Pandemic slows down, video surveillance market starts looking up

It seems like all we have been talking about these days is access control. Sure, thermal and infrared technology continues to be a hot topic during the pandemic, but for many end users, it was, and still is in some respects, more about deciding which is the best technology to manage the problem. And, more importantly, finding the right company among a sea of companies trying to cash in on the space.

Today, though, it is more about creating an ecosystem that provides the right amount of security for each situation. So, whether it is a cannabis medical facility or critical infrastructure, the right combination of video surveillance and access control technology, all underpinned with sound cybersecurity practices, is the mantra of the day. Not to mention having the right people in place, but that is a story for another day.

Turning back to vid-

eo surveillance, though, it looks like a drop in demand in 2020 is in the rearview mirror, as projects that were put on hold in 2020 are finally getting the green light here in 2021.

Looking at the latest research, the global video surveillance market revenues, which are set to reach $24 billion by the end of 2021, will grow to $31.9 billion by 2025 with a total CAGR of 7.1 percent between 2020-2025, according to London-based research firm Omdia's latest Video Surveillance and Analytics Intelligence Database.

"This marks a quick recovery for the video surveillance market," said Omdia, noting, "Demand that was suppressed in 2020 will return and revenues will be bolstered by projects that were postponed in 2020 due to COVID restarting in 2021."

The size of the thermal body temperature

solutions market has rapidly grown to $1.3 billion globally in 2020, according to Omdia. Driven by COVID 19 precautions, this technology has been adopted by several regions, in particular China, East Asia, India and the Middle East. However, without the growth in thermal body temperature solutions, Omdia found that the global video surveillance equipment market declined 3.8 percent globally in 2020.

Despite being a driving growth factor in 2020, Omdia forecasts the thermal body temperature solutions market will decline rapidly in 2021 to just $137 million, an 89.8 percent decline, ultimately limiting the overall video surveillance market growth.

Interestingly, the Chinese video surveillance market growth, which is estimated to have grown 6.4 percent in 2020 compared to the global average of 2.2 percent, is

mainly attributed to the thermal body temperature solution. "The market excluding such solution is estimated to have decline by 0.8 percent," Omdia noted. "As such, China now accounts for 50 percent of the global market revenues. However, a combination of COVID 19 and the completion of Xue Liang or Sharp Eyes program has resulted in declining government investment

in video surveillance in China. Even so, the government investment will continue to grow, albeit at a slower rate."

Tommy Zhu, Senior Analyst – Physical Security at Omdia, explained: "One of the major factors that drove China's market growth in the past few years was government investment. Although the year of 2020 marks the completion

of the Xue Liang program, the government will continue to enhance the construction of Safe China during its 14th Five-Year plan. In addition, as China is rolling out its trillions of dollars investment in new infrastructure construction, the demand for video surveillance equipment is expected to continue to grow. Besides, China's ambitious to accelerate the transformation

Dear Reader

Many system integrators, especially small ones, often face problems dealing with their suppliers of materials to execute their projects. The issues could range from delivery delays, wrong material supplied, product quality issues, poor training and technical support, and a host of other reasons which leave a system integrator with a feeling of being short-changed.

An SI's business involves dealing with different supplier types, ranging from local vendors and small distributors to large distributors, importers and manufacturers. Knowing these different categories and how one will need to deal with them differently is very important.

Large multinational manufacturers and distributors will usually have their processes in place and their terms of supply of materials remain the same for all their clients. Their dealings are transparent. However, to work with such entities SIs need to qualify to be added as a customer. Tiny system integrators who operate in the informal sector usually find it difficult to meet the entry criteria of these large suppliers, as the SI's credentials may not qualify them to work with the large suppliers. They have to then depend on other lower level supply partners.

Working with large suppliers also has its pros and cons. Some of the cons could be, their long drawn processes and delivery lead times, and often inflexible business policies. Smaller suppliers then come into play and fill this gap. They may offer tiny system integrators better pricing, faster deliveries, and often, even a credit line, and that too without any strings attached. This may work well with the SI, till a dispute arises. The redressal mechanisms are usually not in place to resolve the differences, as such, the relationship takes a beating and the project under execution may suffer delays.

Imagine, a SI places an order by making 100% payment in advance to the supplier, for a certain model of a device, for a project which is already running behind schedule, and the supplier ships the wrong products. Then all hell breaks loose, as the SI is unable to meet his deadline with his client, and his money gets stuck.

A supplier with accountability will take responsibility for the quality problem and work forward to address it quickly. It may offer to remove the wrongly shipped devices at it's cost, while simultaneously free shipping the right products to the SI. But a supplier without accountability is more likely to deflect responsibility, which can tell the SI to first send back the previous shipment and then only the right products will be shipped.

This is just one example, there are many other reasons why business disputes may occur. They can be costly and time-consuming, rendering an otherwise profitable project into a probable loss for the SI.

I believe that in a mature trade regime such business disputes should be resolved amicably, quickly and in an inexpensive manner by settlement via arbitration and conciliation. Commercial disputes otherwise can take a real bite out of any SI's bottom line.

Here, trade associations could play the role of an arbitrator as part of the service to their members. They could provide a framework for the arbitration of disputes, usually embodied in a set of 'Arbitration Rules'. The associations could also provide a pool of trade arbitrators to conduct the arbitrations, besides an administrative set-up to organise the settlements. With the maturing of the security industry one hopes to see such mechanisms evolving in future.

Till we meet next month, Stay Safe and Keep Others Safe.

G B Singh
Group Editor
gbsingh@1stasset.org
@EditorGB
linkedin.com/in/gbsingh9

Abloy UK launches the CIPE Manager access management system at International Security Expo 2021

Abloy UK recently showcased its range of innovative digital access solutions at the International Security Expo 2021 including a new range of products which includes CIPE Manager, a new access management solution created to meet the demanding requirements of critical infrastructure protection.

CIPE Manager allows organisations to manage all their keys, locks, and access rights from any location, with a user-friendly, cloud-based management system, which can connect with every locking solution in Abloy's digital portfolio.

These include Abloy BEAT, the keyless Bluetooth padlock, the electromechanical PROTEC2 CLIQ®, and the SMARTair™ access control system, as well as Abloy's high-security mechanical master key systems. This range of traditional and digital access solutions can be combined in a variety of ways to meet virtually any requirements, providing flexible, scalable, and compliant security, while helping to control the movement of people in a wide range of industries, building types, and applications.

ABLOY BEAT is a new keyless padlock that combines three main components: a digital key, a mobile application, and a heavy-duty, Bluetooth padlock, all managed with the visual CIPE Manager user interface. BEAT is IP68 rated and ATEX certified, and is designed specifically for the physical protection of critical infrastructure, businesses, and remote sites, and physically secures property while offering customers improved operational efficiency, reducing both logistics and costs.

PROTEC2 CLIQ® is an easy-to-use locking system, approved for UK government use, trusted by many critical infrastructure organisations across the globe. It enables remote key management and provides comprehensive audit trails on locks and padlocks which fulfils the requirements of regulators.

The risk of lost or stolen keys is eliminated as they can quickly be removed from the system, so security can be confidently maintained in circumstances where a key has been misplaced. SMARTair™ wireless access control system that provides advanced, user-friendly access management with multiple credential options – key cards, fobs, and mobile phones. With intuitive management software, the company controls, identifies and updates exactly who can open every door. They get an instant overview of their site's security status.

The SMARTair Openow™ mobile solution allows controllers to send, revoke and update virtual keys remotely in seconds. SMARTair can help fulfil fire and escape compliance requirements and is ideal for use in high-traffic offices and administrative buildings.

Steve Wintle, Head of CI at Abloy UK said that it provides a clear overview of the critical locking points, connecting mechanical, electromechanical, and keyless locking solutions in the same system. Access rights can be updated, and access permissions granted and revoked remotely from any location with most mobile devices or desktop computers, using the browser-based user interface."

"CIPE Manager provides digital convenience, control, and security that simplifies managing daily processes, adding operational efficiency and complete situational awareness – ultimately improving security, efficiency, and saving money.

Anviz provides FaceDeep Series AI-based face recognition terminal

Along with administering vaccines, face masks have become another important way to keep one safe. In public areas like airports, hospitals, schools, offices, people are complying with mask rules.

Security industries had to think of a way to ensure safety of individuals and to also keep up their business during the pandemic. And the solution was face recognition devices with mask and temperature detection features. Demand for face recognition devices has increased to 124% in the past year.

Anviz as a provider in the security industry introduced FaceDeep Series to meet the global demands. FaceDeep Series is the new AI-based face recognition terminal equipped with a dual-core Linux based CPU and the latest BioNANO® deep learning algorithm.

According to Mr. Jin, the R&D director of Anviz, in FaceDeep Series the facial mask recognition rate increased to 98.57% from 74.65%. Next Step for Anviz is to adapt facial recognition to the iris algorithm and try to raise the accuracy rate to 99.99%. Since 2001, Anviz continuously updates its independent BioNANO algorithm, improving the fingerprint, facial, and iris recognition technologies. In this global pandemic environment, they are doing their best to provide customers with a more integrated, convenient and efficient smart solution.

Pandemic slows down, video surveillance...

to a digital economy will boost the investment in both public and private sectors."

Omdia expects average selling prices of video surveillance equipment to increase in the short term as US-China geopolitical tension and supply chain constraints from the COVID-19 pandemic increases pressure on vendor margins.

In recent years U.S.-China geopolitical tensions within the video surveillance industry have escalated, and Omdia believes that the initial NDAA and blacklisting of companies within the U.S. is being augmented by new FCC regulations.

"The semiconductor shortfall driven by geopolitics and COVID impact has affected all industries, and video surveillance is no expectation," said Oliver Philippou, Research Manager - Physical Security at Omdia. "This disparity between supply and demand is expected to last until mid-2022."

Longer term Omdia expects that there will be a greater adoption of the network camera products using AI deep learning acceleration and inference at the endpoint. This will result in higher average prices of network cameras.

A new cloud based platform for mobile credentials

ID solutions provider and card manufacturer Databac is embracing digital transformation in identification with the launch of Databac Connect. The cloud-based platform offers a secure solution to issue and manage virtual ID cards for identification, access control, vending and other applications.

