Feature | SECURITY AND AUTOMATION

SECURE PROSPECTS

Smart developers are cashing in on rising demand for security automation and banking on such technology to stand apart in an increasingly competitive market, discovers CHARU BAHRI.

Cities across India are witnessing growing demand for smart homes featuring security and utility automation as well as safe office and factory complexes.

"The size of the Indian home automation solutions market is around Rs 1,802 crore," says **Avinash Gautam, Vice President, Security and Automation, Silvan Innovation Labs**. "Security is the largest subset of this market."

Security automation installations in offices and industrial complexes are counted in the intelligent building management systems market, which Frost & Sullivan predicts will cross Rs 500 crore by 2016, expanding at a compounded annual growth rate of 14.8 per cent.

Growing market

Growing awareness about smart homes means that developers can differentiate their offerings from the competition based on the level of security automation they offer.

"Smart homes featuring security (and lifestyle) automation are driving the growth of luxury housing in India

as developers are pitching technology to the next-gen customers," observes **Vivek Jaiswal, Vice President— Marketing, Sobha Developers**. As a result, security automation is becoming the norm, part of the basic home offering from Tier 1 developers like Sobha, Tata Housing, IREO, Lodha, Mantri, etc.

QUICK BYTES

- Intelligent building management systems market to cross ₹500 crore by 2016.
- Developers in India offer security automation as part of the basic configuration of new properties.
- Cloud-based solutions push security alerts and feeds to smartphone users almost instantaneously.

"Automation — covering security as well as other conveniences — has become part of the standard specifications of our projects because that is what our target audience expects," affirms **Brotin Banerjee, Managing Director & CEO, Tata Housing**. For instance, Tata Housing's Promont property in Bengaluru offers over 400 residences over terraced hillside villa units and four apartment towers set in a landscaped park along the ridgeline. The property will conform to Tata Housing's standard three-tier security system including automatic burglar alarms, motion sensor lighting, standalone gas detection, video door phone and panic buttons. These and other appliances will be automated and, hence, controllable by mobile devices.

Whereas luxury residences currently account for only about 5 per cent of total demand, gradually more builders can be expected to turn to security automation to enrich their home value proposition.

Integrated security

A salient trend in security

Product category	Approx price in ₹
Wireless intrusion alarm systems	22,000
Wired intrusion alarm systems	11,500
Biometric access control based on fingerprints	20,000
Biometric door lock based on fingerprints	25,000
Video door phone (B/W)	8,000
Video door phone (colour)	15,000
Master controller	45,000
Universal remote	11,000
Wireless outdoor camera with IR night vision	19,000
Fixed angle camera	19,000
PIR motion sensors	8,000
Wireless magnetic door or window seal	6,750
Siren or hooter (with strobe light)	6,750
Panic switch with emergency auto-dialler alarm feature	9,000

automation is the swing towards integrated security. According to **Ajay Gupta, Head of Enterprise Security, Building Technologies, Siemens,** "Integrated security is the need of the hour, and a key differentiator between ordinary security installations and advanced ones offering a high degree of availability and

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reliability. Integrating various security devices on a common platform can provide comprehensive views of entire complexes."

Siemens is implementing a comprehensive integrated security solution at the Bharat Diamond Bourse Complex in Mumbai, a 20-acre area covering over 3 million sq ft with a daily inflow of 20,000 people. The bourse houses offices of 2,500 small and large diamond traders, a trading floor, a customs clearance house, banks offering general services as well as walk-in vaults, safe deposit boxes, strong rooms and locker facilities, and offices of other service providers catering to the gems and jewellery sector.

The Siemens security management platform integrates and controls CCTV, intrusion alarms and access control. "Nowadays, popular automated access control devices are barriers, video door phones and card/biometric based access," adds Gupta. "Additionally, strategic requirements may mandate devices like under-vehicle scanners, X-ray baggage and walk-through detectors."

Secure communities

From the perspective of residential property, integrated security automation denotes a shift from single-unit solutions to community-wide solutions. Developments like Windmills of Your

COST CONSIDERATIONS

No price is too high for security. Or is it? Some developers in India offer security automation as part of the basic configuration of new properties. Then, is there scope for them to achieve economies of scale from complex-wide installations?

"Overall, the cost of devices per square foot of secured area decreases as the size of the building or spread of installation increases," observes **Ajay Gupta, Head of Enterprise Security, Building Technologies, Siemens.** "However, the cost also depends on the specific security needs of building occupants."

