

DETEKTOR International

Publisher's comment

About time for Schneider to sell off Pelco

Security technology market

Video verification finally powers into intruder market

Business news

Security industry acquisitions made from January to March 2019

Product news

Vanderbilt SPC gains new cyber security accreditation

Event reports

- **Secon in Korea continues to grow**
- **New record at Intersec 2019**
- **Ifsec – The European highlight of the year**

SPECIAL FEATURE 1:

ACCESS CONTROL
– Today and tomorrow

SPECIAL FEATURE 2:

PERIMETER SECURITY
– New technology is changing the market

SECTECH

EXPO & CONFERENCES / SWEDEN

Sectech Sweden 19–21 November, 2019
Stockholmsmässan/Stockholm

Welcome to Sweden's most important security event 2019

– free entrance if you pre-register today: www.sectech.nu

Welcome to the most important event in 2019 for the Swedish security industry. Sectech takes place at Stockholmsmässan 19–21 November 2019.

With 100 exhibitors, the compact Sectech show will be bigger than ever before. The event focuses on solutions and services based on modern security technology. During two intense days, the latest solutions and pro-

ducts in video surveillance, access control, alarms and integrated solutions will be presented by world leading players as well as by niched Swedish specialists.

The seminars cover both technical and civil society trends like Internet of Things, cyber security, video analytics, video surveillance and data storage legislation and the terrorist threat.

• EXHIBITION • SEMINARS • SECURITY BANQUET • OPEN FORUM



FREE ENTRANCE IF YOU REGISTER AT WWW.SECTECH.NU

An event by:

armedia
...we are security



Stockholmsmässan

Entrance sponsor:

seriline

Media partners:

DETEKTOR
SÖDERSTRÖM



security
WORLDMARKET.COM

SecurityUser.com



ISSN-1651-3800 published by **armedia**

Head office:

AR Media International AB
Västberga Allé 32 • S-126 30 Hägersten
SWEDEN
Tel: +46 8 556 306 80
E-mail: info@armedia.se
www.detektor.com
www.armedia.se

Asia Office

Asha Chang
AR Media Marketing Corporation
Address: 15F, No. 55, Bin-hai Road Sec. 1,
Tamsui District, New Taipei (251), Taiwan
Office phone: +(886-2) 2622 1365,
+(886-2) 2622 1385
Mobile: +(886) 922 116272 ,
Email: asha@armediaint.com

General Information

- Detektor International is published twice a year.
- No part of this magazine may be reproduced without prior permission from the publisher.
- Detektor International welcomes manuscripts, news, releases and photographs, but cannot be held responsible for loss or damage incurred in transit or in possession.
- News releases can be sent to intnews@securityworldmarket.com

Subscriptions

Anette Friberg
Rate for two issues is Euro 51
+46 8 556 306 80

Publisher

Lennart Alexandrie
lennart.alexandrie@armediaint.com

Editorial Team

Rachel Ward Owens, Henrik Söderlund,
Jonny Sjöberg, Lennart Alexandrie
info@armedia.se

Art Director

Linn A. Maddern
linn.maddern@armedia.se

Advertisements

Deniz Baykal
deniz.baykal@armedia.se

Printing

Sörmlands Printing Solutions AB, Sweden, 2019



Lennart Alexandrie, Publisher

About time for Schneider to sell off Pelco

As I write, Schneider Electric has entered into negotiations to sell Pelco, their video surveillance business, to the private equity firm Transom Capital Group. I cannot help but reflect on this.

In 2007, Schneider Electric acquired the US video surveillance company Pelco for a stunning 1.22 billion US dollars. The idea was that this acquisition would complement Schneider's building automation business.

Founded in Fresno, California, 1957, Pelco was originally specialised in pan-tilt units and joysticks. In 1987, David McDonald acquired the company and at the end of the nineties and beginning of the 21st century Pelco – now with headquarter in Clovis, California – had a world-leading position on the surveillance equipment market.

When Schneider acquired Pelco, the US company reported a revenue of 506 million US dollar for the financial year 2006. For 2018, the revenue has shrunk to approximately 169 million euro (approximately USD 185 million).

The acquisition was not particularly good for Pelco, neither was it good for Schneider Electric. Synergies were not realised and Pelco's contribution to the Schneider Electric building automation business was poor. The match was simply wrong. There are several reasons why it was a bad decision by Schneider Electric to acquire Pelco.

In 2005 I visited Pelco in Clovis. I was stunned by the company culture, created by the owner, David McDonald (who passed away in early 2019). He was a strong personality, a great American patriot and a true entrepreneur. All these properties were reflected in his leadership. He built his own 9/11 memorial museum in the Pelco factory area of Clovis and his patriotism was also revealed by the uniform shirts – worn by all factory employees – and decorated with an American flag.

David McDonald also had a loyalty programme for all the employees in the factory. Their work performance and workplace presence were registered and each individual rewarded with points, based on that. These points were to be used by the employees to purchase services and

goods in the shops within the facility area – for example, a travel agency.

Loyalty bonds with customers were of course very important for Pelco and the company were very appreciated for its long-standing service, many times individualised for companies' special needs. Loyalty was also achieved through social activities. A good example of this was Pelco's annual parties in Las Vegas, in conjunction with the ISC West security exhibition. Venues for these very costly and extravagant parties were commonly exclusive nightclubs by the strip. These events attracted nearly thousand invited guests at each occasion and were really something extra. It certainly also corresponded very well with the image of Pelco – generosity to create loyalty.

It was into this culture that Schneider Electric landed in 2007. It was not easy to implement a more restrained European corporate culture. Both employees and customers, who were accustomed to David McDonald's most personal way of running Pelco, didn't always get along with it.

Another big problem – Pelco was stuck in the analogue technology market, where they have their strong customer base. Network technology had begun to gain momentum, but Pelco was not on board. Not surprisingly claimed many analysts that Pelco had passed its peak already when Schneider acquired the company in 2007. Pelco's contribution to IP-video surveillance was extremely modest, and mainly about hybrid technology. It took many years before Pelco had a strong product range in network-based video surveillance.

The acquisition of Pelco was a big mistake by Schneider Electric, economically culturally and technologically. Now it seems like they have found a buyer, Transom Capital Group, a Los Angeles-based private equity firm that invests in medium-sized businesses. The purchase price is now known, but Schneider has announced that the transaction, after the completed process, will trigger a booked non-cash loss of up to 250 million Euros.

It will certainly be interesting to see how Pelco will develop with the new owner, once the acquisition is completed. One thing is for sure, this deal is not one day too early.



- 3 **Publisher's Comment.** About time for Schneider to sell off Pelco.
- 8 **Security Technology Market.** Video verification finally powers into intruder market.
- 11 **Special Access Control Feature.** Read about trends, technology and solutions.
- 20 **Business News / Acquisitions.** The Acquisitions Calendar for January – March 2019.
- 24 **Business News.** Sweden's oldest festival improves security and reduces crime.
- 28 **Special Perimeter Security Feature:** Read about trends, technology and solutions.
- 40 **Product News.** Raytec releases new surveillance lighting options.
- 45 **Security Events.** Secon in Korea continues to grow.
- 47 **Security Events.** Review: New record at Intersec 2019. Preview: Ifsec – Highlight of the year.
- 49 **Security Buyers Guide.** The directory of important suppliers of security products & services.
- 50 **Security Events Calendar.** The international overview of scheduled security shows.

REVIEW



Intersec – New record at Intersec 2019

Intersec in Dubai 20–22 January 2019 attracted some 35,889 visitors from 126 countries – a 23 percent year-on-year increase. *Page 47*



Video verification finally powers into intruder market

In 2017, nearly 23 percent of residential intruder alarm systems were sold globally with some form of video verification.

Page 8



Access control today and tomorrow

Cloud solutions, mobile credentials and integration are some of the most prominent trends of the access control market today.

Page 14



Business News / Acquisitions.

The Acquisitions Calendar for January – March 2019.

Page 20



Security Events

Ifsec 2018 attracted more than 27,350 visitors from 113 countries and had more than 500 exhibiting companies.

Page 48

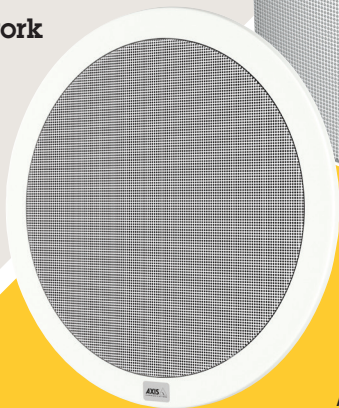
Audio made smart & easy.



**AXIS C1004-E Network
Cabinet Speaker**

**AXIS C3003-E Network
Horn Speaker**

**AXIS C2005 Network
Ceiling Speaker**



Axis network speakers are complete high-quality audio systems in a single unit. And because they're based on open standards, they're easy to integrate with other systems. Our ceiling and cabinet speakers are perfect for public address system and background music in stores and other settings, such as schools. And with our horn speaker you have a cost-efficient way to deter crime by complementing your video surveillance solution in outdoor settings.

**Learn more about our network audio systems at
www.axis.com/products/audio**



Dahua Technology Unveils H.265 Mobile Video Recorder Series

Dahua Technology, a world-leading video-centric smart IoT solution and service provider, recently launched its H.265 Mobile Video Recorder series. Specific products that were launched include the Dahua MXVR1004, MXVR4104, MNVR4104, and MNVR4208. Upgraded in performance while retaining the same price, all the new Dahua Mobile Video Recorder products adopt H.265 technology, offering a cost-efficient choice for mobile solution.

H.265 Compression - Half Bandwidth, Double Space

Featuring cutting-edge H.265 video compression, the new generation of Dahua Mobile Video Recorders can store twice as much video as before with the same HDD capacity. That is, storing the same amount of video now requires only half of the HDD capacity, thus saving money for users. At the same time, choosing wireless network monitoring enables 3G/4G traffic to be reduced by half, which can also lower the cost. This series' enhanced performance delivers more competitive advantages for customers, especially well-suited to meet the needs of corporate

or institutional clients such as transportation service providers, namely taxi companies, buses, railway bureaus, and many more.