Powered by technology partner Any2any, Databac Connect combines security with ultra-convenience, for an end user experience that is entirely intuitive. Once enrolled on the system via the Loop app, users use their mobile phones in the same way as physical ID cards. As a SaaS solution, implementation is instant, offering ease of use, automatic upgrades, support and maintenance, and full scalability. Loop can be custom-developed for systems integrators and large, multi-site and multi-tenant companies.

Digital credentials use mobile-enabled digital keys, certified identity validation and biometric security (facial or fingerprint) for secure authentication. They can incorporate Legic, Mifare and Desfire technologies, and can be paired with physical cards for hybrid, 'phygital' identification.

"The potential and sheer convenience of cloud-based identification will drive adoption of mobile credentials, or 'virtual wallets'. We see this as complementing physical ID cards, which offer visible security, particularly in non-cloud environments, like prisons or hospitals," said Databac CEO Charles Balcomb. "Databac Connect forms the basis of our digital strategy, on which we will build our growing range of cloud solutions, as we support our clients on their own digital transformation journey."
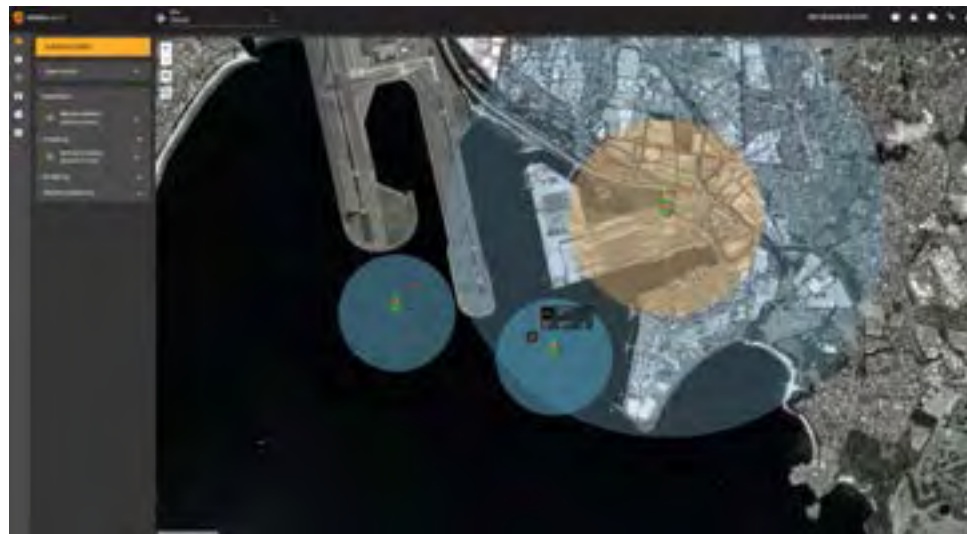
DroneShield's SonarOne Sonar Detection System

DroneShield Ltd has announced a material capability upgrade to its multi-domain DroneSentry™ counterdrone / counter-UxS threat awareness and response system, via addition of SonarOne™, cutting edge sonar detection system, for directional real time reporting of underwater threats.

SonarOne™ is a sophisticated sonar monitoring device capable of detecting and tracking hostile unmanned underwater vehicles ("UUVs") or diver intruders in protected waters. Ideal for deployment around naval vessels, harbours, and critical infrastructure, SonarOne™ is easy to install and monitor via the DroneSentry-C2™, DroneShield intuitive and easy to use operator interface, with no specialist sonar training required.

Oleg Vornik, DroneShield's CEO, commented, "With the inclusion of SonarOne, the DroneSentry system provides a comprehensive all-domain awareness and protection system, including Unmanned Aerial Vehicles (UAVs), Unmanned Ground Vehicles (UGVs), Unmanned Water Surface Vehicles (USVs), UUVs, and divers.

As the original counter-UAS market pioneer which set the industry standards since its inception, we are pleased to continue leading the market by offering this breakthrough unique capability to our customers globally."

With a substantial detection range for divers and UUVs, SonarOne™ can protect large sites with few installation points, reducing the amount of preparation required by the installer and the need for pre-existing infrastructure. With its directional capability and simultaneous tracking of multiple targets, SonarOne™ provides the operator with complete awareness of multi-directional underwater robotic and manned swarm attacks.

The product is unrestricted in deployment, meaning it is available for sale, and expected to be of interest to, a wide range of customers including ports, harbours, naval bases, private yachts, residences, power stations, and various offshore platforms.

HALO Smart Sensor v2.5 from IPVideo Corp.

IPVideo Corp. has announced that it has released new product version 2.5 of the HALO IOT Smart Sensor providing instant Health and Indoor Air Quality readings and alerts.

The HALO Smart Sensor, the worldwide leader for vape and vape with THC detection is now helping facilities monitor their indoor health and air quality.

As part of the newest v2.5 hardware release HALO provides both a real-time air quality and health index and sends alerts when either index falls into danger zones. In conjunction with HALO Cloud, the sensor also provides critical reports that allow building owners and administrators to demonstrate they are providing a healthy indoor environment and/or validate that facility improvements are needed.

With new calibrated C02 sensors, the HALO 2.5 provides a cost-effective and flexible alternative for any facility or campus environment that is looking for the healthiest environment for its staff, students, patients, and tenants.

HALO hardware release 2.5, in conjunction with HALO Cloud, provides a dashboard displaying all air quality and health events, current and historical, and empowers staff to provide an effective response to any monitoring points. This reporting capability allows owners and administrators to provide real-time proof of the environment's health and alleviate concerns of their customers, employees, and communities.

The new 2.5 features in HALO allow its users to capture comprehensive building awareness with an all-in-one device. Used for health and safety, HALO is a vape detector, an air quality monitor, and a complete security device for privacy areas where you do not want to use a camera or microphone. With a single device HALO provides; Building Health Monitoring, Indoor Air Quality Monitoring, Vape Detection, THC Detection, Gunshot Detection, Emergency Key Word Alerting, Audible alerting, Light/Occupancy alerting, Chemical alerting, VOC alerting, Tamper alerting as well as Temperature, Humidity and Pressure alerting.

Kami Doorbell Camera

The Kami Doorbell Camera is a smart video doorbell that can be powered by a rechargeable battery, with a USB cable, or with your existing doorbell wire. It offers dual-band Wi-Fi connectivity and intelligent motion alerts, but you'll have to subscribe to a cloud plan to access vehicle and animal detection and to view recorded video. It's a versatile, solid option, but if you don't mind going the wired route, the Ezviz DB1C wire doorbell offers a higher resolution, local and cloud video storage options, and plenty of support for third-party smart home devices.

Measuring 5.3 by 2.5 by 1.3 inches (HWD), the Kami doorbell isn't quite as large as the Nooie Cam (6.6 by 2.3 by 1.5 inches), but is bulkier than the Vivint Doorbell Camera Pro (4.6 by 1.5 by 1.3 inches). The Kami's glossy black and white polycarbonate enclosure has an IP65 weather-resistant rating and contains a camera assembly and a doorbell button on the front, and a speaker on both sides. Around back are two wiring terminals, a mini USB power jack, and a tamper key.

The doorbell can be powered using your existing doorbell wiring or via USB using the included USB cable. Alternately, you can avoid wiring altogether and power the doorbell using the included rechargeable battery pack, which is rated to last up to 90 days between charges. The doorbell offers dual-band Wi-Fi and will connect to your home network using either the 2.4GHz or 5GHz radio band.

The Kami uses a 1080p camera that captures video at 20fps. By way of comparison, the Ezviz DB1C and Arlo Essential Video Doorbell Wire-Free use Ultra HD (1,536 by 1,536) cameras with enhanced dynamic range technology. The Kami has a 160-degree viewing angle and uses six infrared LEDS for black-and-white night vision. It supports two-way audio and offers person detection and face recognition.

Zenitel TCIV+ Video Intercom

Zenitel has announced the launch of the TCIV+ (Turbine Compact Intercom Video) Station. Combining the unrivaled high-quality audio of the company's Turbine Compact Series with exceptional video, the TCIV+ provides users with a communication solution for any situation and allows for seamless integration with other security systems.

With Zenitel's new Turbine TCIV+ video intercom station, users can mitigate security risks more effectively than ever before, through a unique combination of HD Voice and Video, as well as a new chipset for enhanced function, all of which provide intelligent communication at the edge.

The TCIV+ employs powerful audio technology to safeguard people, property, and facilities. The 10W speaker, matching 10W class D amplifier, and digital MEMS microphones provide open, duplex, hands-free communication – and with an audio amplification that powerful – the TCIV+ can also be used as a public address speaker. With built-in software capabilities, the station can adjust a voice that is too loud or too soft to an intelligible signal for the call recipient. The speaker volume automatically adjusts to an audible level to overcome ambient noise levels.

The new TCIV+ packs crystal-clear, HD voice and video technology within the same form factor as the Turbine Compact (TCIS, TCIV) range. Installation, functionality, and capabilities remain the same as with other Turbine stations, making it easier to upgrade. The wide-angle lens delivers excellent performance, day or night. The Field of View feature captures more of the area around the station, and a 30-per-second frame rate provides a natural look of any movement caught on the camera.

For performance, the 4x Cortex-A53 CPU cores and 512MB LPDDR4 RAM, and 1 Gb flash memory ensure that the TCIV+ series is processing data faster, which translates into stability, uptime, and a long product lifetime. The enhanced efficiency in data processing provides the opportunity for integration into various security and business platforms and opens the door for greater system capabilities in the future.

The TCIV+ incorporates a sophisticated design. The station is well protected from damage and destruction, thanks to its solid aluminum, die-cast frame. The UV-resistant, anechoic speaker design provides an open flow of audio, and is protected from tampering, with speaker-grill angles that prevent direct access to the speaker, as well as an acoustically transparent poke screen that prevents perforation attempts while maintaining an open audio flow.

The TCIV+ is cyber-secure, meeting stringent IT requirements for mission-critical systems and providing defense from cyber threats and attacks. Cyber defensibility is addressed using integrated IEEE 802.1X network access control. As a Center for Internet Security (CIS) SecureSuite Member, Zenitel follows and contributes to the global standards and best practices that are continually refined.