According to **Brotin Banerjee, Managing Director & CEO, Tata Housing,** "Significant economies of scale do not kick in with very high-end automated security products."

"iLiving Lifestyle Automation Solutions from Eureka Forbes are completely scalable; so occupants can start with fewer devices and grow the network as their needs increase," shares **Marzin R Shroff, CEO, Direct Sales & Senior Vice President, Marketing, Eureka Forbes.** A recent full-on installation in a residence in Jaipur involved 33 automation devices over 4,500 sq ft to meet the home owner's needs. Clearly, the cost and scope of the system depends on the current requirements.

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Minds and The Magic Faraway Tree by Total Environment, Bellezea by Nambiar Builders, Palm Groves by Brigade Group, Leaves by Dhammanagi Builders and Lifescapes by Innovative Builders are breaking out of the mould, offering security automation for the entire community.

Community security automation is a growing trend because it takes security to a new level. "We are seeing maximum interest for our solution that integrates home security systems on a community server, through our proprietary Integrated Property Service Manager solution and other features," says Gautam. "Integrating home-based solutions allows swifter remedial action in the eventuality of a break-in or other untoward happening, as the alerts can be fed to security officers of the complex in addition to the family members who may be away and unable to intervene. Also, we are seeing greater takers for our cloud server for push alerts, cloud video push and cloud video storage. Cloud-based solutions push security alerts and feeds (such as, who's ringing the doorbell) to users' smartphones almost instantaneously."

In keeping with the integration trend, Eureka Forbes offers iLiving Lifestyle Automation Solutions, which integrate intrusion alarm system and security cameras to assist occupants to remotely monitor homes by means of remotes, smartphones or tablets via the Internet. "In home security automation, intrusion alarm systems with 24 × 7 monitoring facility are much in demand," observes **Marzin R Shroff, CEO, Direct Sales & Senior Vice President— Marketing, Eureka Forbes**.

Intrusion alarms integrate various detectors to provide security, such as motion sensors, magnetic contacts, emergency switches, gas leak detectors, smoke detectors and glass break detectors. In the event of a break-in, the panic button can be used to alert and call for help from the remotely-located central monitoring station.
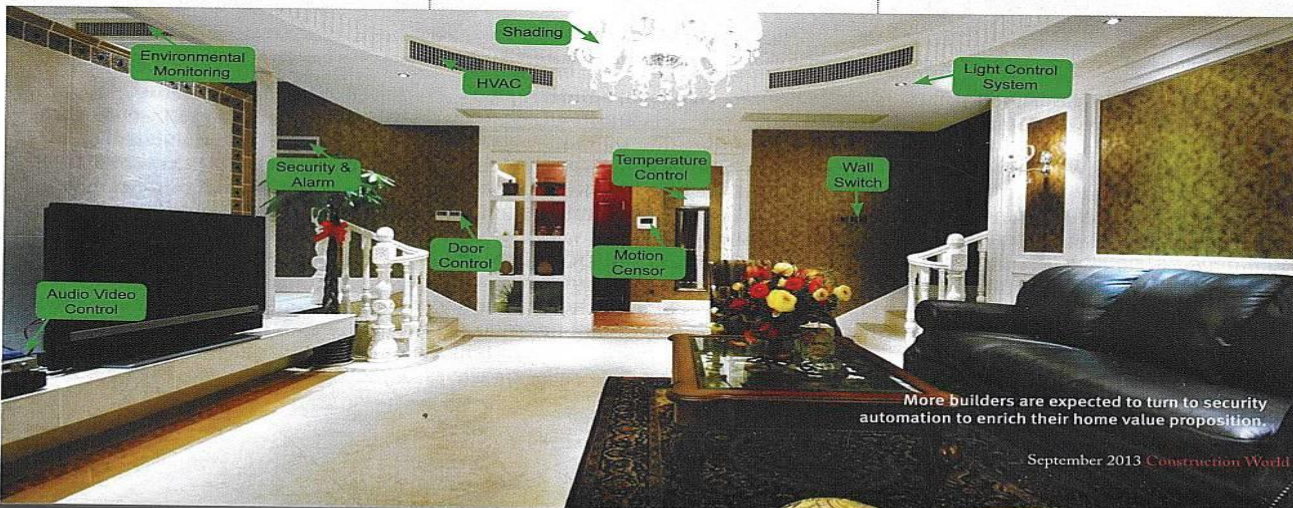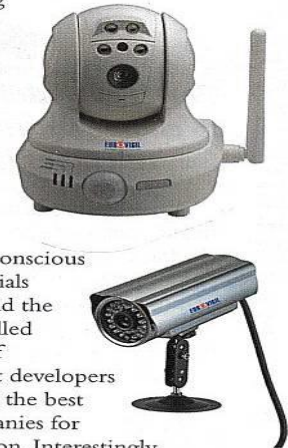
Wireless variants of the solution offer even greater security by virtue of being independent of internal wiring.