Cutting-Edge Technologies Empower Intelligent Video Surveillance

Offering real-time HD monitoring, all the Dahua Mobile Video Recorders support 4MP IP Cameras whereas the MNVR series can support up to 4K cameras. With embedded GPS module, the recorders allow for real-time vehicle location tracking and monitoring, which will enable the police to quickly and accurately identify suspects in the case of a public safety incident. Meanwhile, the devices can be set to upload all the information (video/audio/alarm/GPS) to VMS platform via wireless network: 3G/4G/Wifi. Users can also set the devices so that even under off-line condition, the GPS information will be saved automatically and continuously uploading from the breakpoint when connected to the network again.

Moreover, all the Dahua MXVR series are equipped with AI-empowered face detection, catering for a wide range of applications. For instance, identify-

ing suspects on public bus or taxi, assisting in obtaining attendance information of students on school bus, etc.

Multiple Choices with Strong Functions

Apart from the above, the products of H.265 mobile video recorders unveiled this time share even more fascinating functions including anti-vibration, multiple ports for various applications and accessories connections, as well as wide range of power supply to suit various vehicles.

In addition, most products in the series are certified with EN50155/ISO16750, while having a good resistance to hot or cold temperature while operating. With all the features combined, it becomes an undoubtedly a star series in the market.

Vehicles, ships, airplanes — all forms of transportation these days require modern video surveillance to ensure people's safety. In particular, terrorism and other public

security issues have become the top global concern and are challenging the surveillance industry. The advent of Dahua Mobile Video Record H.265 series has capitalized on the growing demand for mobile surveillance solutions spurred by the needs for robust public security worldwide. Aiming to give early warnings and prevent ahead - a trend of the security industry, the upcoming Dahua ADAS (Advanced Driving Assistant System) and DSM (Driving Monitor System) products will integrate a variety of intelligent warning functions to predict the potential risks. With a mission of "Enabling a Safer Society and Smarter Life," Dahua Technology will continue investing in "Innovation, Quality, and Service," to serve its partners and customers from around the world.

**Product launch date might be varied depends on countries*

Visit: www.dahuasecurity.com

To learn more and follow us on social media.

Facebook: Dahua Technology

Twitter: Dahua Technology

YouTube: Dahua Technology Channel

LinkedIn: Dahua Technology Co. LTD

Video verification finally powers into intruder market

London, UK

In 2017, nearly 23 percent of residential intruder alarm systems were sold globally with some form of video verification – including professionally installed systems, connected do-it-yourself (DIY) systems, and multiple-system operator (MSO) systems. According to Anna Sliwon, security analyst, IHS Markit, this penetration is forecast to increase to nearly 32 percent by 2022.

False alarms are a major problem plaguing the intruder alarm and remote monitoring services industry. IHS says that between 90 percent and 95 percent of alarms reported to the central monitoring stations turn out to be false. These false reports cost service providers, as they must send out a response team to verify each and every alarm. It also strains local police resources unnecessarily and could even increase the financial burden on end users, depending on local alarm response regulations and potential fines.

Video verification solves false alarm problems

Video verification solves these issues, offering an undisputed remote confirmation of the nature of the alarm in the shortest possible time, which helps speed the operator's response process. Video images can be transferred in real time to the operator, so it can be assessed almost immediately, and so a response team or police forces can be sent with a much shorter delay.

DIY, smart homes and consumer video boosts the market

The popularity of video verification solutions is boosted by the influence from the DIY security market, smart home market and consumer video market.

In the DIY sector, consumer video cameras are typically high-resolution internet-protocol (IP) cameras and allow users to check on their home and review footage of past events at their convenience. All this can be done through

a dedicated intruder alarm mobile phone application, which adds to the peace of mind. As for smart homes and building automation systems, they are becoming more popular with end users in all sectors. Cameras are usually advertised alongside smart plugs or smart lights, which gives users an extra level of control over what is happening in the house. Some cameras also offer smoke detection features, to support traditional smoke detectors, while providing surveillance of self-monitoring

“False alarms are a major problem plaguing the intruder alarm and remote monitoring services industry.”

and verification to users. With alarm monitoring stations increasingly offering smart home monitoring services, the video verification market will receive a boost from this side of the industry. In terms of consumer video, the number of devices available on the market is growing rapidly, providing a much broader choice of solutions at various price points. End users can add an IP camera to their home systems and enjoy low-cost self-monitoring and self-verification functionality.

Benefits all round

Many central monitoring stations now offer video verification for an extra fee added to their basic monitoring services. Adding video verification to the monitoring package reduces the likelihood the subscriber will cancel their contract or choose another provider offering more compre-



Video images can be transferred in real time to the operator, so it can be assessed almost immediately, and so a response team or police forces can be sent with a much shorter delay.

hensive services.

Video verification can also benefit installers and dealers that want to offer a broader range of services to their customers. Cloud hosting and support for video self-monitoring delivers greater value to end users. Installers may also find themselves closer to their customers than some

camera detectors can be three times more expensive than non-video-based PIR detectors.

Privacy and cybersecurity:

Residential users' concern about privacy of video verification and video cameras is high. The main worry is that a hacker will use the device to watch and listen to the private lives of residents. There have been media reports of attackers successfully compromising consumer video IP cameras, and these kinds of reports can delay the decision to buy these kinds of devices. Another concern is that alarm-monitoring operators could be watching residents in their homes, outside of the authorised time. Providers of video verification solutions must make sure their systems are designed with privacy protections built into the system set-up, giving the user the ability to restrict access to video devices, whenever they want to.

Self-monitoring:

Increasing availability of consumer video devices, and DIY security systems that incorporate video products into the offering, have led to the emergence self-monitoring and self-video verification. Such systems usually come pre-configured to handle video files, which makes adding a consumer video camera much easier and lowers the barriers to adoption related to the complexity of the system set up.

remote monitoring companies, which makes it easier to increase customer awareness about new offerings. In any case, partnerships between installers and remote monitoring stations can increase revenue per user and provide a more stable annual income. Subscriptions generated by installers could offset normal attrition rates experienced by remote monitoring companies.

Barriers to broad adoption

IHS research has found that the main barriers to broad adoption of video verification include cost, privacy & cyber security concerns, and self-monitoring.

Cost: Even though the benefits of including video verification with intruder alarm systems are clear, many end users – particularly those in the residential sector – may struggle to afford video devices. Passive infrared (PIR)

Increasing threat of disruption drives anti-drone market

Northbrook, IL (USA)

According to the new market research report from Marketsandmarkets on the anti-drone market, the global forecast is expected to grow from USD 499 million in 2018 to USD 2,276 million by 2024, at a CAGR of 28.8%. Major factors driving the growth of this market are rising incidences of security breaches by unidentified drones and increasing terrorism and illicit activities across the world.

Analysts predict that the detection and disruption application is likely to continue to account for a larger share of the anti-drone market during the forecast period. Anti-drones are used for detection and disruption applications, especially in the military & defence sector wherein unauthorised drones that enter the prohibited area of any country need to be detected, as well as destroyed

on the spot. The growth is also attributed to increased number of terrorist groups, which are demonstrating the ability to operate a wide range of drones, including armed systems.

The anti-drone market for the commercial vertical is expected to grow at the highest CAGR during the forecast period. Key factors responsible for this growth include increased awareness and

rapid development of inexpensive drones in the market. Drones are evolving beyond their military origin to become powerful business tools. They have already made the leap to the consumer market, and now they are being put to work in commercial applications such as firefighting, mining, surveying, and farming, among others. However, these drones create public safety concerns.

In terms of geography, the researchers believe that the Americas is likely to account for the major share of the global anti-drone market during the forecast period. Factors contributing to the growth of this market include rising incidences of security breaches by unidentified drones and increasing terrorist attacks in countries in the

Americas, especially in the US. The growth can also be attributed to the presence of several key players in this region, such as Airbus Defence and Space, Battelle Memorial Institute, Department 13 International Ltd, Detect, Inc, and Lockheed Martin Corp.

Some of the major players cited in the report as being active in the anti-drone market include, Thales Group, Blighter Surveillance Systems Ltd, Lockheed Martin Corp, Saab AB, Raytheon Co, Dedrone, Israel Aerospace Industries Ltd, Security and Counterintelligence Group (SCG) LCC, Droneshield Ltd, Liteye Systems, Inc, Theiss UAV Solutions, LLC, BSS Holland BV, and Prime Consulting & Technologies.

vario2 HYBRID ONE PRODUCT TWO ILLUMINATORS



Outstanding
Performance

Combined White-Light
and Infra-Red

IP Enabled

rayTEC[®]
www.rayteccctv.com

Global physical security product sales will reach over \$31Bn in 2018

Memoori has published a new report on Access Control, Intruder Alarm & Video Surveillance in 2018, forecasting to 2023; which brings together all the factors that are influencing the future of the security industry.

The total value of world production of Physical Security products at factory gate prices in 2018 was approx. \$31.55Bn, and the market is forecast to reach \$44.25Bn in 2023 at a CAGR of 7.2% over the next 5 years.

Memoori estimates that China accounts for approx. 31% of the world's physical security business. It is now the biggest single country market for physical security products having increased its share by almost 50% in the last 7 years.

"Video surveillance equipment has been the major contributor here, with the market growing rapidly through a boom in new construction and safe city projects in the public sector," says James McHale, CEO, at Memoori.

"However very little of this vast expanding market has been of benefit to western manufacturers as they have failed to establish a solid business base and significant market share in China. Whilst two Chinese manufacturers, Hikvision & Dahua now have sales of more than \$5 billion between them and the kind of scale that allows them to reduce prices to levels most western manufacturers can't compete against."

14 companies with a revenue of \$1Bn or more

According to Memoori, there are now 14 companies, with physical security product revenue over \$1Bn (Memoori term Group A Companies) accounting for some \$18bn in 2018. Hikvision, Dahua and Axis Communications have given new impetus to this group and the merger between Thales and Gemalto has produced a new mega Identity Management / Biometrics company. The net effect is that this group has significantly increased its contribution and the average sales revenue is over \$1.2bn giving them 57% share

of the physical security product market.

Proprietary – an obstacle for growth

Access control is still a much smaller business than video surveillance and today less competitive, but consolidation is creating a more competitive environment and with it comes the confidence to move forward and take up the challenge of embracing new technologies that will deliver better performing products.

"However if manufacturers prefer to continue to be insular and proprietary, it will not be good news for continued growth, for traditional proprietary systems mean limited options for the customer and restricted possibilities for integration and scalability", says James McHale..