Transit 112 helps automate secure access in public places

The safety of shop owners and tourists is paramount in city centres. Dynamic vehicle barriers, such as speed gates, bollards and barriers are often installed to keep out unwanted visitors. This is also the case in other places, such as business parks and leisure parks. The new Nedap Identification Systems Transit 112 helps meet these challenges and also those of dealing with emergency services that always need access whilst simultaneously ensuring access will be smooth and secure.

Nedap offers a fast, convenient and safe access solution for emergency services to restricted areas by means of Transit 112. With its long-range identification technology, Nedap makes it possible to provide emergency services fast, safe and reliable access, without having to stop the vehicle. This is crucial in (critical) situations when every second counts.

Transit is a long-range reader that can identify transponders up to 10 metres away. This Transit reader is pre-programmed for a specific RFID tag containing 112 coding, which is allocated to emergency services. The emergency vehicles are then equipped with an RFID transponder. There are two types of vehicle transponders available: a transponder that is attached to the inside of the vehicle's windscreen with a suction cup and a fixed transponder located behind the grille of a vehicle. The combination of the Transit long-range reader with a pre-programmed 112 transponder ensures 24/7 access for emergency services.

Transit 112 can be integrated as a stand-alone solution, connected to barriers or to any existing parking management or access control systems, no matter the brand or type of access control system. When a vehicle equipped with a Transit 112 transponder approaches the gate, it opens automatically without the vehicle having to stop. In the event of a critical situation, emergency services can automatically pass all vehicle barriers, quickly, safely and without delay.

Transit 112 can be used in any scenario that involves a vehicle barrier. It is an ideal solution for situations where many people come together, such as city centres: pedestrian areas, car-free areas, shortcuts and car parks; businesses: industrial areas, industrial estates, residential boulevards and individual enclosed private areas; leisure areas: campsites, holiday parks and amusement parks.

The Transit 112 system has been designed to provide safe and fast access for emergency services to restricted areas with speed gates, bollards and other barriers. And in addition, it offers a reliable and robust solution for all weather, sun, snow, hail or rain 24/7.

TiOC 2.0: Customisable security alarm system made possible by Dahua

Dahua Technology has launched its upgraded Three-in-One Camera series – the TiOC 2.0. Aside from its Active Deterrence function, it is also equipped with Smart Dual Illuminators, VoiceCatcher technology, and other intelligent features that can help ease monitoring operation and customise alarm systems based on the actual needs.

The upgraded TiOC 2.0 features Smart Dual Illumination technology that can flexibly switch between IR mode and white light mode. The smart illumination mode adopts a deep learning algorithm to detect a target, when the Smart Illumination Mode (default mode) is enabled, the supplementary white light will only turn on when a target has been detected in the monitored area (PTZ camera tracks the target).

The active alarm will be triggered as well (siren and blue & red light) if the target enters the rule area. When the target leaves the monitored area, the supplementary white light will turn off (PTZ camera goes back to preset) and the IR illuminator will turn back on, which can significantly help reduce light pollution during nighttime. Together with other modes including IR Mode and White Light

Mode, the smart dual illumination technology can meet various scene requirements of customers.

The Dahua VoiceCatcher technology adopts a high-sensitivity dual mic array – a newly designed audio acquisition circuit that can intercept external circuit interference. With Dahua's self-developed noise reduction algorithm and high-performance SOC, this feature significantly increases the camera's audio pick-up distance by 7 meters compared with the previous generation of TiOC (based on standard laboratory environment).

Powered by OPC (Optical Path Compensation) technology, the TiOC 2.0 cameras can correct the angle of refraction of different light rays, allowing Dahua IPCs to output brighter and clearer black & white images with an F1.0 large-aperture lens.

Moreover, Dahua innovatively adopts an F1.0 super large aperture which greatly improves image quality (IR cameras on the market mostly have an F1.6 aperture). The F1.0 aperture lens of TiOC 2.0 cameras increases the light input by 1.96 times and 2.56 times compared with F1.4 and F1.6 respectively. This technological breakthrough enables a

smooth visual experience with high brightness and real-time 4K resolution at 25/30 fps even when AI is enabled.

Aside from the DMSS app, the TiOC 2.0 camera series also works with WEB/NVR software. It allows the configuration of alarm-in ports directly on the webpage interface, providing an alarm receiving or one-tap arming/disarming function that can control both siren and warning lights with just a click of a button through the alarm system interface.

It features 11 built-in alarm sounds and supports importing of custom voice audios that can be used as a welcome message in stores and as a deterrent in restricted areas.

This upgraded series also adopts an AI algorithm instead of conventional PIR sensors to improve its event detection accuracy. It boasts an array of AI functions, including SMD 3.0, perimeter protection, making it suitable for various application scenarios including public areas and private places. It is equipped with an F1.0 large aperture and optical path compensation technology – breakthrough technology in the industry – that can capture a brighter and clearer image even under low-light conditions.

Eagle Eye Local Display Station

The new Eagle Eye Local Display Station video appliance has been engineered to integrate seamlessly with Eagle Eye's cloud VMS, displaying up to 32 cameras on any standard TV

display and up to 164 cameras across multiple display pages.

The Eagle Eye Local Display Station is available in two models, the DS100 which supports a single display, and the

DS200 which supports two displays. Both models offer ultra-low latency, crisp, and clear video. The software provides high reliability and customizable layouts which are controlled and man-

aged from the cloud.

The Eagle Eye Local Display Station is designed to deliver live video without the cost, complexity, and mainte-

nance of a workstation, making it ideal for use in public areas or remote locations with less technical support staff. It delivers live video on almost any monitor. And,

it is designed using high quality components, with embedded software technology that ensures reliability even during power outages.

IDIS tech-explainer eBook on video analytics to better security, safety and business intelligence

IDIS's tech-explainer eBook – The Benefits of Deep Learning Driven Intelligent Video Analytics – explores how a new generation of AI video solutions is delivering better security, safety, operational efficiency, and business intelligence.

The eBook, which can be downloaded now from the IDIS website, reflects the company's commitment to supporting its systems integrator partners as they focus on delivering advanced video solutions into growth sectors.

In recent years, the terms 'intelligent' and 'artificial intelligence (AI)' have been applied to many different types of security systems, but without agreement on what AI means, says IDIS, so it's important to understand that not all solutions are designed to the same standard or deliver equal value.

By contrast, effective deep learning video analytics can deliver multiple benefits, from preventing 'alarm overload' in busy security control rooms, to freeing up personnel resources and enabling security provision to be better focused. Metadata search functions also allow users to benefit from advanced interrogation of single and multiple cameras, speeding up investigations and automatically locating objects or people

powerful deep learning technologies. This newest generation AI solutions leverage neural networks made up of multiple layers of algorithms and advanced processing and can be more accurately called 'intelligent' video analytics.

Deep learning's real value comes from its ability to detect events of interest and distinguish these from video data input which is just 'noise'. But some caution is still needed, warns IDIS: deep learning video solutions can still disappoint if the engines and algorithms that drive them are not fully trained and able to recognise objects reliably and accurately.

"The best AI offerings today add value for customers by rapidly increasing productivity and efficiency, and providing useful business intelligence," says James Min, Managing Director, IDIS Europe. "This new eBook explains how systems integrators can get past the jargon to support end-users, building a compelling business case that both addresses immediate priorities and demonstrates long term return on investment."

of interest.

The eBook also outlines how AI video can support efficient return-to-work strategies and ensure COVID-secure facilities and workplaces using highly accurate analytics for face mask detection, social distancing adherence, people counting, and occupancy monitoring.

Guidance is also provided for systems integrators, demonstrating how the same functionality will deliver value beyond the pandemic, with benefits such as facilities and workspace optimisation, and actionable insights, particularly for the retail and hospitality sectors.

Mi 360 Home Security Camera 2K Pro review: For those who want surveillance in high resolution

Xiaomi has introduced the Mi 360 Home Security Camera 2K Pro. The new security camera comes with 2K resolution. The camera is capable of providing 360 degree surveillance and aims to provide value for your money.

The Mi 360 Home Security Camera 2K Pro is essentially designed to be used as an indoor camera, but its compact form factor makes it ideal to be positioned outside. Sadly, it doesn't come with any water resistance. So, if you install the camera outside, please make sure it is covered and doesn't get damaged by water splashes.

At the front of the camera, you get an indicator, lens, microphone and a microSD card slot that can be revealed by pushing the lens upwards. The Mi logo is positioned under the lens and completes an overall minimalist design.

The rear of the camera features a microUSB port, loudspeaker and a reset button. Another advantage of the Mi 360 Home Security Camera 2K Pro is that it weighs just 400 grams. It can be carried around easily and even the wire is quite long, allowing you to position the camera far away from the power socket.

One of the issues people face with IoT devices is to set them up. Xiaomi has made the process very simple with the Mi 360 Home Security Camera 2K Pro. The security camera comes with nearly everything you need to run it within the retail box. The power adapter, cable and a bracket are included within the packaging. The last can be used to install the camera on a wall.

For connectivity, Mi 360 Home Security Camera 2K Pro can

work on 2.4GHz and 5GHz Wi-Fi signals. There is also Bluetooth 4.2 and support for Amazon Alexa and Google Assistant. It allows you to check the feed on Echo Show or Next Hub devices.

Mi 360 Home Security Camera 2K Pro comes with infrared night vision which helps you get decent picture quality even in lowlight or night. Of course, it is not the same as day surveillance, and you get a lot of grain, but it's passable for a security camera.

It sends out notifications after detecting anyone in the field of view. These notifications can be customised using the Mi Home app. There is also an AI motion detection feature, which can follow the detected humans, if enabled. All these features work just fine on the Mi 360 Home Security Camera 2K Pro.

SimpliSafe unveils its first proper outdoor cam

For years, SimpliSafe's only option for outdoor video monitoring was its indoor-only SimpliCam wrapped in a weatherproof rubber sleeve. Now, the company is finally offering a proper, battery-powered outdoor cam, complete with a weatherized shell, a spotlight, and people detection.

The SimpliSafe Wireless Outdoor Security Camera is a svelte, cylindrical camera with

a swiveling magnetic base, Wi-Fi connectivity, Alexa and Google Assistant support, and a rechargeable, replaceable battery that promises to deliver between 3 and 6 months of battery life on a single charge.

