

AN OVERVIEW OF THE PERIMETER SECURITY SOLUTIONS IN THE INDIAN MARKET



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According to latest industry figures, the global perimeter security market is expected to grow from USD 14,010.3 Million in 2015 to USD 20,250.6 Million by 2020, at a Compound Annual Growth Rate (CAGR) of 7.6% during the forecast period. The Indian security & surveillance industry is still fragmented, but as crimes, emergencies and terrorist attacks are increasing, we see an increased need for the country to adopt security policies and ensure a safe and secure environment for its citizens. Hence, the need for a sound perimeter system to form part of an organisation's wider security strategy has become indispensable. The Indian market for security and surveillance products is robust and growth is expected to further accelerate in the future. Perimeter security is an essential investment that no enterprise can afford to disregard.

Since security cannot be the responsibility of the government alone, it should consider offering incentives with respect to the adoption and implementation of security systems and technology aiding its implementation. Regular third party security audits should be conducted to ensure that the systems are up-to-date to counter any security threats.

Security begins with securing the perimeter and preventing unauthorised entry. Besides physical security measures, such as access control devices, boom barriers, etc., electronic surveillance today, offers a host of intelligent solutions.



Aditya Khemka,
CEO & Director, Aditya Infotech

LATEST DEVELOPMENTS

According to Aditya Khemka, CEO and Director, CP Plus, "Security begins with securing the perimeter and preventing unauthorised entry. Besides physical security measures, such as access control devices, boom barriers, etc., electronic surveillance today, offers a host of intelligent solutions. Of them, video analytics has particularly taken the perimeter security market by storm: trip wire, wherein the camera signals the surveyor in case the virtual line(s) created in an area is crossed; scene change, where the surveyor is intimated should the camera's area of focus is tampered with; defocus detection, where the camera triggers an alarm or a push message if the focus is tampered with; motion detection, where the surveyor is intimated if motion is detected in a reserved/ restricted area."

Sudhindra Holla, Country Manager, Axis said, "The perimeter protection requirement has increased globally in the last few years due to many reports of perimeter intrusion. It is alarmingly high in India especially in commercial and residential properties. Businesses and individuals suffer from great losses ranging from property to information. Loss of data can lead to higher losses in terms of revenue hence, the need for perimeter protection."

"Perimeter security has come a long way from barbed wire and glass embeds. Today's perimeters are watched and guarded by CCTV cameras that offer 24x7 in-depth surveillance. IR cameras make night surveillance really effective. IR scanners are being deployed on various scales so that the smallest breach can be easily detected and acted upon," explained Hari Om Sharma, Director and Co-Founder, Solus.

According to Sanjay Oberoi, Country Manager, FFT, "Long range, locating, cut resilient, real time fiber optic sensor technology for large deployments, including sterile zones, borders and pipelines – where linear lengths of assets require monitoring that can extend from a few hundred meters to a hundreds of kilometers."

Elaborating on the technology trend Lazley Paul, Manager Business Development, Optex said, "In trending solutions of perimeter security systems using IR based Photoelectric Beam detectors, Laser Based curtain solutions & Optical fiber based intrusion detection system have made perimeter security more prominent and successful. The big advantage of these systems is they are not vulnerable to many of the traditional alarm technology problems like obstructions, changing lighting conditions, animal movements and certainly some of the elements like wind and rain in moderation. A particular advantage is that it can follow the perimeter line without difficulties as the detection sensors is easily installed along the perimeters. These solutions are much more economical and precise in Intrusion detections on perimeter."

INNOVATIONS

Further talking about the latest innovations in this segments Aditya Khemka said, "Latest innovations in perimeter security solutions have been in the field of analytics. While quite a few are in use already, such as trip wire, wherein the camera signals, the surveyor in case the virtual line(s) created in an area is crossed; scene change, where the surveyor is intimated should the camera's area of focus is tampered with; defocus detection, where the camera triggers an alarm or a push message if the focus is tampered with; motion detection, where the surveyor is intimated if motion is detected in a reserved/restricted area, etc. further innovations in perimeter security are

expected to be primarily in this direction." According to Sanjay Oberoi, "Accurately comparing and costing Perimeter Intrusion Detection Systems (PIDS) is complex. There are many factors to be taken into account by customers including selecting the most suitable technologies to use for the application, system performance, reliability, pre and post-sales support, and of course the 'real' cost of delivering a cost-effective PIDS solution. When evaluating the cost of

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Sudhindra Holla,
Country Manager-India,
Axis Communications

the system, you need to look beyond the up-front price of the hardware and software which is only a part of the picture – you need to look at the Total Cost of Ownership (TCO) over the life of the product. Pleasingly, we are finding that customers are starting to look more at the TCO rather than just initial upfront costs. Customers are also becoming more open to adopting new and effective technologies rather than traditional, legacy solutions.

Axis has made several innovations under automation detection without eyes and Automatic notification category. Sudhindra Holla explained in detail: Automation - detection without eyes: Network video allows for distributed intelligence, i.e. units at the edge capable of processing video and extracting relevant information. This requires less bandwidth and reduces the need for storage since only relevant video footage is downloaded onto the server. Even small and rather basic systems provide high quality images needed to enable advanced features such as video motion detection, virtual fence or cross line detection. Compared to a radar or laser system that is typically installed on the inside of a fence, a network camera can be configured to sustain an alarm trigger outside of the fence and thus give an earlier warning. Large systems allow advanced configurations and functionalities.

