS Q19 Series Thermal Network Cameras arranged for monitoring along the perimeter of the site, all equipped with VTrack intrusion video analysis software from Technoaware, installed on board the cameras.

Result

This solution met with immediate appreciation from the client, who recognized the innovation of this intrusion detection system over traditional systems. The decision to use Axis thermal cameras enables accurate and efficient monitoring in all lighting conditions, even at night, easily detecting any intrusions in the solar park and immediately setting off the alarm.

“There are many reasons why we decided to rely on Axis solutions. First of all, the excellent price-quality ratio and the high reliability that has always distinguished Axis products. Secondly, the small size and compactness of these cameras. Finally, their top-notch technology: we’re talking about IP cameras that allow onboard recording on microSD and onboard video analysis.”

Mirko Aucone, ItaSicurezza.

Day and night intruder prevention

A new state-of-the-art solar park has been installed at Castello D'Argile, in the open countryside of the Province of Bologna, to produce electricity that is then sold to Enel, Italy's largest power company. The requirement of the Austrian company that owns the plant was to prevent intruders entering the plant, even at night, which means they needed the best solution in terms of security, cost and speed of installation.

To meet these needs, Cubi e Perina, a Verona-based company in charge of building and commissioning the plant, turned to ItaSicurezza, leader in the implementation, management and maintenance of integrated security systems and an Axis partner. After thorough analysis of the possible options, ItaSicurezza decided to abandon the traditional route, based on the installation of traditional detectors (microwave barriers, infrared barriers etc.), choosing an innovative intrusion detection system with a number of merits. The chosen system consists of eleven AXIS Q19 Series Thermal Network Cameras, arranged for tracking along the entire perimeter of the site. These cameras take thermal images, enabling the detection of people, animals and objects with the utmost precision, both in lit conditions and in complete darkness, limiting so-called “false positives” to a minimum, even at long distances.

Quick situation overview

Compared with traditional intrusion detection systems, a system based on video analysis with Axis thermal cameras has the considerable advantage of, in addition to raising the alarm, also showing the precise photo that triggered it. This enables the security guard to quickly get an overview of the situation and react accordingly, or to immediately realize if it is a false alarm. This is possible by exploiting Technoaware's VTrack Intrusion plugin, installed on board the cameras via the Axis open application platform, ACAP, which allows third parties to develop applications that can be downloaded and installed on the cameras.

The possibility of installing this technology on board the camera is a distinctive strength of the Axis system compared to other systems on the market. In this way, the “passage” of information to an external server is avoided, as Technoaware's algorithm is loaded directly on the ACAP platform on board the camera. As soon as an intrusion event is detected through the video analysis carried out by the individual camera, a string is immediately sent via “http” to two AXIS P8221 I/O modules (Input/Output and Audio Server). Upon receiving the string, the Audio Server closes a contact that interfaces with an input module of an alarm center, activating the alarm signal for the relevant zone. In the event of an intrusion along the monitored perimeter, the alarm is therefore raised immediately, while the intrusion zone and movements of the intruder are accurately indicated via the Lifecube Security application, which shows the position of the intruder graphically on a map that can be accessed via tablet and smartphone.

Lighting problems eliminated

This innovative solution turned out to be the most functional for meeting the client's requirements for several reasons. First of all, a system of cameras is more efficient, precise and immediate than a classical perimeter barrier around the entire enclosure. Secondly, compared to a traditional perimeter system, the solution using AXIS Q19 Series Thermal Network Cameras is much less invasive, less complicated to install, and has an unbeatable price-efficiency ratio.

“This is the first time we have tackled this type of intrusion detection installation and I must say that, after an initial period of physiological adjustment, we are extremely pleased with this solution. The fact of having chosen day/night cameras really gives us a great sense of security, even at night, and eliminates the problems concerning park lighting”, stated Marco Pizzato, Technical Manager, partner of Cubi e Perina.