Equipped with two antennas, the new SimpliFi outdoor cam is capable of connecting to 2.4GHz Wi-Fi networks, but it won't work without a SimpliSafe base station. The Out-

door Security Camera has a 140-degree field of view and supports HDR video resolution up to 1080p (720p and 480p are also options, with 720p being the default), as well as 8x digital zoom.

The camera boasts two types of night vision: full color, with help from the integrated spotlight, or black-and-white infrared. Activity zones let you designate which areas of the frame

can trigger motion alerts, allowing you to include (for example) your driveway while excluding the street or a neighbor's window.

The camera also supports people detection, but only if you pony up for one of SimpliSafe's subscription plans. The company's Self-Monitoring plan offers unlimited video events for up to five cameras, while a $25/month Interactive Monitoring plan adds

24/7 professional monitoring, unlimited video events for up to 10 cameras, and cellular backup for the base station in case you lose your regular internet connection.

Other features on the outdoor cam include two-way audio and an 80dB siren for scaring off intruders, while "smart AI" helps to preserve battery life (presumably by preventing swaying branches and other random events

from triggering video recording).

The Outdoor Security Camera has an IP65 rating, which means it offers complete protection from dust ingress, as well as resistance to powerful jets of water from any direction. In other words, the cam shouldn't have any trouble withstanding rainy or snowy conditions, no rubber sleeve required.

Hikvision provides their HikCentral video management software to enhance real-time monitoring at Care Protect's office in Belfast

When Care Protect wanted to upscale its operations in healthcare safety and monitoring services to a large private provider, it turned to Hikvision's HikCentral video management software, in combination with off-site cloud video storage from Manything Pro.

Care Protect is an innovative organisation. It was created to promote excellent, sustainable and consistent care delivery in health and social care settings. That innovation is reflected in the way the company integrates technology into the very heart of its care provision services. It uses the latest camera and audio technology, alongside the latest secure cloud-based video storage services, with a team of health and social care professionals reviewing and assessing around the clock.

Because of this diligence in monitoring, high levels of independent scrutiny can be guaranteed. The result is that through this transparency, reassurance is available for residents and their families, knowing that vulnerable adults and children are better safeguarded and protected. In all cases, system use is with the prior consent of residents and relatives or next of kin only.

Care Protect's independent monitors are very well qualified, with years of relevant health and social care experience, together with all necessary Disclosure and Barring Service (DBS) checks and Security Industry Authority (SIA) licencing. Collectively they offer a high level of sector knowledge and expertise essential to assist and advise those with responsibility for safeguarding and quality and clinical governance. One of the key reasons that Care Protect was established was to help address public concerns over incidents of poor care or malpractice in health and social care environments,

some of which have seen wide media coverage.

As a result, sound and motion detection alarms, infrared filming, and reliable connectivity is utilised so immediate alerts can be raised if an incident is seen or heard or there is an internet or maintenance issue. Video recordings also include the use of privacy settings to block any agreed zones or areas of view as required.

With video footage playing such a crucial role in Care Protect's service, it is of pivotal importance that the system in place to manage the viewing of that video is stable, reliable and effective. One of Care Protect clients is a large private healthcare provider, for which Care Protect monitors bedrooms and communal areas of child and adult wards in hospitals nationwide throughout England. Care Protect also monitors elderly care homes for several different providers.

Care Protect's IT & Systems Director, Andy Johnson, said Care Protect Directors have a background in the care industry, which has informed the monitoring system the company utilises. "We've developed a system based on the reviewing of recorded footage by social workers and nurses to advise, initially, on the quality of practice," Johnson explains.

"The contract with the large private healthcare company saw our operation change to caring for patients who pose a high risk to themselves for self-harm. Because of the importance of this monitoring in ensuring the patients' wellbeing, it was critical that we were able to efficiently manage that video, both in terms of live monitoring and off-site video storage."

The new focus required an upscaling of Care Protect's operational office in Belfast (the company's head office is in Yarm, Cleveland). A key

element of this upscaling was the use of Hikvision's HikCentral video management software, which needed to be able to deliver high quality images to a Samsung multi-screen video wall for real-time monitoring.

Video management via HikCentral at Belfast is critical, as is the offsite cloud video storage provided by Manything Pro, as Care Protect is careful to ensure there is no local recording of video onsite at the customer's facilities so that it cannot be tampered with. Resident and patient rights to privacy remain at the core of Care Protect's operations, and they ensure they comply with and exceed all relevant legislation and guidelines, including the Data Privacy Act and Surveillance Camera Code of Practice.

HikCentral is a comprehensive, intelligent surveillance platform. The newly improved HikCentral delivers data and intelligence via a pre-installed VMS on standard, off-the-shelf servers, and contains advanced functions including advanced live view and playback, thermal imaging, queue detection, low bandwidth adaptability, video linkage with access control, enhanced alarm management and smart wall operation – as in use at Care Protect.

HikCentral manages the cameras, the smart wall monitors, and the video decoders that drive the images to the multiple screens in the Belfast hub. These screens cover 21 separate hospital sites for Care Protect private health provider customers. "One of the key features of HikCentral for us was the new smart wall functionality," Johnson says, "Allowing us to manage multiple screens from the one place, rather than having software to run an application to then put it on the screens."

Care Protect also makes good use of HikCentral's Smart Maps function. "We use Smart Maps within HikCentral for interactive floor plans for the hospitals we monitor," Johnson explains. "We have a selection of the communal cameras live on the maps, and our reviewers can click into

the relevant area and get an overview without having to further interrogate those floor plans."

The appeal of this VMS, he says, was down to both the newly mature and advanced functions of the latest version of HikCentral, as well as its very competitive pricing compared to its rivals. Care Protect uses 500 HikCentral licences and a variety of Hikvision cameras are deployed across the customer's facilities, predominantly unobtrusive 4MP and 6MP high resolution network mini domes. Hikvision Smart functionality on those cameras also proves extremely useful, Johnson says.
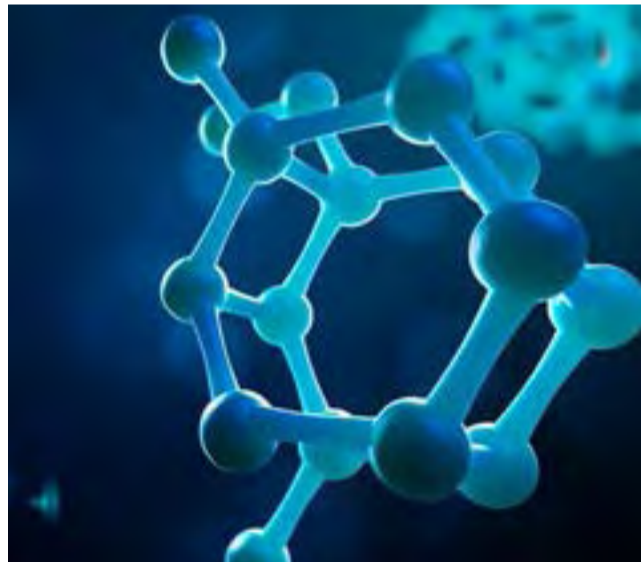
"The use of Hikvision Smart events on the cameras helps our reviewers to know how many people are in a room or a designated zone at a particular time," he says. "These sorts of smart features can greatly assist our reviewers, allowing us to be more efficient and effective in responding to the

needs of patients."

Those in-built smart camera functions are complemented by the use of audio analytics. In some cases this audio software is used to trigger cameras so that potential incidents can be automatically viewed and assessed by a Care Protect reviewer. The results of utilising this technology, according to Johnson, have been highly successful. "We have been able to upscale our operation to 27 screens, to accommodate 21 hospital sites for our biggest customer, to great satisfaction from their end as it is safeguarding the vulnerable patients that they care for," he says.

In addition to monitoring the live streams for certain hospitals, Care Protect's independent monitors are tasked with reviewing all recorded video to ensure that the quality of care provided meets the required standards. For this they utilise the services of Hikvision cloud video technology

partner, Manything Pro. Care Protect has almost 3,000 cameras recording video to the Manything Pro platform.

All video is stored offsite in the secure Manything Pro cloud and can be accessed via the Manything Pro app and website. Manything Pro software runs on Hikvision cameras and is constantly monitoring the bandwidth conditions on each site. If necessary, the software will dynamically adjust the video bit rate to ensure recorded events are sent to the cloud even in poor network conditions.

"We use Manything Pro for our cloud storage, so any recorded footage goes up to them, and we review through their website," he says. "Some providers that we work with aren't part of the live streaming through HikCentral in our Belfast monitoring centre. For these sites we also use the Manything Pro app and website to view the camera live streams."

British chemical plant in Czech Republic upgrades security with G4S security solution

A revamped G4S security solution at the chemical industry company Synthomer's operational centre in the Czech Republic ensures that employees and valuable assets are protected from potential threats.

The Sokolov region in western Czech Republic, not far from the German border, is home to an operational centre for the British chemical industries company Synthomer, one of the world's foremost suppliers of water based polymers. Synthomer's polymers are used to manufacture many everyday products: from the medical gloves used by doctors and dentists, and the sound dampening in cars, to the backing of car-

pets in the office.

As with any site where chemicals are stored and used, security is a top priority and the G4S team in the Czech Republic has recently revamped the entire security solution at the site to give the best protection to Synthomer's staff, property and other important assets.

Risk-based approach

There are a number of risks and threats to consider when preparing the security for a chemical site such as putting in strong measures to prevent unauthorised entry into the perimeter and to key buildings within the site. You have to consider the assets that are held on site

that you do not want to fall into the wrong hands, such as important technology that is used in the chemical manufacturing process, as well as further restricting access to high hazard zones within the site.