Brands and patents

An expanding market for security automation is creating opportunities for all sorts of technology solutions and vendors. But customers are becoming more conscious about the credentials of the provider and the brand of the installed product. Jaiswal of Sobha affirms that developers must partner only the best technology companies for automation solution. Interestingly, Sobha Developers has gone a step further in home development with Sobha Habitech, a complex housing over 300 luxury apartments in Whitefield, Bengaluru.

All the apartments in the Sobha Habitech gated residential community are being equipped with patented smart home automation technology. Why patented? "To ensure a high quality of security automation for this project's elite and IT savvy target audience," says Jaiswal, and explains, "Based on a survey of the IT community, the set of security automation features includes entrance management via an indoor panel, touch pad or smartphone, video

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> ❝ **Power availability is the key to enable security devices at all times in buildings.** ❞
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> ❝ **Versatile ELOS can be linked to CCTVs, burglar alarms and safety access doors.** ❞
>
> – **Sriram Ramakrishnan,** *CEO,* CONSUL CONSOLIDATED

"Power protection is needed wherever there are cameras, video recording devices, access control systems, fire alarms, intrusion detection devices, emergency communications equipment, asset protection or loss prevention systems," emphasises Banerjee. "Uninterruptible power supplies can protect such devices from power spikes, electrical interference, brownouts, surges and outages."

ELOS vs GENSETS

ELOS (Emergency Lift Operating System) has been designed as a cost-effective alternative to traditional diesel gensets. Individual site factors influence the cost of the ELOS system, such as the back-up time required, the number of lifts, and load of additional systems like security and emergency lighting. ELOS is available in a range of 6 kva to 150 kva.

A seven-storey building with a 4-kw lift motor might need a 6-kva/72-v DC ELOS for back-up power of four hours. The starting cost of such a unit is Rs 1,40,000. A 12-storey building with an 8-KW lift motor might manage with a 12-kva ELOS for four to six hours power back-up. A 100-kva ELOS is installed for a complex of 14 buildings.

operate on traditional power back–up systems like inverters that are usually installed in homes," says Shroff about the security automation devices constituting Eureka Forbes' iLiving Lifestyle Automation Solutions.

"Power availability is the key for the functioning of security devices and to ensure security of the buildings," underscores Gupta. "We generally recommend that clients use devices with in–built batteries for backup."

In large buildings, one effective way to surmount this challenge is to tie in the back–up power needs of security automation devices with a larger back–up system, such as that powering lifts during an emergency. For instance, ELOS (Emergency Lift Operating System) by Consul Consolidated takes control of lifts during power cuts. "Versatile ELOS can additionally be connected with security systems encompassing CCTVs, threat alarms, burglar alarms and safety access doors," explains **Sriram Ramakrishnan, CEO, Consul Consolidated.** "Further, emergency lighting in critical areas and even water pumps can be connected with ELOS.

Automated access control devices like barriers, video door phones and card/biometric-based access are quite popular in the Indian market.

surveillance, gas leak sensors, soft panic button and RFID-driven boom barrier vehicular access control."

Power solutions
Automated security devices are only as effective as their backup power systems. Power failure halts the feed to the security devices, stalls the security cover and leaves building occupants vulnerable.

At Sobha Habitech, uninterrupted power supply devices ensure that the home automation solution continues to function in the eventuality of power failure too. Additionally, the UPS keeps the entire automation solution going while the power transitions from mains to DG set power and back.

"The devices of our iLiving Lifestyle Automation Solutions can

Automatic transition between regular power sources and ELOS ensures comprehensive and uninterrupted building security." ELOS is operating in over 5,000 buildings in Mumbai and Pune such as Kanhaiyya Classic, Sunshine Court and Raheja Garden in Pune, and Seawood Estate in Navi Mumbai.

Evidently, takers for innovations in security automation are growing. **CW**

To share your views on India's Security and Automation market, write in at feedback@ASAPPmedia.com