Awareness of cyber security increases

2018 is the year that all the stakeholders in the physical security industry finally got the message that the Cyber Security threat was capable of causing significant harm to their businesses. Now one of the critical buying propositions of physical security is "What have you done to make this equipment less vulnerable to cyber attack"? The owners and operators of buildings, particularly those having large building estates need to know that manufacturers and installers fully understand what needs to be done to reduce vulnerability and make sure it is applied to their equipment and systems.

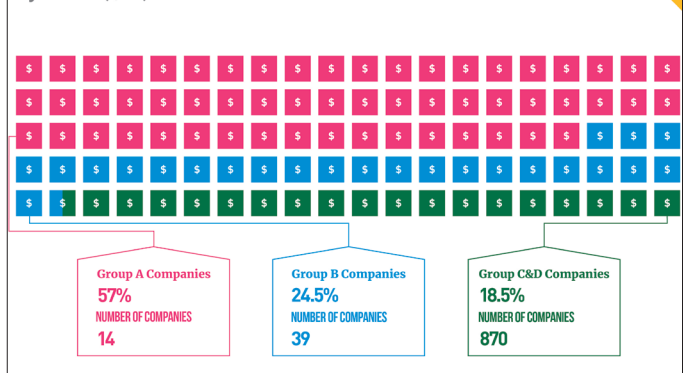
Acquisitions and mergers increased by 16%

The report also shows that in 2018, mergers and acquisition activity in physical security totalled \$7.33Bn (16% up on 2017), which looks like the start of a new

A Layered Approach to Smart Buildings Cybersecurity



Fig 2.1
Distribution of Sales by Major Grouping by Value (\$m) 2018



wave of growth. The structure of the industry is still very fragmented with hundreds of small companies finding it increasingly difficult to compete and it looks inevitable that the general trend line of value and volume of mergers and acquisitions will continue upwards over the next 5 years, but at a modest growth rate.

The average value of a deal increased from \$100m in 2010 to \$150 million in 2015. This year (2018), adjusting for the non-physical security business of the Gemalto acquisition the average deal was around \$160 million.

The number of deals in the range of \$50m to \$150m has increased and there has been more diversity across the different product types. Cross border acquisition accounted for 24% of the deals carried out this year.

"For the most part over the past five year period the main driver has been the need to extend geographic coverage but this year acquisition of technology has been the main objective. Some 62% of the deals involved the acquisition of US companies with the vast majority being domestic affairs," concludes James McHale.

About the Report

At 329 pages with 43 charts & tables & ONLY \$1,750 USD for a single user license, The Physical Security Business 2018 to 2023; Access Control, Intruder Alarm & Video Surveillance report filters out all the important conclusions, supported by facts, to demonstrate what is shaping the future of the security industry. The report can be directly ordered from AR Media International:

https://www.armedia.se/en/products_other_physicalSecurity.asp

Access control market heading for \$12.1 billion by 2024

Northbrook, IL (USA)

According to a new research report on the access control market from Market-sandmarkets, this sector is expected to grow from USD 7.5 billion in 2018 to USD 12.1 billion by 2024, at a CAGR of 8.24%. The growth of the access control market is attributed to the high adoption of access control solutions inline with increasing crime rates globally; technological advancements and deployment of wireless technology in security systems; and adoption of IoT-based security systems with cloud computing platforms.

\$12.1
8.24%

The adoption of access control as a service (ACaaS), implementation of mobile-based access control and increasing urbanisation in emerging countries are also expected to provide huge growth opportunities to players in the access control market.

Strong growth for biometric readers

The biometric readers segment is expected to grow at the highest CAGR from 2018 to 2024. The market for biometric reader-based access control systems has been further categorised into fingerprint recognition, hand geometry recognition, iris recognition, and face recognition. Biometric readers

are rapidly gaining worldwide traction owing to the growing need for surveillance and security in government facilities, manufacturing units, power stations, defence establishments, and enterprises.

Residential vertical on the rise

The researchers predict that the access control market for the residential vertical is expected to grow at the highest CAGR from 2018 to 2024. In smart homes, access control systems are used to enhance security. The key factors contributing to the growth of this market include the rise in crime rates, ongoing technological advancements, increasing need for

hazard detection such as fire and gas leaks, and ensuring the safety of children at home. The growing smart home market will lead the demand for access control solutions in the residential sector.

Asia Pasific takes the lead

Growing security concerns will boost demand for access control solutions in the APAC regions during the forecast period, and as a result this region is expected to grow at the highest CAGR to 2024. Factors driving the growth of the market in this region include growing industrialisation, commercialisation, and high demand for security systems. Also, rising terror threats and crime

rates in the APAC countries and low police officer to population ratios are expected to create high demand for access control systems there.

Market leaders

The analysts cite the key players in the market as Assa Abloy, Johnson Controls, Dormakaba, Allegion, Honeywell, Identiv, Nedap, Suprema, Bosch Security Systems, and Gemalto. These players are increasingly undertaking product launches and developments, mergers and acquisitions, contracts, partnerships, and agreements to develop and introduce new technologies and products to the market.



Business & Product News – Every Day!

www.securityworldhotel.com



ASSA ABLOY

Hands-on!

Code Handle®:
The convenient way to protect sensitive stuff in public spaces

Learn more at:
campaigns.assaabloyopeningsolutions.eu/codehandle

The global leader in door opening solutions

The power to secure and streamline your vehicle gates

New Generation of UHF Readers Allow a Secure, Fast and Automatic Vehicle Identification

Queues, congestion and miscommunication can cause delay and have a negative impact on business and the wellbeing of employees.

STid – trailblazer and market leader in the design of secure & instinctive solutions – introduces SPECTRE, the first born of a new generation of long-range ultra-high-frequency readers enabling fast vehicle identification process at the gate with the highest security levels.

The most important reasons to embrace AVI solutions are the convenience, traffic fluidity and the security they bring. Vehicle access control based on traditional proximity, remote control or barcode, often results in people leaning uncomfortably out of their windows towards the reader to show their access credentials.

Combining high security levels based on the latest industry standards, modularity making it

adaptable to any field scenario and uncommon design, SPECTRE is the solution for all AVI applications. "This secure and smart solution has been designed in close collaboration with our customers to ensure SPECTRE reader meets the myriad of security requirements of a fast, automatic vehicle identification," commented Vincent Dupart, STid CEO. "We are committed to make cutting-edge security solutions much easier for corporations and

their employees, so instinctive and convenient that user adoption is guaranteed."

Instinctive Vehicle identification

Based on the EPC1 Gen 2 standard and UHF passive technologies, SPECTRE rewrites traditional rules of security, making it more instinctive. The long-range reader offers unmatched reading distances up to 13 m and reliability for smooth vehicle access. According to STid, its outstanding performances makes SPECTRE the fastest reader on the AVI market.

Smart and Upgradable

Fully scalable and modular, SPECTRE enables to cover all security issues and all configurations, even in highly challenging environments. This evolutive reader is built to manage up to 4 driveways handling access of a mixed fleet of vehicles (light, heavy and motorcycles), the identification on wide lanes or even distinct access control for 4 lanes of vehicles. The solution can be tailored to customer's needs, offering the best solution for any situation and ensuring that all features and security levels can be upgraded at any time. Supporting a large variety of standard communication interfaces (Wiegand, Clock & Data, RS232 and RS485) and the OSDP™ industry standard, it enables seamless integration into any existing or new access control systems. For more fluidity, the reader can be controlled by ground loop or presence detector.



The Highest Levels of Security

The reader provides proven and unprecedented security, allowing users to sign UHF credentials, using encryption methods recognised by independent certification bodies in information security. This high security function enables faster authentication and prevents UHF credential cloning without compromising performance.

Standing the Test of Time

The enhanced vandal-proof structure withstands knocks and malicious acts. This weather-resistant reader is IP66-rated and designed for outdoor uses in harsh environments: vibration, dust, heavy rain, sea air... ". It's the most robust reader on the market, yet intuitively easy to use and set up. We have developed user-friendly and free tools to configure the readers in few seconds via USB cable or UHF card", adds Maé Tholoniati, Security Product Manager.

Its stealth design with strong lines ensures it integrates easily into the corporate environment for swift adoption. The wide range of customisation options enables our clients to truly get the most out of this powerful communication tool.

SPECTRE offers many smart features which make it the perfect solution for gates that require a combination of high security and convenience. "SPECTRE is the perfect blend of security, performance, reliability, flexibility and a unique design all in a simple solution. Reaching excellence to deliver best-in-class products is always a goal for STid.

The continuous improvement and innovation are strong and shared values in our company. We have pushed our 22-years of know-how and expertise in SPECTRE", concludes Vincent Dupart.