As part of the new integrated security solution, G4S redesigned the perimeter security for the site, which covers a large four square kilometers area, with cameras with video analytic functionality and new IP speaker systems. The cameras automatically detect potential intruders and instantly send information to the on-site security operation centre where G4S mobile patrol officers, who are permanently on site with patrol vehicles, can quickly respond.
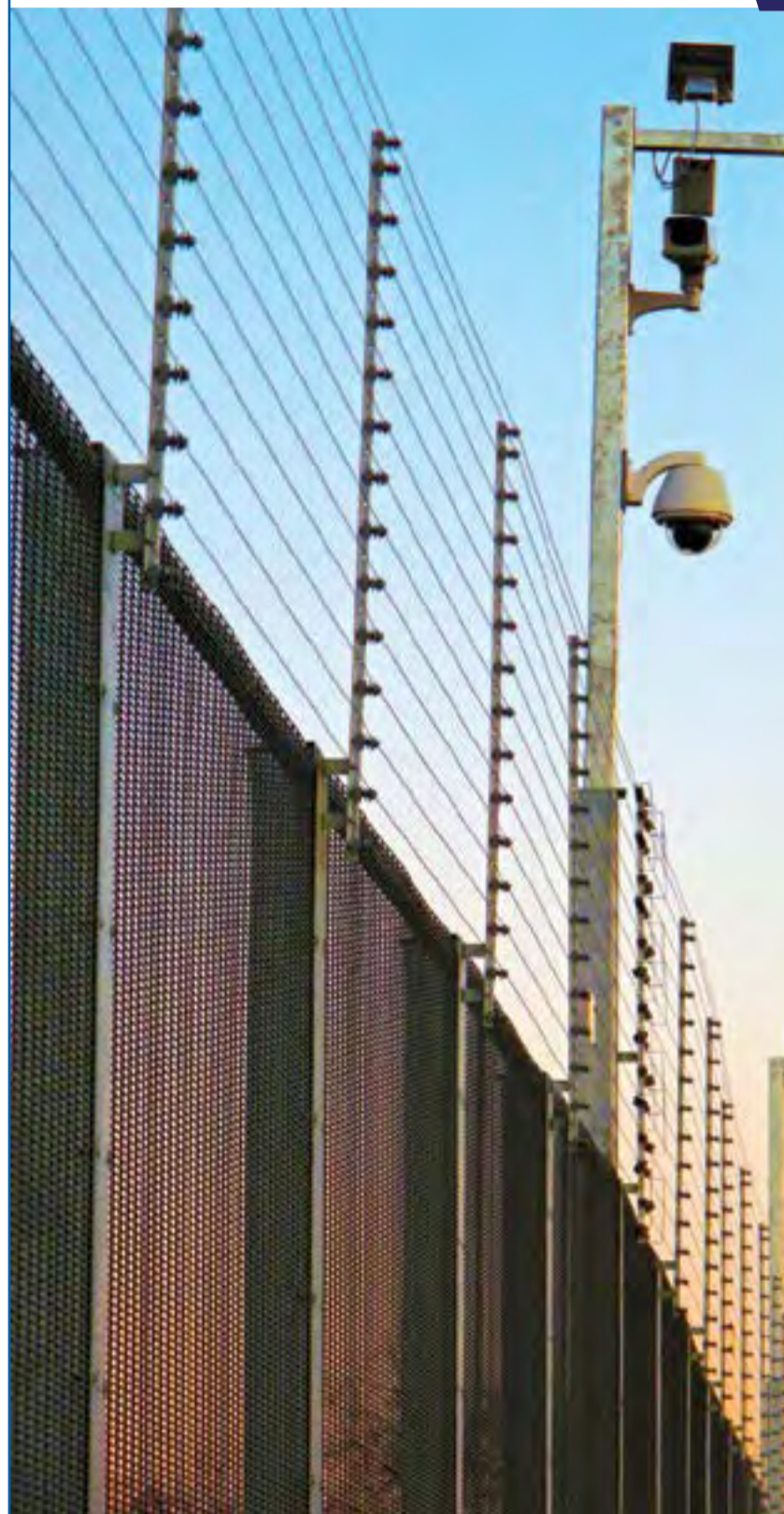
In any risk assessment for chemical sites the threats that have to be considered include terrorist attacks and organised crime attacks. G4S will also carry out annual risk assessments of the site and security solution for Synthomer to ensure that it remains as effective as possible in protecting the site and employees from evolving threats.

Scotch & Soda turns online and offline shopping into a new experience with Checkpoint Systems

Customers shopping in Scotch & Soda clothing will soon have a much stronger chance of finding and purchasing the right trousers, skirt, jacket, or shirt, thanks to the retailer's new three-year partnership with renowned RFID solutions provider, Checkpoint Systems.

Checkpoint Systems will tag, on average, 10 million Scotch & Soda garments with the latest generation of RFID labels per year, providing it with improved inventory accuracy across its estate. By utilising this technology, the retailer will gain full, real-time visibility of its entire stock holding, ensuring its omni-channel services, including 'click & collect', are optimised.

Scotch & Soda, which operates 166 stores in more than 70 countries, has been using Checkpoint Systems' clothing labels for more than 10 years. Now, the fashion brand is going a step further in its collaboration, by incorporating the latest generation of RFID labels, featuring the high performing Njord label with the Impinj M750 Chip, onto all its merchandise worldwide.

Scotch & Soda has expanded the relationship with Checkpoint Systems, as they are a trusted partner that could deliver this project within just 8 weeks' time. With the implementation of this new technology, Scotch & Soda will be able to match its stock to the demands of its consumers.

This means that the retailer will be able to have the right stock, at the right place, at the right time, in order to serve its customers, regardless of the channel they chose to shop. To be able to optimise stock holding to this level results in omni-channel retailing becoming seamlessly coordinated, enabling stores to optimise services, such as click & collect.

Rik Kok, the Global Director of Procurement and Real Estate for Scotch & Soda, said "Thanks to Checkpoint Systems' latest RFID labels, we know exactly how many medium blue trousers are still in our distribution centres in Belgium, the Netherlands or Germany, for example, or how many extra jackets our shops in Japan need from our summer collection."

Rik adds, "In this way, we are not left with a large surplus of unsold items, at the end of a season and we can provide every consumer with the garment he or she wants, through his or her most preferred sales channel."

Imagine shopping and wanting a garment, but are told that the size or colour is no longer available. Scotch & Soda believe this should never happen and thanks to Checkpoint Systems' RFID labels, shop staff can now replenish stock quickly and coordinate it with the entire supply chain, right from manufacturer to distribution centre, to shops and pick-up points.

Rik Kok said "Thanks to RFID technology, we know how many garments we have of what size and colour, and where they are in our chain. This means, we can immediately help the consumer find the right garment. This also applies to when they buy clothes from us online. We refer the customer to the nearest click & collect, or buy & pick up point, where the desired garment is located, or they pick it up in our shop that is on their daily route."

Geert den Hartog, the Key Account Director - Apparel at Checkpoint Systems, said "2020 has changed the buying behaviour of consumers worldwide. Shoppers no longer just buy clothes in a physical shop or online. They buy through their preferred channel, as and when it is convenient for them. If retailers want to grow, they will have to accommodate their consumers with this omni-channel behaviour."

He adds, "RFID ensures that shops can perfectly align e-commerce, click & collect and other online services. This improves customer loyalty by ensuring that the experience is enjoyable, from mobile/desktop browsing through to collection or delivery."

Rome aims to cut pollution, accidents & gridlock with smart city trial

Sony Europe has announced its IMX500 image sensors with AI processing functionality are at the core of three smart city trials being run by Envision in the municipality of Rome. These are intended to cut the city's transport-related pollution and accidents at pedestrian crossings.

The trial's primary objective is to evaluate and deliver a smart parking system using IMX500 to reduce pollution and gridlock from those cruising to find a parking space. For this, the trial seeks to evaluate the effectiveness of such a system, with drivers alerted via a smartphone app before being directed to the free parking space closest to the driver's destination.

In addition to this, the test also includes a study of smart city systems that will optimise capacity and increase the use of its public transport network by implementing smart bus shelters, counting those getting on and off each bus – identifying overloading to ensure better provisioning of buses and cost optimisation.

Finally, an alert system at pedestrian crossings will be progressively activated to alert drivers when pedestrians are crossing, using low-latency smart lighting on the road to make them more visible with the aim of reducing the city's accidents on pedestrian crossings.

The IMX500 is, according to Sony, the first image sensor to integrate AI processing functionality. The configuration used for this trial allows to extract real time metadata related to information of a free parking space, the presence of a pedestrian about to cross a street, or the number of people getting on / off a bus. No images are stored, nor leave the sensor, in line with privacy requirements.

This allows the city to reduce the bandwidth required, to scale it easily using existing networks, and to cut power and communication costs. And furthermore, this system allows citizens' privacy concerns to be addressed.

Traffic caused by those seeking to park is seen by the city as a key contributor to congestion, with the trial seeking to quantify the scale of the problem. Leveraging Sony's imaging and sensing technology to serve social causes in the cities demonstrates how IMX500 sensors can alleviate some of the problems faced by busy cities.

The average distance between pedestrians and vehicles is a key metric used to measure pedestrian safety. The trial is aiming to deliver a quantitative analysis of this and prevent pedestrian accidents through signalling mechanisms installed at the crossings.

Genius version Smart Tips have been installed in Rome's city centre. A preliminary phase was undertaken to train a neural network to identify available parking spaces as well as the number of people waiting at the bus stops, entering / leaving the bus and waiting to cross or crossing the road.

Every Genius Smart Tip consists of two sensors looking over the roads around and the parking spaces. The sensors send real-time data elaborated by neural networks on the exact location of a free space, the pedestrians' presence and the number of people queuing at bus shelters.

The exact location of the free parking space data is streamed in real time through the Smart Tip. The data is then immediately processed by the sensor integrated in the Smart Tip, using neural networks, and then sent to the cloud software platform of the partner company, Envision. The coordinates of the free parking space's location are overlaid in real-time on a map that is displayed on a mobile device used by the driver who is heading towards the area.

Pedestrians' presence is measured and compared across different locations. The neural network system detects pedestrians at the zebra crossing and a lighting signal is sent to the drivers to alert them.

Data of queue length and people getting on and off the bus are processed by the sensor in the Smart Tip through the neural network and sent to the Envision software platform which aggregates them and makes them available to personnel managing the public bus network in order to enhance the planning and scheduling of the bus transportation network. A "crowded" figure of merit is provided to signal when the bus is running at over capacity to avoid overcrowded buses, better manage the transportation network and improve citizens' journey experience. The trial is conducted in the City of Rome collaboratively by a number of start-up companies in the Italian ecosystem and with the support of Sony Europe.