Automatic notification: When an alarm is triggered, a real time notification is automatically sent by e-mail. Using a remote viewing app, the receiver can then see a live stream from the camera or a recording of the triggering event. Based on this visual information, it is easy to go ahead and decide on the appropriate action. IP-based systems are flexible and scalable as well as being possible to integrate with other security technologies, such as access control and motion sensors etc. Relying on open industry standards also facilitates the development of a wide variety of third party applications.

According to Lazley Paul, "With available perimeter solutions for the market, companies are trying to innovate there solutions by offering something out of the box to their clients, this is happening by bringing various security products one platform. Products are now days being promoted as complete package for perimeter security integrated with surveillance solutions. Laser based solutions are being developed based on the specific market requirements. Customers understand the real need of perimeter protection with different solutions available to cater every market segment.

CHALLENGES

In Aditya Khemka's view, "The primary challenge in Perimeter Security stands: cost efficiency – designing a solution that maximises benefits in the least investment. "The main issue that they face is integration with the native security systems that prevail in the company. If the perimeter security software is not compatible with the other systems, it makes everything very complicated and reduces its effectiveness. Also, it is important that the databases are well updated," said Hari Om Sharma.

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Lazley Paul,
Manager, Business Development, Optex



According to Sudhindra Holla, "Historically, most perimeter defending solutions have been large-scale and stationary. However, that poses challenges for mobile industry and defence forces. The solution here is to create smaller and mobile solutions that can defend large complexes without compromising on image quality. With innovations in this field, it is possible to deploy cameras that are discreet, mobile and can detect intruders in the dark."

The challenges according to Sanjay Oberoi, "There are several issues installers face when choosing Perimeter Security Solutions for their clients. These challenges include low awareness by asset owners/consultants of the design, features and advantages of the solutions available in the market; minimal deliberation at specification/tender writing stage between the asset owner/consultant and the SI/OEM; insufficient research by the asset owner/consultant when setting a budget and seeking budget approval and focus on lowest cost rather than total cost of ownership amongst others."

Meanwhile Lazley Paul said, "Our market is very competitive & price sensitive and mainly installers are not thoroughly aware of solutions available for different market sectors. This generally happens due to lack of knowledge and interest in promoting such solutions, easy sale is a general focus. On the other hand sometimes they face challenges from some non-branded products available at a cheaper price, but facts remain the same, quality & durability comes with a price. The market in India is not much aware where companies like Optex initiate Training & learning activities in different parts of India to share solutions knowledge with applications."

OFFERINGS

Aditya Khemka gives detail about PTZ (Pan/ Tilt/ Zoom) cameras; Access Control Solutions; video analytics such as trip wire, wherein the camera signals the surveyor in case the virtual line(s) created in an area is crossed; scene change, where the surveyor is intimated should the camera's area of focus is tampered with; defocus detection, where the camera triggers an alarm or a push message if its focus is tampered with; motion detection, where the surveyor is intimated if

motion is detected in a reserved/ restricted area, etc. are some of the solutions that we are offering for perimeter security.

According to Sudhindra Holla, "Axis has created the Perimeter Defender- one of our most sought after solutions globally. The Axis Perimeter Defender is a flexible, scalable video analytics application for perimeter surveillance and protection. It's designed for demanding large-scale installations. Some of its benefits are:

- Scalable perimeter protection
- High detection accuracy
- Multiple detection scenarios
- i-LIDS certified
- Easy and intuitive installation

AXIS Perimeter Defender provides accurate detection capabilities with support for multiple detection scenarios. This includes several types of intrusion detection and loitering. AXIS Perimeter Defender enables detection of multiple events occurring simultaneously in different places. It analyses detected events, dismisses non-threatening

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Sanjay Oberoi,
Country Manger-India
Future Fibre Technologies

ones and notifies security staff of potentially critical situations. Your staff can then choose to view detailed video footage to determine the precise nature of the threat – and act accordingly. The result is accurate detection and minimal false alarms.”

Lazley Paul points that Optex focus is regular innovations in technology & products. “We strive to provide unique and one of its kind solutions like recent offering is Redscan Mini Laser Detector, which is a small variant of Redscan specially recommended for perimeter protection, building area protection, Datacenter applications, museum etc. We have some more offering like QUAD lens IR Beam detectors with excellent environmental immunity & Optical fiber based intrusion detection systems. Optex patented technology that is curtain PIRs gives us an edge over other players in the market.”

Mentioning about the improved security function of Souls, Hari Om Sharma said, “We offer CCTV surveillance solutions as well as IR scanners for perimeter security. We also offer the integrated security platform called iSolus, which is the most adaptive, compatible and convenient platform that integrates all parts of the security system and makes it accessible on one single work-station. iSolus can

generate alerts even on the mobile phone and offers dynamic reporting- something that has really improved the efficiency of the security function.”

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Hariom Sharma,
*Director, Co-Founder ,
Marketing and Sales,
Solus Security Systems*

Lastly, Sanjay Oberoi said, “Future Fibre Technologies is a leading manufacturer and developer of fibre optic intrusion detection security systems. Deployed by some of the most security conscious industrial, military and government organisations around the globe, FFT’s advanced security systems detect and locate perimeter intrusions, identify third party interference on oil and gas pipelines, and protect sensitive data network communications cables. With hundreds of installations in more than 60 countries, FFT has established a solid reputation for delivering highly intelligent, reliable and award winning intrusion detection solutions.” FFT’s latest product offerings include:

- FFT Aura Ai-2 (released 2017) - a new product platform featuring extended detection range, enhanced intrusion location accuracy and cut resilient capabilities.
- FFT Secure Fence - for controlled sensitivity with very low nuisance alarm rates and high probability of detection.
- FFT Secure Point - for securing small perimeter critical assets, and especially suitable for any weak points such as an intruder trying to ingress/egress via drain gate.

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