FOCUS Winner of a New Innovation Award at Expoprotection

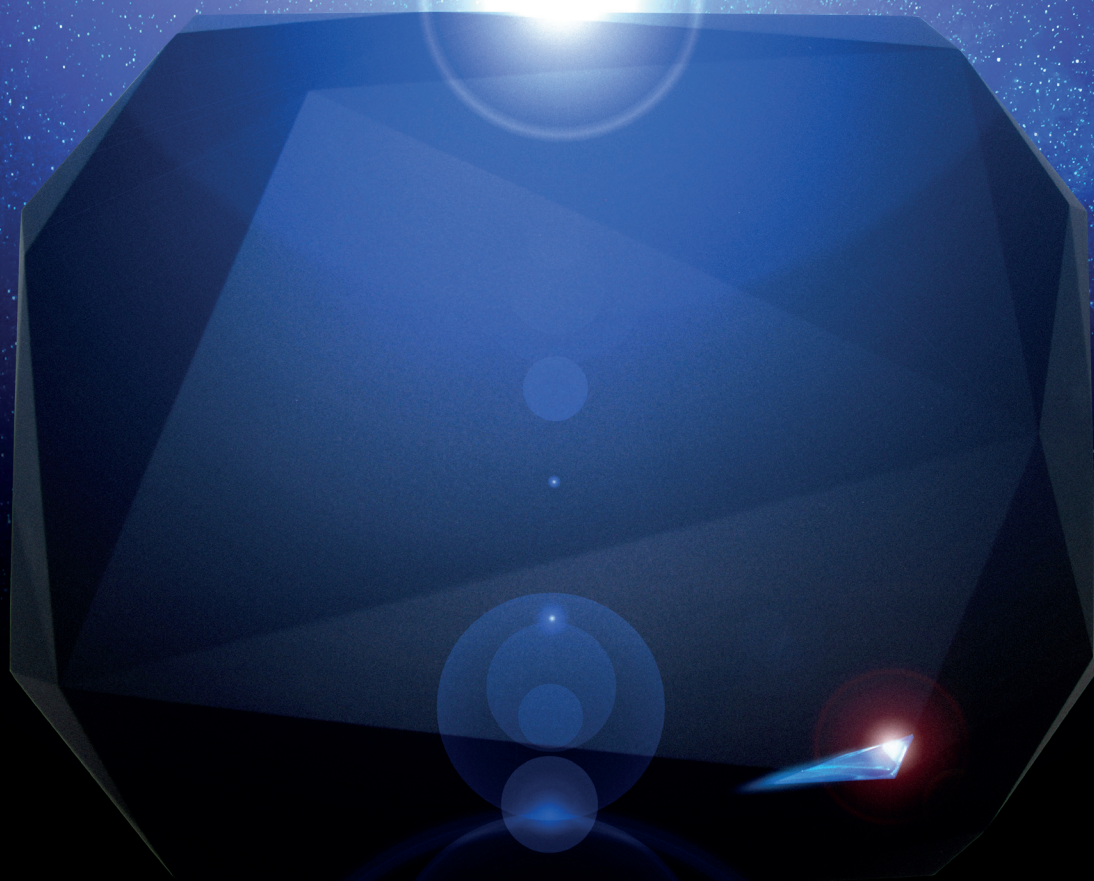
A jury of 9 end-user experts awarded SPECTRE from more than 30 participants in the "Risques Malveillance et Incendie" category for its ability to make UHF long distance identification both instinctive and extremely secure.

www.stid-security.com

STid
Electronic Identification



Smart Vehicle Identification



New Spectre reader: Let the good go, kick the bad out. Without delay.

Accept the challenge of fast-track security at your vehicle gates. Spectre's UHF-based vehicle ID reader is the first of a new generation: discreet by design, flexible in its configuration, secure and encrypted in its communication. Our new long-range reader is built to perform for up to 4 driveways, even in highly challenging environments. It's the most robust reader on the market, yet intuitively easy to use. Welcome to speed and security - in a single solution.

SCALABLE | SMOOTH | SECURE | AGILE | STEALTH | INSTINCTIVE

www.stid-security.com



Security Meetings
Trophées de la sécurité
Exprotection
ISC West
APS

Access control today

Cloud solutions, mobile credentials and integration are some of the most prominent trends of the access control market today. Detektor has talked to some of the leading companies in the market and listed four main headlines to sum up what is happening in the market right now and what is to come.

By Henrik Söderlund

Wireless and mobile

IHS Markit forecasts that 44 million mobile credentials will be downloaded by 2021, up from just 1 million in 2016. When Vanderbilt recently listed some of the main trends in the access control market, the company stressed that mobile access control is in high demand right now from end users looking for a way to incorporate their mobile phones with certain access levels within their organisation. Businesses see mobile solutions as an opportunity to enhance flexibility by integrating mobile access into offices at varying levels.

Wired to wireless

Customers seek a better experience from building security and according to Thomas Schulz, Assa Abloy EMEA Director Marketing and Communications for Digital and Access Solutions, making use of convenient technologies like smartphones seems like a logical starting point. He says: "In fact, we do detect fast-growing interest in mobile credentials: unlocking a door with a smartphone, in other words."

Thomas Schulz also stresses

that there is an on-going migration taking place from wired to wireless electronic locking in business premises. He says: "In our 2018 biennial survey of senior security professionals, the share of respondents with a fully-hardwired access control system fell below 50 per cent for the first time. Wireless solutions with secure, battery-powered locks are spreading fast."

Dahn Sadarangani, Regional Sales Manager for Northern Eastern Europe at HID, believes mobile access solutions is the biggest access control trend for the mid-end market. Using the mobile device offers several advantages to end users, such as convenience, efficiency and security. There is no need to carry a card, you can open the door from a distance, and there is intuitive user interaction with "Tap", "Twist and Go" and widget options. Physical access administration is made easier with online processes and each mobile ID can be bound to the device, you have the possibility to revoke credentials over-the-air and you can address vulnerabilities quickly through remote updates.



Cloud solutions and access control-as-a-service

The acceptance of cloud products and cloud services are increasing within access control. They provide benefits such as quicker installation time, automatic software updates, flexibility and mobility, managed services and increased cyber security. Also, you can investigate alarms, enable/disable credentials and view

businesses who have never owned an access control system before.

Tom Rockliff, Regional Sales Manager for Northwestern Europe at Johnson Controls, believes cloud services and access control-as-a-service will be very prominent in the future, at least in the medium and low-end market. He says:

I think the monthly subscription model will become a more regular route to market.

footage tied to access control systems from any location at any time. IHS Markit has estimated that the access-control-as-a-service market revenues will increase to 950 million dollars by 2022. The demand for access-control-as-a-service has grown rapidly over the past five years, and this growth is expected to continue according to IHS Markit. It is increasing the penetration of access control systems in buildings, and many end users are owners of small and medium-sized

"I think the monthly subscription model will become a more regular route to market. People have now started to pay a monthly subscription rather than make an outright purchase."

However, this model is easier for big system integrators to implement, because of the revenue collection model. Tom Rockliff says: "Smaller players do not usually have the infrastructure to collect the money, whereas the large companies do".



Dahn Sadarangani, Regional Sales Manager for Northern Eastern Europe at HID.



Thomas Schulz, Assa Abloy EMEA Director Marketing and Communications for Digital and Access Solutions.



Tom Rockliff, Regional Sales Manager for Northwestern Europe at Johnson Controls.

and tomorrow

Integration and ID management

Integration is another major trend in the access control market, for example between locks, readers, intrusion, security cameras and video management systems. Vanderbilt recently cited statistics from a recent survey that showed 36 percent of access control installations in educational settings now include video or intrusion, a trend that the company says is reflected in customer demand. An integrated, cloud-based access control and video management solution allows users to seamlessly monitor access activity and link events at doors with integrated video.

Thomas Schultz from Assa Abloy thinks that the question of standards and integration is only beginning to be addressed. He says: "Security professionals – from

our survey data and anecdotally – recognise the importance of integrating multiple security functions within a single environment. The whole 'smart building' paradigm hangs on doing this well. The easiest, most cost-effective route to integrated systems is via open platforms and agreed standards."

Data-driven decisions

Thomas Schultz also states that open standards make scaling-up more cost-effective and future-proof large investments in access control. He says: "Procurement is about the long run. Our industry's future will include better interoperability between building management systems."

Dahn Sadarangani sees the growing interest in alternative

use cases of identity management beyond just security as the biggest access control trend for the high-end market. He says: "A good example of this is building occupancy management, according to a recent study the majority of offices around the world are 50 per cent under-utilised."

Dahn Sadarangani also stresses that a number of factors influence the modern work environment, including changing work styles, mobile technologies and shifting business needs. Building occupancy management provides insights and enables data-driven decisions on the scaling and repurposing of office space. He says: "Building occupancy management can provide the real-time location of any individual meaning in the event of an

emergency, this gives an instant indication for security personnel and first responders over who is still in the building, and on which floor they are on."

Set up exclusion zones

Furthermore, he says that coupling building occupancy management with physical access control can also elevate building security to another level. For example, the building occupancy management system can be calibrated to set up exclusion zones that alert security staff when certain individuals enter a prohibited zone.

"Additionally, automated alerts and event notifications can be set up for when a specific person or group has either entered or left a designated area", he says.

In fact, we do detect fast-growing interest in mobile credentials: unlocking a door with a smartphone, in other words. Thomas Schulz

Old cards and future technology

Tom Rockliff from Johnson Controls does not think that cards will remain as a credential in the long run. He says: "We have a card in our hand, we have a card in our eye, and I have a credential in my watch and in my phone. So, I think the market for physical cards will decline, not yet, but it is just about to start decline."

Except the convenience of not having to carry around cards, he points out that there is a carbon footprint to consider as well. But there are also security reasons for why cards, or at least some of them, might vanish. Tom Rockliff says: "Wiegand and other technologies that can be hacked, they can only exist in the residential market in the future. Card

cloning and Wiegand sniffing and all the different types of activity to get into those lower technologies is making that market very difficult."

OSDP (Open Supervised Device Protocol) is one of the more secure access control communications protocols that has gained traction lately. It is much more secure than old protocols like Wiegand and protects readers against hacking using AES-128 encryption.

More biometrics

Biometrics is another field within access control that is projected to grow. For example, a market research report from Marketsandmarkets shows an estimated growth from 16.8 billion dollars from 2018 to 41.8

billion in 2023, at a compound annual growth rate of almost 20 per cent. Demand from the travel and immigration market is forecast to hold the largest share of the biometrics system market.

Tom Rockliff stresses that Bluetooth low energy and mobile credentials are becoming a much more popular requirement, but also biometrics. He says: "Facial recognition seems to be the preferred flavour of the moment. It is usually for high security applications like banking and military. We have been successful with a couple of deployments now in the financial sector and high security for perimeter protection and buildings. Once inside a perimeter, people are using a card, but in the

actual crossover from public to private, facial recognition is a success now."

Main adoption

Dahn Sadarangani stresses that biometrics have rapidly expanded into our daily lives, as millions of people utilise fingerprints to unlock their mobile phones, or access cash through ATMs. He says: "This mainstream adoption is also driving the increasing demand for biometrics in physical access control systems, as it offers increased protection and convenience. Using fingerprint biometrics for physical access security offers customers convenience as fingerprints are unique, cannot be forgotten, lost or stolen."



Access control makes schools safer and more efficient

On a daily basis, schools attract thieves and unwanted intruders. One report suggests almost half of UK schools experienced technology theft in the last three years. At the same time, schools often have to keep track of many mechanical keys. Therefore, there is a significant demand for both better security and easier access management.

Thomas Schulz, EMEA Marketing & Communications Director for Digital and Access Solutions at Assa Abloy, argues that in an ideal world, top-of-the-range access control would be standard for all schools. But challenges persist. Doors in schools perform many different roles: some handle high traffic (the main entrance), while others see little daily use. Most school managers are non-technical; they may want to embrace new technology but do not know exactly where to turn. The wrong system could demand time-consuming administration. And, of course, budgeting looms over every decision.