Fire protection systems market to hit 84.6 B USD by 2026

The fire protection system market was valued at USD 62.1 billion in 2021 and is expected to reach USD 84.6 billion by 2026, according to the latest research information from Marketsandmarkets.

The fire protection system market report includes Covid-19 impact and suggests that market growth is being fuelled by the development of the construction industry, an increase in the loss of human lives & property due to fire breakouts, stringent regulatory compliances, and a rise in the adoption of wireless technology in fire detection systems.

Fire suppression segments are expected to hold the largest size of the fire protection system market from 2021 to 2026. A fire suppression system starts operating once it receives fire alerts from different sensors and detectors. By product, the fire suppression market has been segmented into fire sprinklers, nozzles, caps, and control heads; fire suppressors; and fire detectors and control panels. Fire suppressors are used to prevent the spread of fire and put it off. Fire extinguishers spray water, foam, carbon dioxide (CO2), and other fire-resistant materials to control fire. The growth of this market is propelled by technological advancements and innovations in the construction industry; rise in the number of policies, regulations, and government mandates; and increased damage to human life and property due to fire breakouts.

Maintenance services include timely servicing and auditing of fire protection systems to ensure that fire protection systems meet all the required fire safety standards and function appropriately during an emergency. Maintenance services include inspection, testing, servicing, and repair of components, and monitoring of fire protection systems and their components. The services comprise equipment supply, system testing and commissioning, and regular preventative maintenance.

The market for oil, gas, and mining vertical is expected to grow at the highest CAGR during the forecast period. The oil, gas, and mining vertical involves materials such as petroleum, crude oil, flammable gases (such as butane), and coal. These materials are flammable; therefore, to avoid fire accidents, advanced fire protection systems are used in this area.

Highly efficient fire detection and prevention systems are required in this sector to prevent accidents. Clean agent fire suppression systems, dry chemical fire suppression systems, and water and foam sprinklers are used in the mining sector. Gas-based suppression systems (CO2, FM200, Novec, and Inert) and sprinkler systems are used in the oil & gas sector.

APAC presents best growth opportunities

APAC is expected to be the fastest-growing market for the fire protection system market during 2021—2026. Growing urbanisation has increased construction activities, which are contributing significantly to the growth of the market in this region. APAC is a developing region, and countries such as China, Japan, and South Korea are driving the overall growth of the fire protection system market here. The demand for fire protection systems is expected to increase with technological and economic advancements. Additionally, according to the analysts, governments in this region have also laid down fire safety norms, and the fire protection system sector is expected to grow with the execution of these policies.

Major players involved in the global fire protection system market and mentioned by the research, include Johnson Controls, Carrier Global Corporation, Honeywell International, Siemens, Halma, Robert Bosch, Hochiki, Gentex, Mini-max Viking, and Securiton.

Why employees need fire safety training at the workplace

Globally, less than 50% of occupants in buildings are confident that they know what to do and where to evacuate in the event of an emergency. Because so many offices lack the training and knowledge of what to do in a fire, it can lead to more fire damage and even loss of life.

One of the biggest benefits of employee fire safety training is that it teaches your employees about common fire hazards in your workplace. Understanding potential risks and threats in your workplace can help reach your employees how to prevent fires.

For example, if your employees know that damaged power cords are a common fire hazard, they can recognise these as an issue and can do something to prevent a fire, such as notify an office administrator to get it taken care of.

Not only does training for fire safety in the workplace teach your employees about common fire hazards in your industry, but it can also help them prevent fires. This is one of the most important parts of fire safety courses, as it is much easier to prevent a fire than it is to put one out. If employees in each part of your building know how to prevent fires, you will protect your business from fire damage and can even save the lives of your employees.

With fire safety training, you can identify emergency routes and exits. Physically showing your employees where each emergency exit is will make them more likely to be able to find it, even in the chaos that comes with a fire in the building.

Teaches Proper Response

In an emergency like a fire, it can be easy to lose focus and panic. However, with fire safety training, you can teach your employees how to properly respond to this type of emergency.

Have your employees practice their training during a fire drill by going through your fire safety plan, using your emergency exits, and more. This will make it more likely that they will remember the proper response if a real fire were ever to happen.

Identifies Emergency Exits

A vital part of fire safety is having a fire evacuation plan for your employees. Not only do you need to have a plan, but you want each of your employees to be familiar with this plan.

With fire safety training, you can identify emergency routes and exits. Physically showing your employees where each emergency exit is will make them more likely to be able to find it, even in the chaos that comes with a fire in the building.

Having your emergency exits clearly marked and free from any obstacles is vital to having a safe way to get out of the building. Make sure that you do not store anything near emergency exits as they may be necessary to use for yourself and for first responders that come to your aid in a fire.

Trains Employees to Use Fire Fighting Equipment

Another huge benefit of fire safety training is that it allows a professional fire safety specialist to train your employees to use fire fighting equipment. Most employees don't even realise that there are different types of fire extinguishers that are used for different classes of fires. Because so many people are not confident in using any type of fire fighting equipment, this training can help them learn how to use this equipment in an emergency.

Creates a Communication Plan

Finally, utilising fire safety training is vital because it helps you create a communication plan. In an emergency, it is important that you know how you can communicate with your employees and other people on the premises of your building. Having a method of communication during an emergency makes it easier to confirm that everyone makes it out of the building safely and that each of your employees is safe. It can also help you find ways to quickly and effectively tell others about the emergency to get the fastest response possible.

Fire safety training is an essential tool that can help you and your employees stay safe in the event of a fire and even prevent fires from happening in your workplace. By teaching your employees how to use fire fighting equipment and fire hazards in the workplace, you can potentially save their lives.

Important to integrate fire safety with security at workplace

The scale of your business doesn't matter when it comes to the safety of your workplace and everyone who works there. Every organization needs an effective fire alarm and security system, this not only ensures the security of your employees, but it also helps them to feel safe at work, boosting morale and confidence.

Your business needs fire and security services today more than ever. From fires to vandalism and theft, businesses face a range of security risks and challenges. There's no doubt that both fire protection and security systems are essential. But is it better to have separate fire and security systems, or integrate the two together?

Advantages of Integrating Fire Protection and Security Systems

There are plenty of compelling reasons to consider integrating these services. The positive aspects of combining these systems include:

and we are now seeing progress like never before. Modern systems are being designed based on a single protocol comprising different security and safety functions. Some functionality can be shifted to the cloud to deliver a seamless safety experience, with more accessibility and flexibility.

- Unleash your Full Potential: Technology is advancing regularly,

- Impeccable Management: Integrating your fire protection and security systems makes them easier to manage, and allows you

to manage them to a higher degree. With the help of graphics packages and software, you only need one user interface to monitor both your security and fire protection systems. This system offers a holistic view which offers all kinds of efficiencies. For example, a fire in the building could activate your CCTV camera and would help you to identify the source of the fire.

- 360-degree Safety: Increased safety is another incredibly important benefit of integrating these systems. Integrating your fire protection and security systems allows for a smooth flow of critical information when you most need it, and confirms emergencies via multiple tools. This helps to avoid false alarms and reduces response times. Integration makes it easier to ensure that your system is tailored to align with their specific needs.

- Easier to Operate: An integrated system is easier to manage compared to operating different products simultaneously. Such systems are controlled from a single point, and this allows users to identify the source of an emergency quickly and respond in a more timely manner.

- Cost-Effective: Integrating security and fire systems can also allow you to significantly reduce maintenance costs. Inspections

costs are halved as your business will be working as a single life safety service company. This translates into a reduced number of service visits each year, as well as less ground security staff and surveillance staff.

Challenges of Integrating Security and Fire Protection Systems

As you can tell, integration has many advantages. However, nothing is black and white and this approach can have its challenges too:

- Contradicting Requisites: Complete integration of both these systems can be challenging as they can have opposing requirements. For example, in the case of a security alert, doors need to be shut securely. On the other hand, fire safety protocols would dictate otherwise. These differences prevail in other scenarios too.

- Regulatory Concerns: Fire alarm products must be tested and verified by a qualified technician to ensure that they comply with laws and regulations. Integration of further elements and features can be a challenge for the manufacturers, especially when they have to adhere to all regulations. Updating products and keeping them aligned with the evolving technology can be a challenge and this is not always executed well.

- Common Connection to Emergency Services: Fault detection

systems can sometimes lead to false alarms and initiate the wrong response. This issue can be doubled because the integrated system has a common connection to emergency services.

By now, you're probably convinced that it is a good idea to fully integrate your security systems and fire protection systems. Every new technology has its own cons, but the ease of use, and its many benefits arguably outweigh the disadvantages. Similarly, nothing can surpass the level of security and safety you achieve when you integrate these systems.

It will be difficult to filter out sporadic faults, but with consistent improvements, your business will be able to master this integration and benefit greatly from its use. You won't regret investing in integration!

Your staff and the buildings where they work are the pillars of your business. The most effective way to enhance the overall safety of your workers as well as your assets is through the integration of fire protection and security systems. Loosely translated, this means that you can greatly benefit from linking everything from your security systems to your smoke alarms and fire sprinklers to access control.

You cannot achieve the same results with manual processes. Let the technology work its charm and diffuse emergencies. Maintaining safety and security should be your top priority!

Vismo launches Notify platform to caution members of the organisation during an emergency incident

Vismo - the global location monitoring and safety specialist - announces the new Vismo Notify, an easy to use resilient mass notification platform for organisations to notify any or all members of staff during an emergency incident, when an incident is expected - or simply when updating staff with a new company policy.

Irrespective of geo-

graphic range, large scale or highly localised, staff can be notified of an incident based on their proximity to it and risk levels they face. The system allows organisations to greatly reduce and manage business and personal risks.

When an incident occurs or is expected to occur, Vismo Notify enables organisations to act immediately and provide critically important notifications to their staff, including how to be as safe as possible until help arrives if it's required. Notifications can

be customised by management, who have full control over message content.

Message delivery methods include secure/encrypted delivery via the Vismo App or additionally by email, SMS and Text to Voice. All or any of these options can be selected and continuously used until a message is responded to if required. Response options ensure that organisations can quickly understand how safe an employee is or feels for full auditability. The options are fully customisable and easy to add to notifica-

tions.