Replace mechanical keys

With so many doors at a typical site, mechanical key management is laborious. A large high-school keeps track of keys for the entrance, classrooms, laboratories, AV rooms, drama studios, IT and server rooms, offices, the library, gym, canteen and kitchen, medical rooms, student locker bays, staff rooms, and maintenance rooms. The key-tracking workload is enormous. Thomas Schulz suggests it should be replaced with one intuitive software interface.

“Electronic access control dispels the shortcomings of lock-and-key security. With key-cards instead of mechanical keys, it’s easy to cancel a lost credential immediately and efficiently,” he stresses.

“Providing access to a new site user, or removing permissions from a departed staff member, is straightforward. If an incident occurs, administrators collect an audit trail for any door or user via the software. Advanced features like real-time control become possible, with the right system.”

Electronic access control enables security managers to programme fine-grained access permissions for every user. So, for example, the school director has blanket all-areas access from a single RFID card, while maintenance and security staff are excluded from management offices or sensitive data stores. Teachers and cleaners hold time-based permissions, so they only enter during their individual working hours. Thomas Schulz stresses that such precision is near-impossible with mechanical security.

Wireless access control for schools

Assa Abloy has designed its Smartair wireless access control system for schools. According to the company, with intuitive management software, credentials and battery-powered locks in many configurations, it is easy to install and convenient for non-technical staff to use. The system can handle a large number of users and logs every interaction, so incidents are investigated efficiently.

“Doors require minimal alterations when Smartair battery-powered devices are fitted, because there is no wiring around the door. A lost card is much cheaper and less hassle to replace than any physical key. There’s no need to change the locks, merely to delete a card’s authorisation from



Doors require minimal alterations when Smartair battery-powered devices are fitted, because there is no wiring around the door.

the system. When needs change, it’s easy to extend coverage to more locks or combine offline and real-time online functionality within the same installation,” states Thomas Schulz.

In Denmark, Vejle Friskole has saved a lot of time switching to Smartair key management. Mechanical keys have been replaced, and over 80 doors and cabinets are secured by Smartair devices.

“There was a lot of work in key administration. Smartair is incredibly easy to figure out, it takes one minute to code a student,” comments Henrik Kækel, the school’s Technical Service Officer.

Today, Vejle Friskole staff spend around 5 minutes a week managing their entire access system.

Easy-to-use software

Another example comes from France, where school managers at Lycée Kreisker have replaced a stressful solution which involved managing two separate key systems.

Smartair readers now control access through the main gate – every school’s critical first line of defence. Classrooms are locked with wireless escutcheons. Non-technical, in-house staff carry out basic administration via the easy-to-use Smartair software.

“System configuration is affordably outsourced. So, for example, doors can be pre-programmed to remain open between 9am and 5pm but require a credential for out-of-hours access,” says Thomas Schulz.

Bringing Biometrics to the door and across the Enterprise

Biometrics fuse convenience and security while validating “true identity” versus identity that is associated with possessing an ID card (or mobile credential on a smartphone). It also offers numerous benefits for access control and other enterprise applications, according to Wayne Pak, Director of Product Marketing, Physical Access Control with HID Global.

With the emergence of new anti-spoofing capabilities and its integration into secure platforms that protect privacy and support numerous credential technologies, biometric authentication is poised to deliver a much higher matching speed and better overall performance along with improved security and user convenience.

According to the firm ABI Research in its May 2018 study titled Biometric Technologies and Applications, the total fingerprint sensor shipments for the entire consumer market is “estimated to reach 1.2 billion worldwide for 2018, thus ensuring its market dominance.” This represents a significant market opportunity for integrators, who can help their customers specify the best products and technologies for their application.

“Many technologies are still vulnerable to spoofs and hacking. It has been far too easy for fraudsters to create a fake fingerprint and present it to a reader. Equally troublesome, older products have not been able to move users through the doors as fast as a simple ID card and reader”, states Wayne Pak.

“In general, all fingerprint capture technologies are not equal among older products, and there can be significant differences in performance. Newer solutions are overcoming these security and convenience hurdles to help realise the full potential of biometrics.”

Key areas

According to Wayne Pak, development of the latest solutions has focused on the following key areas:

- **Improving image capture:** Many customers choose sensors that use multispectral imaging because it optimises the quality of the captured image, and illuminates the skin at different depths to collect information from inside the finger to augment available surface fingerprint data. Additionally, the multispectral sensors work for the broadest range of people with normal, wet, dry or damaged fingers, across the widest range conditions (from lotions or grease to sunlight, wet, cold conditions).
- **Liveness detection to enhance trust:** An increasingly visible dimension of biometric performance in commercial applications, liveness detection is the ability to determine that the biometric data captured by the fingerprint reader is from a real, living person rather than a plastic fake or other artificial copy. This is critical if biometrics are to eliminate the need to use PINs or passwords. It also protects privacy – if you can't use a fake finger, then even if you did obtain someone's fingerprint data, it is meaningless.
- **Optimising performance:** The top-performing solutions capture usable biometric data on the first attempt for every user and speed up the liveness detection process. They quickly perform template matching to reject impostors and match legitimate users, and should be tested by skilled and independent third parties for interoperability so that performance is based on data that can be trusted in all template-matching modes.



Wayne Pak, Director of Product Marketing, Physical Access Control, HID Global.

Security and accessibility

Incorporating biometrics into access control systems requires a secure trust platform designed to meet the concerns of accessibility and data protection in a connected environment. The platform should leverage credential technology that employs encryption and a software-based infrastructure to secure identities on any form factor for trusted access to doors, IT networks and beyond. This system also should encompass remote management of all readers and users, spanning all onboarding as well as template loading and enrolment activities for supported authentication modes.

“Tools should be available to allow system administrators to manage all configuration settings from time and data to language, security and synchronisation. Additionally, the system should enable continuous live monitoring of authentication, alerts and system health”, comments Wayne Pak. “To simplify deployment, application programming interfaces (APIs) should be available for direct integration of biometrics authentication solutions with the access control infrastructure.”

Privacy protection

Integrators can also help their customers ensure that solutions protect user privacy. Biometrics data must be handled like all sensitive and identifying information, and properly architected system designs will always consider and protect against both internal and external threats and attacks. New system architectures and data models have been created to protect personal information and maintain user privacy.

“Beyond the encryption of the data itself, there are now many good alternatives available for building highly secure and well protected systems, including the use of multi-factor and even multi-modal authentication to maintain security, even if some identifying data is compromised,” says Wayne Pak.

Viable option for access

Today's fingerprint authentication solutions are on a fast track to deliver a unique combination of ease of use and higher security to access control systems, according to Wayne Pak, who sees a bright future for this technology.

“With their latest enhancements in liveness detection, system architectures and performance, they seamlessly combine security and convenience to make them a viable option for secure access to facilities, networks and services”, he concludes.



Cyber Security Standards within IP Surveillance secures Taiwan

The number of cyber-attacks on IoT devices and consequently on video systems is becoming more frequent and is growing at an unprecedented rate.

Bearing in mind, that the continually growing number of IP cameras shipped from Taiwan has reached a figure of 25% - 30% of the total number installed worldwide, the Taiwanese government acknowledged the phenomenon and initiated a project to work out a series of IoT cyber security standards and regulations, with a testing system for networking solutions for products being used in Taiwan.

The new government policy aims to build 'a safe and reliable digital land' in Taiwan; and it recognises that cyber security in IP surveillance has been highlighted as a serious issue throughout the world at large today, thus, the policy will also give impetus to the IP surveillance industry of

Taiwan enabling it to enhance its export business to the rest of the globe.

IoT Cyber Security Standards & Regulations 72% compliant to UL 2900

Committed to this goal, at the end of 2017, the government gathered together the industrial elite, specialists in cyber security (including white-hat hackers), scholars and officials to work on "The IoT Cyber Security Standards and Testing Specification." The Video Surveillance System Series Standards (for IP cameras and for NVRs/DVRs) are said to be 72% compliant to the requirements of UL2900, according to III (The Institution for Information Industry), a think tank and

R&D organisation for, the Digital Economy, Industrialisation and Talent Cultivation, created to lead Digital Country Development in Taiwan. The standards and regulations will be reviewed and updated under the supervision of III when any industrial feedback or market complaints are raised.

Alongside the announcement of these new standards and testing specifications, the TAF(*), a non-profit organisation which offers third-party impartial, independent and transparent assessment services, has further certified a batch of six testing labs to perform and deliver the testing, consultation, and certification

services on the software and hardware of IP surveillance products/solutions.

TSSIA helps to promote the Standards to the Security Industry

The IoT Cyber Security Standards have regulated all basic requirements on networking IP surveillance devices in Part I (TAICS TS0014-1 v1.0). Those requirements specially applying to IP cameras are described in Part II (TAICS TS0014-1 v2.0). And, the requirements for DVRs and NVRs have just been announced at the end of March 2019.

TSSIA (Taiwan Safety and



Security Industry Association) has been assigned by the IDB (Industry Develop Bureau, Ministry of Economic Affairs) to help Taiwan-based IP surveillance manufacturers to improve and enhance their IP cameras, NVRs and DVRs with the consultation and testing services from the TAF-certified testing Labs. In 2018, sixteen brands or companies (with logos listed below) joined the consultation and testing programme to check and improve the cyber security performance of their products.

From now on, if international brands, wish to undertake OEM or OBM manufacturing in Taiwan, they will also be able to use the service at a limited cost; which will provide an impartial testing report from the certified 3rd party to assure the cyber security performance of their OEM/OBM products before being shipped.

The TSSIA in joint-force with the ETC testing Lab will be

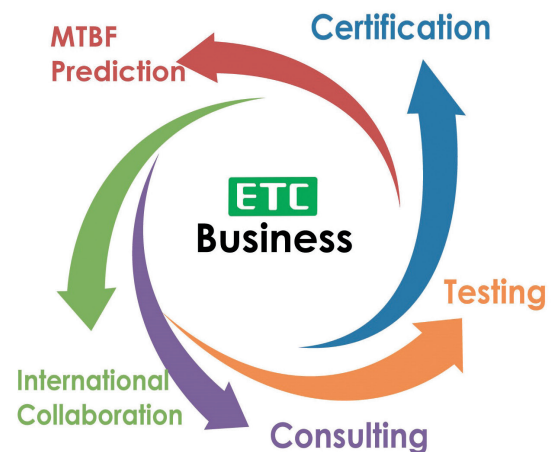
exhibiting, and available at, Ifsec International 2019. If interested in the consultation and testing services, please visit stand #IF2632 of IFSEC International, London Excel, UK, from 18-20 June 2019.

TAF(*), The Taiwan Accreditation Foundation, is the only body in Taiwan recognised by the Government for the accreditation of conformity assessment against international standards. TAF is a full member of iLac-MRA. The ILAC Mutual Recognition Arrangement (ILAC MRA) provides significant technical underpinning to the calibration, testing, medical testing and inspection results of the accredited conformity assessment bodies and in turn delivers confidence in the acceptance of results. The ILAC MRA supports the provision of local or national services, such as providing safe food and clean drinking.



The ETC (Electronics Testing Center) was founded with the support of the Ministry of Economic Affairs (MOEA) of Taiwan in 1983.

The Lab is accredited as a certification body by BSMI, NCC (National Communications Commission) and Taiwan EPA. ETC is also the first non-governmental RPC Certification Body in Taiwan. It is also a designated laboratory for safety and EMC testing.



Test and Improve

Network-connecting Cyber Security

within Your IP Surveillance products/systems






Service Window:



Taiwan Safety & Security Industry Association (TSSIA)

TEL: +(886-2) 2629 1800

Email: tssia.tw@gmail.com

<http://www.tssia.org.tw/en/>

With the Taiwanese governmental projects' support, TSSIA in associate with ETC (TAF-certified testing Lab) offer the testing and consulting service on the IoT Surveillance devices from Taiwan.

International brands and manufacturers, wish to undertake OEM or OBM manufacturing in Taiwan, they will also be able to use the service to get an impartial testing report from us, the certified 3rd party, to assure the cyber security performance of their OEM/OBM products before being shipped, on sales, or applying to projects.

The service will be mainly executed based on the "The IoT Cyber Security Standards and Testing Specification" (for IP Cameras and for NVR/DVR)" of Taiwan that are almost 72% compliant to the requirements of UL2900; please scan the QR code (above) to learn more.



The Acquisitions Calendar for January – February 2019

The beginning of a year is often an intense period for acquisitions in the physical security market. 2019 is no exception.

In this issue we present a chronological breakdown of some of the main acquisitions this year up until the end of March 2019.

JANUARY



Assa Abloy President & CEO,
Nico Delvaux

Assa Abloy signed an agreement to acquire **Keyper Systems**, a supplier of electronic and mechanical key management systems in the US with a strong presence in the automotive segment.

“The acquisition of Keyper Systems enhances our global product offering in this area and will provide synergy opportunities in North America and other markets,” says Nico Delvaux, President and CEO of Assa Abloy.

Keyper Systems was established in 1993 and has approximately 25 employees. The head office is located in Harrisburg, North Carolina. Sales for 2019 are expected to reach about USD 22 million with a good EBIT margin.

Motorola Solutions, Inc. acquired **VaaS International Holdings, Inc.** (VaaS), a data and image analytics company based in Livermore, California and Fort Worth, Texas. Motorola Solutions paid a purchase price of \$445 million in a combination of cash and equity.

VaaS International is a video analysis-as-a-service company, providing data and image analytics for vehicle location. The company's image capture and analysis platform – which includes fixed and mobile license plate reader cameras driven by machine learning and artificial intelligence – provides vehicle location data to public safety and commercial customers. Its subsidiaries include Vigilant Solutions for law enforcement users and Digital Recognition Network (DRN) for commercial customers.

The company's 2019 revenues are expected to be approximately \$100 million.

Verint Systems Inc. signed a definitive agreement to acquire **Foresee**, a cloud voice of the customer (VoC) vendor. The Verint-Foresee combination aims to create a comprehensive omnichannel cloud VoC portfolio and an analytics-rich offering that will allow organisations to better measure and understand customer experiences and prioritise the improvements that will have the greatest business impact.

Securitas Transport Aviation Services USA has acquired **Global Elite Group**, a security services provider to the aviation industry in the US. The purchase price is approximately MUSD 22 (MSEK 200), contingent upon reaching certain targets.

Global Elite Group is based in Garden City, New York, and specialises in providing high level security services to various airlines, airports and airport related customers. The customer base consists of more than 60 commercial airlines and numerous general aviation clients. The growth pattern in the company has been solid over the years with total sales expected to be MUSD 32 for 2018. The number of employees is approximately 1,050.

Securitas runs a twofold strategy in the US aviation market, addressing both the federal government with passenger and baggage screening for the Transportation Security Administration, as well as security services for the commercial market such as airlines, airports and airport related customers (e.g. cargo). The estimated market volume for the latter, i.e. the commercial market related to 450 airports, is between BUSD 1.3-1.8.

Convergent Technologies acquired **MTS Security** in Dublin, Ireland. MTS is Ireland's largest independently owned security systems company, supplying a single-source solution to clients in the U.K. and Europe.

MTS Security brings Convergent 87 experienced colleagues, all of whom will be joining the Convergent organisation. With a focus on complex enterprise solutions, MTS has built strong relationships with many global customers throughout Europe, including those in the technology, retail, pharmaceutical, and industrial markets.

FEBRUARY



Rugged, reliable, and field-proven, Aeryon's Skyraider UAS are rucksack portable and can be deployed in minutes by a single operator.

Flir Systems acquired **Aeryon Labs**, a developer of high-performance unmanned aerial systems (UAS) for the global military, public safety, and critical infrastructure markets for \$200 million.

Aeryon's vertical takeoff and landing quad-copter airframes integrate multiple sensors, including Flir thermal technology, to provide users with immediate high-resolution intelligence, surveillance, and reconnaissance (ISR) capability.

Based in Waterloo, Canada, and with offices in Denver and Salt Lake City, Aeryon Labs was founded in 2007 and is a leading designer and manufacturer of mission-focused Group 1 UAS solutions built around aircraft under 20 pounds. Aeryon's family of UAS are deployed by 20 militaries in over 30 countries around the world, including the United States Department of Defense. Aeryon develops UAS solutions that includes hardware, embedded software, ground control stations, sensors, software for flight operations, as well as supporting services for its global customers.

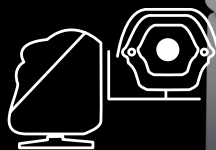
“The acquisition of Aeryon Labs reinforces our long-term strategy to move beyond providing sensors to the development of complete solutions that save lives and livelihoods,” said Jim Cannon, President and CEO of Flir Systems. “This acquisition, coupled with our acquisition of Prox Dynamics in 2016, greatly increases our unmanned systems solutions capabilities, expanding beyond nano-UAS into Group 1 UAS solutions for military. We intend to continue to invest and build this area of our business and broaden our capabilities as we view unmanned and autonomous solutions to be a significant opportunity for organic growth in the coming years.”

Continuing on page 22 →

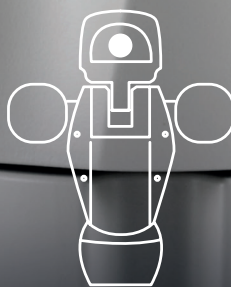
Ulisse eVO



1986



1995



2005



2010



2019

Witness the Evolution of video security

Videotec's ULISSE EVO PTZ camera is another technologically innovative step forward in the pursuit of increasingly high-performance and reliable video surveillance products. This new versatile PTZ camera offers performance, competitiveness and design at an unprecedented level.



VIDEO SECURITY
PRODUCTS
www.videotec.com
info@videotec.com
Made in Italy since 1986

deLux
technology





The Acquisitions Calendar for February to April 2019

FEBRUARY

Also in February, **ADT Inc.** acquired **Lifeshield, LLC**, a pioneer in advanced wireless home security systems, in a transaction valued at approximately \$25 million. John Owens will continue in his current capacity leading the Lifeshield team.

Founded in 2004, Lifeshield was the first to bring a wireless DIY home security offering to the residential market. Over the past 15 years, Lifeshield has further redefined residential home security, improving interactivity, advancing video capabilities and enhancing the overall user experience.

The addition of Lifeshield's innovative technology to ADT's security and automation solutions and expertise increases ADT's ability to address the approximately 80% of U.S. households who do not have professionally installed and monitored home security.

"We are confident that Lifeshield's capabilities and approach, combined with the brand and scale of ADT, will create an opportunity for us to offer our services to a broader cross-section of U.S. households. Together with Lifeshield we will be positioned to offer more solutions to a broader base of customers and create increased value for our shareholders as we seek to grow profitability through expanded, yet focused offerings," comments ADT President and CEO Jim DeVries.

MARCH

In March **Convergent Technologies** announced its acquisition of North Carolina-based **Security Solutions & Management systems**.

SS&M's expertise in military and commercial security solutions includes physical security information management systems that integrate video surveillance, access control, building management, identity management, and IT security. The acquisition adds to Convergent's expanding presence in the Carolinas, with expertise within the government, healthcare, and retail security fields.

Flir Systems, Inc. completed the acquisition of **Endeavor Robotic Holdings, Inc.**, a developer of battle-tested, tactical unmanned ground vehicles (UGVs) for the global military, public safety, and critical infrastructure markets, from Arlington Capital Partners for \$382 million in cash.

Based outside Boston and formerly known as Irobot Defense & Security, Endeavor has shipped more than 7,000 UGVs to customers in over 55 countries. Endeavor's highly-mobile and easy to operate ground robots utilise advanced sensing and actuation in providing explosive ordnance disposal, reconnaissance, inspection, and hazardous materi-



Endeavor has shipped more than 7,000 UGVs to customers in over 55 countries.

als support for troops, police, and industrial users at stand-off range. Endeavor is one of the largest UGV providers to the United States (U.S.) Department of Defense (DoD), and a key supplier of unmanned systems for the accelerating modernisation of global military and law enforcement operational assets.

"With the addition of Endeavor, Flir becomes a leading provider of unmanned aerial and ground solutions to support the needs of warfighters, and public safety and critical infrastructure professionals," states Jim Cannon, President and CEO of Flir Systems.