"In an ever changing world, more and more employers are keen to be more proactive with managing their risks relating to mobile or globally travelling staff," says Craig Swallow, Vismo CEO. "Vismo Notify ensures staff can be reached no matter where they are - at their office desk, working from home, travelling anywhere in the world – and at any time."

Its ease-of-use, resilience, security and effectiveness have been fully tested and proven under rigorous conditions across the world."

In summary, Vismo Notify is designed to help protect all employees, no matter where they are based or travelling. By using multiple delivery methods, staff can be reached effectively. Employees gain peace of mind knowing they can be contacted and assisted in the event of an emergency.

How IoT is Changing Fire Safety

The most prominent applications of the Internet of Things (IoT) are driverless cars and home appliances. In the world of fire safety, however, its most exciting application may be sensors in buildings. The collection and application of atmospheric data could dramatically alter our approach to fire prevention and firefighting and ultimately help to save lives.

IoT sensors form a major part of what are known as 'smart buildings'. Smart buildings are properties controlled in part by autonomous computer software, known as Building Management Systems (BMS). These sensors can maintain a specific temperature in different rooms; turn lights on and off, and other tasks, which benefit from external data.

The same principles applied to fire safety open

up numerous possibilities for entirely new ways of fighting fires. Temperature sensors are currently configured to detect temperatures in normal ranges, but special heat-proof sensors can detect the temperature of fires. This would not only detect fires before they emit smoke, but could also give fire-fighters a clue as to the intensity of fires, allowing them to alter their equipment and approach.

Knowing where in a building a fire is taking place is also invaluable. At present, you may have an idea of where detectors were set off or where an alarm was pulled, and you might get some witness testimony. IoT sensors can confirm this beyond all doubt, showing you not just where a fire started but where it is spreading, and how quickly. All of this information can be transmitted automatically to fire crews.

IoT technology can also improve the upkeep of vital fire detection systems. For many large facilities, fire alarm systems are a patchwork of different alarms made by different manufacturers, with maintenance procedures relying on the readings from each control panel, and manual storage. IoT can utilize a single point of contact (e.g. a phone or computer interface) to bring together data from various alarm systems, allowing a user to quickly view maintenance logs and data.

By sensing exactly where the fire is, the nature of the fire and whether there are any occupants in the room, a smart IoT enabled fire system can deploy different measures to specific rooms, minimizing damage to the broader facility.

New and intelligent systems can integrate information from almost every make of fire alarm systems via the internet, so it can be viewed on mobiles, laptops or tablets from anywhere in the world. This data can also be used for compliance purposes and prove that whoever is responsible has done everything they can to ensure a building is safe.

AI and ML - The game changing duo in the SaaS industry

Over the past few years, we have been observing the global evolution of the SaaS market. SaaS solutions are today spanning across horizontals and verti-

cals, creating products for both individual and enterprise, and segmenting their markets to specific customer size. Analysts believe the market will grow @12% every year and by 2022, the volume of investments will reach a staggering $141 billion.

However, in all this, there is one common underlying factor - the foundation of all these solutions is built on Artificial Intelligence (AI) and Machine Learning (ML). AI and ML have been the two most influential factors to impact SaaS businesses and have become the fundamental constituents of the SaaS landscape. With AI's infusion, the industry today can see business categories that were non-existent earlier. AI has made several enhancements to the SaaS solutions that are currently driving the market growth.

Following are four areas, where we can see the game-changing impact of AI and ML in the SaaS industry.

Tailor-made services

Consumers today are looking for personalized user experiences from any product or service - be it B2C or B2B. A one-size-fits-all template is an obsolete concept, especially when it comes to SaaS-usage. For instance, in general practices UIs are first designed taking into ac-

count the designer's idea of the product. If the design is not upgraded sooner or later, it will lead to the discord of options and redundancy. AI and its subset like ML and NPL (Natural Language Processing) is making it possible for solution providers to design tailor-made user

interfaces and user experiences (UI/UX). Applying AI, the customer's usage history data will reveal patterns that will help the product team to understand their usage behaviour and also their preferences. Consumers today have the choice of multiple providers to switch to, in case their needs are not specifically served by the solution.

Big Data

The SaaS industry's growth can be credited majorly to the accumulation of Big Data - a massive pool of untouched information for companies. But the data volumes are ever-increasing, and companies are struggling to manage the same. AI and ML together can enable a much more automated means of mass data processing.

With the help of automated data analyses, businesses can understand their product usages trends and identify areas that demand further improvement. This helps not only businesses to prevent and resolve any potential outages faster, but also to identify redundant features that can be either discontinued or changed. Businesses are better equipped to understand customer usage patterns and can use this data to give intelligent feedback.

Automation

SaaS offerings are also being popular because they provide a greater degree of automation, again largely enabled by AI. AI essentially aggregates large quantities of data and filters it into automatic processes. Automation allows companies to respond to custom-

er needs automatically, with less reliance on human resources.

Chatbot is a great example here. A chatbot is a computer program designed to provide automated replies to preliminary queries of customers visiting a website or an app. It dismisses the need for a human assistant round the clock. Hence, companies can respond and troubleshoot customer inquiries automatically, making customer relations management faster and efficient. It can be an extension of the larger customer service team. An example could be, the banking services using AI to register the requirements of the customer before connecting them to the appropriate department, where they may have a person-to-person interaction for further services.

However, chatbots are not expected to replace human interactions completely. AI will add more value when it is used in conjunction with human-centric services. Together, they can drive the SaaS model further.

Marketing

Marketing activities today are leveraging AI and ML techniques. AI principles and applications are directly applied to marketing concepts for targeting, acquiring and retaining customers. Here comes the term

Marketing Technology (MarTech). MarTech can be a range of software and tools that assist in achieving marketing goals or objectives, and is a growing industry, both in size and scale. When MarTech software adopts AI applications in order to boost the RoI and effectiveness in SaaS and Cloud operations, we can safely term it AI Marketing.

For instance, while running cross-promotional activities or loy-

alty programs, large organizations will be collecting a fair amount of data for AI and ML to analyse. The analysis can help businesses to nail down their insight into potential customers.

The impact of ML and AI will be clearly visible practically in every application and industry, in the coming few years. Today, almost all modern business applications are delivered via the cloud. Having that settled, SaaS and cloud-

based application providers should continue to deliver the competitive benefits of AI and ML to customers. Companies who want to stay relevant and updated do not have a choice but to adopt both the technologies while also ensuring full compliance with all regulatory requirements and keeping customer data fundamentally safe at all times.

Credits: Vikas Bhonsle, CEO, Crayon Software Experts India

Covid-19 unlocks $80b digital identity market

A recent Frost & Sullivan webinar highlights the impact on two key emerging trends from rapid digitalisation and following the onset of the Covid-19 pandemic - digital identity management and value chain compression on societies.

Covid-19 has accelerated digitalisation across industries, business models, and touchpoints, says Frost & Sullivan analysts. As communication and sharing of information move from a physical to digital medium, users must protect access to their identity online using secure, portable, and verifiable credentials in real-time. Therefore, a digital identity system compiling personal information such as name, passport number, health data, and financial information that can be linked to a secure digital device or account will be a critical enabler.

Frost & Sullivan finds that the digital identity management market is expected to register strong growth over the next decade and has the potential to unlock investments worth $80

billion globally by 2030. The public sector, financial services, insurance, and healthcare industries increasingly deploy pilot projects to test the market's effectiveness and applicability. Some of the growth opportunities expected in this space include blockchain-based decentralized digital identity management, digital identity custodians, and personal cyber insurance.

Another emerging trend due to rapid digitalisation is the compression in value chains, which reduces the number of steps in customers' purchase journeys. Enterprises are looking at innovative models that eliminate the middlemen and leverage digital platforms to reach the end customer. Retailers are adopting direct-to-consumer models that displace the need for physical stores.

Value chain compression offers several economic benefits, such as reducing capital and infrastructure costs. For example, blockchain can reduce several steps around validation, tracking, clearing, and risk

mitigation. This allows the companies (financial institutions) using blockchain to reduce infrastructure costs by 30%.

In the webinar Frost & Sullivan experts Malabika Mandal and Vinay Venkatesan discussed the predicted key trends arising in the near future that will create avenues within emerging value chains and digital identity management.

Those subjects included investment potential and growth opportunities in digital identity management; the role of digital identity management in realising economic potential, improving national security, and fostering social inclusivity in the next decade; exploring how traditional value chain models will evolve in the near future and what parts of the value chain will get compressed; and, the emerging business models supporting the value chain evolution and understanding how these new proficiencies in the value chain will impact the customer's journey.

Hikvision India Tech-Knowledge Talk Series on MinMoe Face Recognition Terminal Provides Cryptic Product Knowledge

Hikvision India has recently conducted Hikvision MinMoe Face Recognition Terminal product introduction and training event 'Tech-Knowledge Talk' on PRAMA India App platform. The recently concluded third edition of 'Tech-Knowledge Talk' was focused on the newly launched MinMoe Face Recognition Terminal product introduction and training. This event got a very good response from the Regional Distributor (RDs) and Sub Regional Distributors (SRDs) from the PAN India regions.

This was the third edition of Hikvision's 'Tech-Knowledge Talk' LIVE session series. In this LIVE session, Hikvision's product experts discussed the latest range of MinMoe Face Recognition Terminals. They presented the market potential of these devices, features and applications of the product offerings. It was an insightful and engaging session where viewers participated in the LIVE quiz competition and won prizes as well.

The product introduction and training Series 'Tech-Knowledge Talk' on PRAMA India App platform was jointly conducted by Mr. Prashant Nangare – Product Head, Access Control, Prama Hikvision India Pvt. Ltd. and Vinit Narvekar, Manager- Customer Trainings, Prama Hikvision India Pvt. Ltd.

"We are happy to introduce the MinMoe Face Recognition Terminal products in Hikvision's 'Tech-Knowledge Talk' LIVE online session series. These online sessions are helpful to evangelize the USPs of our new products and technologies, they develop the product knowledge and technology awareness among Regional Distributor (RD) and Sub Regional Distributors (SRDs) community. We hope these sessions are helpful to enhance the skills and knowhow of installers, system integrators and security professionals," said Mr. Ashish P. Dhakan, MD & CEO, Prama Hikvision India Pvt. Ltd.