Also this month, **Assa Abloy** announced it was acquiring a majority stake in **Agta Record**. As a 39 percent shareholder in the Swiss company Agta Record AG, Assa Abloy has signed an agreement with the shareholders of Agta Finance to indirectly acquire their 54 percent shareholding in Agta Record. The purchase price for the acquisition amounts to approximately EUR 502 million, equivalent to a purchase price per Agta Record share of EUR 70.

After the completion of the acquisition, Assa Abloy will own approximately 93 percent of the share capital and voting rights of the company and will launch a public tender offer for the remaining outstanding shares at the same purchase price per Agta Record share as for the acquisition.

Agta Record is a well-established manufacturer and service organisation dedicated to automatic pedestrian entrance systems. The company is headquartered in Fehraltorf, Switzerland and has 2,600 employees. For 2018 agta record's sales amounted to EUR 374.4 million. The Company's extensive expertise covers the design, production, marketing, installation and maintenance of a large range of automatic doors.

Agta Record sells its products and services across the globe and is directly present with subsidiaries in 17 countries. Agta Record is listed on Euronext Paris, foreign stocks.

The acquisition is conditional upon regulatory approval and is expected to close during the fourth quarter of 2019.

Schneider Electric in negotiations on the sale of Pelco

Rueil-Malmaison (France)

Schneider Electric has entered exclusive negotiations with Transom Capital Group, a U.S.-based private equity firm, regarding the sale of its Pelco business unit.

Pelco is a global specialist in the design, development, and delivery of trusted end-to-end video surveillance solutions and services

including cameras, recording and management systems software. It generated revenues of €169m in 2018 and employs 478 people. It is currently reported under the Energy Management business of Schneider Electric. The proposed transaction follows the strategic review announced in Schneider Electric's

2018 results on assets totalling €1.5-2 billion of revenues, as the Group continues to focus its activities on core energy management and industrial automation offerings.

The proposed transaction is subject to the consultation of the relevant work councils and would be finalized upon the successful

completion of this process. Based on current terms, it would trigger a non-cash loss on disposal of up to €250m, the net impact of which would be excluded from the net income used for dividend calculation. The transaction would be accretive by c.+10bps to the Group adjusted EBITA margin on a full year basis.

Aviation specific solution secures Bahrain airport

Belfast, UK and Manama, Bahrain

The powerful CEM Systems AC2000 Airport software and industry leading CEM Systems hardware is being installed at Bahrain International Airport to ensure the highest level of integrated security and assist in controlling passenger flow across the airport. The contract was awarded by Thales and will be delivered by regional partner Tyco Fire and Security Middle East.

Bahrain International Airport is the international airport of

Bahrain, located in Muharraq, an island about 7 km northeast of the capital Manama. The airport is currently undergoing a \$1.1 billion expansion that will boost the airport's capacity to fourteen million passengers per year.

"This contract to secure Bahrain International Airport represents another significant win for CEM Systems AC2000 Airport solution in the growing aviation sector in the Middle East region," said Philip Verner, regional sales

director, Building Technologies & Solutions, Johnson Controls.

"The powerful CEM Systems AC2000 Airport has a proven record as one of the most reliable and resilient access control and security management solutions available for aviation security. It not only provides Bahrain International Airport with advanced access control throughout terminal buildings and airside/landside boundaries but it also provides a range of software applications



The aviation specific CEM Systems AC2000 Airport access control solution has been selected to secure the new Bahrain International Airport.

to enhance the airport's onsite operations and increase business efficiency."

Dahua financials show over 25% growth

Hangzhou, China

The initial unaudited preliminary financial data for 2018 for, **Zhejiang Dahua Technology Co., Ltd.**, more commonly known as Dahua, show that the company achieved a total operating revenue of RMB 23,665,688,106.22 (USD 3.45 billion approx), representing a year-

on-year increase of 25.58%.

Operating profit amounted to RMB 2,696,619,590.13 (USD: 0.39 billion), representing an increase of 2.44% as compared to the corresponding period of the previous year. Net profits attributable to shareholders of the Dahua amount-

ed to RMB 2,531,526,444.05 (USD 0.37 billion), growing 6.42% year on year.

During the reporting period, the company strengthened the precise investment in R&D, continuously improved its video-centric smart IoT solution capabilities, grasped

the development trend of the market and industry, and realised the continuous growth of the company's performance. Dahua's total asset increased by 23.52% and net asset increased by 20.58%, mainly due to the expansion of the business scale and the increase of the profit.

Everybody.



Everywhere.



Every day.



Ordinary days require extraordinary protection.

Find out more about the software behind the everyday at
genetec.com/protectingeveryday

Genetec™

© 2018 Genetec Inc. GENETEC and the GENETEC LOGO are trademarks of Genetec Inc., and may be registered or pending registration in several jurisdictions.

genetec.com

BUSINESS PEOPLE



George Moawad.

Country Manager for Genetec in Australia and New Zealand

Montreal, Canada and Sydney, Australia

Genetec Inc. has appointed Mr. George Moawad as Country Manager for the Australia-New Zealand (ANZ) market. In his new role, Mr. Moawad will lead Genetec business growth and nurture expanding market opportunities for the company in the region.

Prior to this, Mr. Moawad served as Vendor Business Manager and General Manager Northern Region for Hills Limited, the exclusive value added distributor for Genetec. In these roles, he was responsible for the Genetec portfolio for the ANZ region, allowing him to gain valuable knowledge about the regions' unique security needs.

"The security market in Australia and New Zealand continues to grow at an exponential rate, and as Genetec deploys more resources to expand our footprint across the region, it is an exciting time to lead the Australia-New Zealand team," says George Moawad.

Sweden's oldest festival improves security and reduces crime

Malmö, Sweden

Crime fell sharply at the annual Malmö Festival following the deployment of a new security solution which according to reports resulted in fewer violent crimes, more people being detained and the number of sexual offences fell by 73 per cent.

The Malmö Festival is Sweden's oldest city festival and is held in August every year. The festival attracts approximately 1.4 million visitors of all ages and nationalities.

The security and safety of visitors and artists is of paramount importance when the festival is held. The organisers of the festival, the Traffic and Property Management Department in Malmö City, have therefore worked tirelessly to improve security. In 2018, an initiative was launched to enhance security measures in collaboration with the Swedish Police Authority, Skåne Regional Council and Rescue Service South.

Quick and clear information

The new solution that includes Axis network cameras provides quick and clear information in the event of an incident, including what and who caused it, so that interventions can take place quickly.

"For the 2018 festival we wanted to collect better decision-making data, and by using technology, we could quickly get an overview of the current situation should anything happen. That allowed us to undertake a quick and effective



The festival attracts around 1.4 million visitors and security and safety is paramount.

situation analysis", says Magnus Fjällström. "By using technology, staffing can be made more efficient, while safety standards are just as high."

Many risk factors

Unfortunately, festivals and mass gatherings involve a risk of sexual harassment, abuse, terrorist acts and sabotage. The police's objective was to work proactively and with incident prevention, rather than reaction, so they could effectively detect and deter delinquent behaviour before anything serious happened. The Swedish Police Authority had previously had a few cameras at the Malmö Festival.

One element of the security solution consisted of vehicle barriers with sensors, which sounded an alarm if someone tried to move the barrier, and a nearby camera then zoomed in and filmed the event. Vehicle barriers are of the utmost importance to prevent vehicles from driving into crowds, regardless of whether it's an act of terrorism, drink-driving or illness related.

Intelligent cameras

In addition, software was installed on the cameras to count visitors,

and to monitor the flow of people in different areas. This helped the festival meet its licensing requirements for how many people are allowed to assemble in a certain area at the same time, as well as to estimate how many security guards were needed. The organisers could also estimate crowd flows to determine how many staff members were needed in certain areas.

In addition, the cameras filmed audience members in close proximity to the stages in real time. "Despite smoke machines and the challenges of spotlights in different colours, and thus difficult lighting situations, the cameras worked very well and provided good quality images. Axis' network cameras are very impressive", says Magnus Fjällström.

Less cases of assault

The new security solution has resulted in a sharp fall in crime. At the Malmö Festival in 2018, the number of cases of assault fell by almost 13 per cent and the number of sexual offences fell by 73 per cent. Furthermore, considerably more people were detained thanks to evidence in the form of image material.

German police take on body-worn cameras

Idstein, Germany

Motorola Solutions will equip the German federal police with its Si500 video speaker microphone and a digital evidence management software solution.

The technology will help law enforcement officers and citizens to be better protected and will

improve incident investigations. The Motorola Solutions Si500 combines a body-worn video camera, a remote speaker microphone that connects to the officer's two-way radio and a smart interface in a single device, reducing the load police officers have to carry when

on patrol. As part of the roll-out, 2,300 Motorola Solutions Si500 devices will be delivered by the end of 2020. Data will be securely stored in a digital evidence management system, keeping the chain of evidence intact from capture to courtroom.



Advanced
Sensor



Powered
by GPU



Deep
Learning



Image
Fusion

Intelligent Awareness Any Moment, Any Condition

- Highly-accurate video content analysis to enhance perimeter protection
- Non-contact temperature measurement to prevent equipment breakdowns
- Vigilant fire detection to pinpoint potential risks in the first place
- Augmented with visible light imaging and visualized metadata



Hikvision Headquarters

T +86 571 88075998
overseasbusiness@hikvision.com



@HikvisionHQ



@HikvisionHQ



@Hikvision

Visit us at

**IFSEC International
Booth #IF1530**

HIKVISION®

www.hikvision.com

Top seven security and risk management trends for 2019

Stamford, Ct (USA)

Gartner, Inc. has identified seven emerging security and risk management trends that will impact security, privacy and risk leaders in the longer term.

“External factors and security-specific threats are converging to influence the overall security and risk landscape, so leaders in the space must properly prepare to improve resilience and support business objectives,” says Peter Firstbrook, research vice president at Gartner.

The top seven security and risk management trends for 2019 and beyond as identified by Gartner researchers are as follows:

Trend No. 1:

Risk Appetite statements are becoming linked to business outcomes

As IT strategies become more closely aligned with business goals, the ability for security and risk management (SRM) leaders to effectively present security matters to key business decision makers gains importance. “To avoid exclusively focusing on issues related to IT-decision making, create simple, practical and pragmatic risk appetite statements that are linked to business goals and relevant to board-level decisions,” says Peter Firstbrook. “This leaves no room for business leaders to be confused as to why security leaders were even present at strategic meetings.”