He further added, "Authorized access has come a long way from using keys, pin codes, cards, and fingerprints. We now find ourselves stepping into the era of face recognition. The use of face recognition in access control and time attendance has been an inevitable trend, which creates advantageous "touch-free" experience. With advanced deep learning technology and practical functions, Hikvision MinMoe Face Recognition Terminals bring better security and improved efficiency to access control and time attendance tracking, making them easier than ever."

"The latest trends in MinMoe range of face recognition terminals product segment, includes facial recognition and artificial intelligence technologies. The access control market in India is expected to grow at a steady rate in the Metro and Tier- II cities due to increased demand for touch-free access control supported by face recognition and time management solutions. A clear trend towards Touch-Free Access Control products in the market will drive the market

demand," said Prashant Nangare, Product Head- Access Control, Prama Hikvision India Pvt. Ltd.

He further added, "Hikvision MinMoe face terminals are available in following models - DS-K1T341, DS-K1T331, DS-K1T671 and DS-K1T607PEF Series. The application scenarios of Hikvision MinMoe terminals include, corporate offices, financial institutions, banking and financial institutions, industrial parks, retail stores, manufacturing units, schools and educational institutions." "The Hikvision MinMoe devices are available in three categories - Value Series, Pro Series and Ultra-series," he added.

"The MinMoe Face Recognition Modules for Turnstile can easily integrate with turnstiles to provide the user with a complete access solution. The integrated terminal-turnstile solution is particularly useful for commercial buildings, banks and so on," said Vinit Narvekar, Manager- Customer Trainings, Prama Hikvision India.

This LIVE session covered all aspects of MinMoe range of face recognition terminals. Given the current situation, this session elaborated on the need for a touch-free access control system. Mr. Prashant Nangare explained the technology aspects and evolution of access control systems from card to biometric and the latest touch-free face recognition terminals. This was followed by a walkthrough of various models under the MinMoe series. The session also covered various application scenarios and solutions.

Smart homes get smarter with biometric access

Household adoption of smart home systems currently sits at 12.1% and is set to grow to 21.4% by 2025, expanding the market from US$ 78.3 billion to US$ 135 billion, in the same period. Although closely linked to the growth of connectivity technologies, including 5G, tech-savvy consumers are also recognising the benefits of next-generation security systems, to protect and secure their domestic lives.

Biometric technologies are already commonplace in our smartphones, PCs and payment cards, enhancing security without compromising convenience. Consequently, manufacturers and developers are taking note of biometric solutions, as a way of levelling-up their smart home solutions.

As with any home, security starts at the front door and the first opportunity for biometrics to make a smart home genius lies within the smart lock. Why? Relying on inconvenient unsecure PINs and codes takes the 'smart' out of smart locks.

As the number of connected systems in our homes increase, we cannot expect consumers to create, remember and use an ever-expanding list of unique passwords and PINs. Indeed, 60% of consumers feel they have too many to remember and the number can be as high as 85 for all personal and private accounts.

Doing this risks consumers becoming apathetic with security, as 41% of consumers admit to re-using the same password or introducing simple minor variations, increasing the risk of hacks and breaches from weak or stolen passwords. Furthermore, continually updating and refreshing passwords, and PINs are unappealing and inconvenient. Consequently, biometric solutions have

a real opportunity to strengthen the security and convenience of home access control.

Biometric authentication, such as fingerprint recognition uses personally identifiable information, which is stored securely on-device. By using on-device biometric storage, manufacturers are supporting the 38% of consumers, who are worried about privacy and biometrics, and potentially winning over the 17% of people, who don't use smart home devices for this very reason.

Compared to conventional security, such as passwords, PINs or even keys, which can be spoofed, stolen, forgotten or lost, biometrics are difficult to hack and near impossible to spoof. Consequently, homes secured with biometric smart locks are made safer in a significantly more seamless and convenient way for the user.

Physical access in our domestic lives doesn't end at the front door with smart locks. Biometrics has endless opportunities to ease our daily lives, replacing passwords and PINs in all devices. Biometric smart locks provide personalised access control to sensitive and hazardous areas, such as medicine cabinets, kitchen drawers, safes, kitchen appliances and bike locks. They offer effective security with a touch or glance.

Multi-tenanted sites, such as apartment blocks and student halls, can also become smarter and more secure. With hundreds of people occupying the same building, maintaining high levels of security is the responsibility for every individual occupant.

Biometric smart locks limit entry to authorised tenants and eliminate the impact of lost or stolen keys, and passcodes. Furthermore, biometric solutions have

for costly lock replacements and when people leave the building permanently, their data is easily removed from the device.

Like biometric smart locks in general, the benefits extend beyond the front door, but also throughout the entire building, such as washing rooms, mail rooms, bike rooms and community spaces, such as gyms.

Different people might have different levels of access to these areas, depending on their contracts, creating an access control headache. But, by having biometric smart locks, security teams can ensure that only authorised people have access to the right combination of rooms and areas.

Additionally, if building owners have options. The biometric sensors can be integrated into the doors themselves, thereby allowing users to touch the sensor, to unlock the door and enter. Furthermore, the latest technology allows biometric access cards to be used.

This embeds the sensor into a contactless keycard, allowing the user to place their thumb on the sensor and tap the card to unlock the door. This may be preferable in circumstances where contactless keycards are already in use and can be upgraded.

In tandem with the growth of the smart home ecosystem, biometrics has real potential to enhance our daily lives, by delivering smarter, seamless and more convenient security. Significant innovation has made biometrics access control faster, more accurate and secure.

Furthermore, today's sensors are durable and energy efficient. With the capacity for over 10 million touches and ultra-low power consumption, smart home system developers no longer have to worry about added power demands. As consumers continue to invest in their homes and explore new ways to secure and access them, biometrics offers a golden opportunity for market players to differentiate and make smart homes even smarter.

INDUSTRY EVENTS ▶

🇺🇸 **USA** 5-7 October, 2021 NFSA Annual Conference and North American Expo Las Vegas, NV, USA www.nfsa.org/annual-seminar/	🇹🇷 **TURKEY** 14-17 October, 2021 ISAF Fire & Rescue Istanbul Expo Center (Istanbul Fuar Merkezi), Bakırköy, Turkey www.isaffuari.com	🇪🇬 **EGYPT** 1-3 November, 2021 Egypt Energy 2021 Egypt International Exhibition Centre Egypt www.egypt-energy.com
🇷🇺 **SAINT PETERSBURG** 9-11 November, 2021 Sfitex 2021 ExpoForum Convention and Exhibition Centre, Saint Petersburg Russian Federation www.clocate.com/conference	🇲🇾 **MALAYSIA** 9-11 November, 2021 IFSEC Southeast Asia 2021 Malaysia International Trade and Exhibition Centre, Kuala Lumpur, Malaysia www.ifsec.events/sea/	🇿🇦 **SOUTH AFRICA** 16-18 November, 2021 Securex South Africa Gallagher Convention Centre Johannesburg South Africa www.ifsecsa.com
🇺🇸 **USA** 17-18 November, 2021 ASIS 31st Security Conference and Expo Javits Centre, New York, NY USA https://asisnyc.org/events/	🇺🇸 **USA** 17-18 November, 2021 ISC East 2021 Javits Centre, New York, NY USA www.nfsa.org/annual-seminar/	🇸🇬 **SINGAPORE** 24-26 November, 2021 Fire & Disaster Asia 2021 Marina Bay Sands, Singapore www.firedisasterasia.com.sg
🇮🇳 **INDIA** 24-25 November, 2021 SECURITY TODAY KNOWLEDGE SUMMIT 2021 New Delhi http://securitytoday.in/knowledgesummit/	🇮🇳 **INDIA** December, 2021 TOP INDIAN WOMEN INFLUENCERS IN SECURITY 2021 New Delhi https://www.securitytoday.in/	🇮🇳 **INDIA** 9-11 December, 2021 IFSEC India Pragati Maidan, New Delhi India www.ifsec.events/india/
🇮🇳 **INDIA** 16-17 December, 2021 3ʳᵈ Edition of the Global Inclusive Disaster Management Conference and Exhibition India Expo Mart, Greater Noida India www.ifsec.events/india/	🇪🇸 **SPAIN** 22-25 February, 2022 SICUR 2022 IFEMA Feria de Madrid Madrid, Spain www.ifema.es	🇳🇴 **NORWAY** 9-10 March, 2022 Sectech Norway Norges Varemesse Lillestrøm Norway www.securityworldmarket.com
🇮🇳 **INDIA** 3-5 March, 2022 PACC 2022 Goa India https://fsai.in/	🇮🇳 **INDIA** 23-25 March, 2022 7th Smart Cities India 2021 Expo Pragati Maidan, New Delhi India www.smartcitiesindia.com	🇮🇳 **INDIA** 1 April, 2022 Secutech India Bombay Exhibition Center Mumbai, India https://secutechindia.tw.messefrankfurt.com/mumbai/en.html
🇬🇧 **UK** 5-7 April, 2022 The Security Event N.E.C., Birmingham United Kingdom www.thesecurityevent.co.uk	🇰🇷 **KOREA** 20-22 April, 2022 Korea International Exhibition Centre - Kintex Seoul, Korea www.seconexpo.com	🇳🇬 **NIGERIA** 10-12 May, 2022 Securex West Africa 2021 Lagos, Nigeria www.gidmc.org

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Corporate Office:
PRAMA HIKVISION INDIA PVT. LTD.
Oberoi Commerz 2, International Business Park,
18th Floor, Near Oberoi Mall, Off W.E. Highway,
Goregaon (East), Mumbai - 400 063.
Tel: +91-22-4041 9900, 2846 9900
Web: www.hikvisionindia.com

Sales:
+91-22-4041 9944, 2846 9944
sales@pramahikvision.com

RMA Support:
+91-22-6822 9977, 3322 6070, 2846 9977, 0250 663 6677
rma@pramahikvision.com

Technical Support:
+91-22-6822 9999, 3322 6060, 2846 9999
support@pramahikvision.com
Toll Free: 1800 222 699