Trend No. 2:

Security operations centres are being implemented with a focus on threat detection and response

The shift in security investments from threat prevention to threat detection requires an investment in security operations centres (SOCs) as the complexity and frequency of security alerts grow. According to Gartner, by 2022, 50 percent of all SOC's will transform into modern SOC's with integrated incident response, threat intelligence and threat-hunting capabilities, up from less than 10 percent in 2015. “The need for SRM leaders to build or outsource a SOC that integrates threat intelligence, consolidates security alerts and automates response cannot be overstated,” claims Peter Firstbrook.

Trend No. 3:

Data security governance frameworks will prioritise data security investments

Data security is a complex issue that cannot be solved without a strong understanding of the data itself, the context in which the data is created and used, and how it is subject to regulation. Rather than acquiring data protection products and trying to adapt them to suit the business need, leading organisations are starting to address data security through a data security governance framework (DSGF). “DSGF provides a data-centric blueprint that identifies and classifies data assets and defines data security policies. This then is used to select technologies to minimize risk,” explains Mr. Firstbrook. “The key in addressing data security is to start from the business risk it addresses, rather than from acquiring technology first, as too many companies do.”

Trend No. 4:

Passwordless: Authentication is achieving market traction

Passwordless authentication, such as Touch ID on smartphones, is starting to achieve real market traction. The technology is being increasingly deployed in enterprise applications for consumers and employees, as



Gartner, Inc. has identified seven emerging security and risk management trends that will impact security, privacy and risk leaders in the longer term.

there is ample supply and demand for it. “In an effort to combat hackers who target passwords to access cloud-based applications, passwordless methods that associate users to their devices offer increased security and usability, which is a rare win/win for security,” states Peter Firstbrook.

Trend No. 5:

Security product vendors are increasingly offering premium skills and training services

The number of unfilled cyber security roles is expected to grow from 1 million in 2018 to 1.5 million by the end of 2020, according to Gartner. While advancements in artificial intelligence and automation certainly reduce the need for humans to analyse standard security alerts, sensitive and complex alerts require the human eye. “We are starting to see vendors offer solutions that are a fusion of products and operational services to accelerate product adoption. Services range from full management to partial support aimed at improving administrators’ skill levels and reducing the daily workload,” comments Peter Firstbrook.

Trend No. 6:

Investments being made in cloud security competencies as a mainstream computing platform

The shift to cloud means stretching security teams thin, as talent may be unavailable and organisations are simply not prepared for it. Gartner estimates that the majority of cloud security failures will be the fault of the customers through 2023. “Public cloud is a secure and viable option for many organisations, but keeping it secure is a shared responsibility,” says Peter Firstbrook. “Organisations must invest in security skills and governance tools that build the necessary knowledge base to keep up with the rapid pace of cloud development and innovation.”

Trend No. 7:

Increasing presence of CARTA approach in traditional security markets

Gartner’s continuous adaptive risk and trust assessment (CARTA) is a strategy for dealing with the ambiguity of digital business trust assessments. “Even though it’s a multiyear journey, the idea behind CARTA is a strategic approach to security that balances security friction with transaction risk. A key component to CARTA is to continuously assess risk and trust even after access is extended,” states Peter Firstbrook. “Email and network security are two examples of security domains that are moving toward a CARTA approach as solutions increasingly focus on detecting anomalies even after users and devices are authenticated.”

A NEW ERA IN PERIMETER SECURITY

*PROTECT YOUR BUSINESS WITH THE FLIR
SAROS PERIMETER SECURITY CAMERA*



The FLIR Saros™ Dome camera is a detection solution for small-to-medium size businesses that watches over an entire perimeter. Saros combines an optical camera with thermal sensors enabling analytics to limit false alarms. From the industry leader in thermal imaging, FLIR Saros provides an effective, efficient, and economical security solution.



[FLIR.com/saros](https://www.flir.com/saros)

New technology is changing

Perimeter protection has become a somewhat hot topic in the physical security industry and the market is growing with a CAGR of approximately 13 per cent.

“We can now see radars and other technology becoming more cost effective, these were in the past quite expensive solutions. And with those technologies come additional features, that were not available in the past”, says Mark Cosgrave, Division Manager for Western Europe at Optex.

By Henrik Söderlund

There are many reasons for why the global perimeter security market is growing. Market research companies such as Statistics MRC and Marketandmarkets highlight rising number of perimeter intrusions, increasing urban infrastructure across the globe, strict government rules and rising technological advancement in perimeter security as well as the rise in terror attacks worldwide. Various market reports estimate that the market for perimeter security will reach around 200–225 billion dollars within the next 3–4 years.

Edward Knoch, Project Manager at Spotter RE, says that the perimeter market is growing

for a specific area. If you ignore perimeter protection, then you are ignoring a critical piece of your security portfolio.”

Price drop

Nick D’hoedt, Regional Sales Director, Genetec, believes the perimeter market is growing because there are more big sites. He says: “A couple of years ago, everyone was putting fences around some projects, but today we are really looking at very large situations. I am talking city-wise where we are focusing on critical infrastructure and airports.”

Jimmy Ek, Sales Manager, Nordics, Axis Communications, stresses



The market for perimeter security will reach around 200–225 billion dollars within the next 3–4 years.

now see are able to provide unique solutions to people’s demands. The threat levels also have increased globally, and I think there is much more of a requirement for this type of solution today than there has been in the past”.

Rapid development of sensing technology

Jimmy Ek claims that the growth in the perimeter market is higher than ever before. He says: “What we hear when we meet with customers is how impressed they are that we are continually inventing new ideas and products. And it is not just the product itself, but the availability of integrating different technologies together.”

There are many different technologies that are being used for perimeter protection: video surveillance systems, thermal cameras, radars, access control systems, alarms and notification systems, fencing, lighting and others. Nick D’hoedt from Genetec says that new kinds of sensors have changed a lot over the last couple of years. “Today we are looking at noise, speed, colours, we have so many sensors around us, that complete the image with cameras that we had already before, so that we can take much more intelligent decisions,” he says.

The devices also work better together than before. For example, security cameras are good at verifying alarms from different sensors and can bring the information together to a central platform or system that are providing situational awareness for customers.

A combination of technologies

Most industry professionals agree that there is no single technology that can solve all situations. Mark Cosgrave thinks every technology has its strengths and its weaknesses – what is important is that you tailor the product to the application. He says: “It is also important to ensure that you have a layered protection solution, so you cannot just depend on using one particular type of sensing technology, it is important to incorporate the technologies together, to create a harmony and a solution that works really well for the end user.”

Nick D’hoedt and Edward Knoch also have more or less the same opinion: there are a lot of security technologies that can be applied to a customer’s property. Edward Knoch says: “If you think about the layering of the security from outside the perimeter to the inside perimeter, the building and inside the building itself, you have to have layers of security as you go out. We are looking at protection beyond fences and offering a solution where I can go hundreds of metres beyond your fence line if you want.”

Finally, Jimmy Ek, who believes you have to ask yourself what the customer needs are and what the threat level and budget looks like. He says: “When you have those, you can put together a solution that fits that need for that customer, and without specifying any technology. I think that is how you have to do it.”

“The different types of technologies that we now see are able to provide unique solutions to people’s demands”.

because of mainly two reasons. One is because customers are recognising that physical penetrations of their properties are happening whether they know it or not. He says: “People are penetrating properties, stealing critical assets such as copper, aluminium, valuable metals and other things that they can sell on the open market.”

The second reason is the terrorist threat. Edward Knoch says: “A number of terrorist incidents have occurred in the USA and around the world, where people have penetrated properties, taken shots at critical infrastructure, like power sub stations and such. And that can take out your entire infrastructure

that the threat levels and needs have changed over time and that a lot of companies are investing to ensure that they have a good perimeter protection. He also says another reason for why the perimeter market is growing is that technology has dropped in price and today the technology is available for a broader portion of end customers.

“The average enterprise customers could all fit it into their budgets”, Jimmy Ek says.

Mark Cosgrave stresses the rise of new technology and that automated solutions have helped to improve sensing technology and drive the market. He says: “The different types of technologies that we

the perimeter security market

Drones add a new dimension to perimeter security

The introduction of drones has led to a paradigm shift in the perimeter security market: it is no longer only about horizontal protection, but also vertical.

“Now that the average person has access to our airspace, full three dimensions with drones – that means we have new sensors that use that paradigm and that means market growth”, says Dave Romero, Managing Partner at Black Sage.

By Henrik Söderlund

The foundation in perimeter protection is physical security and fences according to Genetec Regional Sales Director Nick D’hoedt. However, he thinks perimeter security has changed and while we were looking at a couple of hundred metres away from the boundaries before, today it can be multiple kilometres. He says: “Now you have to think about a third dimension – radar technology, laser technology, radio frequency and also drone technology are all combined into one solution and we are bringing all that information back to the operators, who need to take responsibility and decisions within a timeframe of 10 to 20 seconds.”

A new reality

Lucas Le Belle, CEO of Cerbair, believes the emergence of civilian drones have dramatically changed the market. Traditionally attacks have been carried out by individuals trying to break into a site physically, or more lately, through cyber attacks. Hence, security countermeasure solutions have been implemented. But the problem with drones is that they just

bypass all those traditional security measures. Lucas Le Belle says: “All sites need cameras, analytics and access control, but we also need transition from this model to a fully integrated three-dimensional security approach. The near air space can be an easy way to go for terrorists, criminals or people with bad intentions to actually penetrate your site and do the attack. So, the whole anti-drone industry is going to be complementary to the more traditional way of doing things in security.”

He also believes that more emphasis has been put on anticipating detection in order to get longer reaction-times.

Volumes of coverage

Mark Cosgrave, Division Manager for Western Europe at Optex also thinks drones have changed the market dramatically and that drone detection is a big concern for different sectors like civil aviation, military applications, stadiums and more. Dave Romero stresses there has been a shift in radar technology and a lot of radar manufacturers are now moving to 3D radars that



Lucas Le Belle, CEO of Cerbair, believes the emergence of civilian drones have dramatically changed the market.

can provide latitude, longitude and altitude in addition to the other characteristics. He says: “The technologies that are best suited for the three-dimensional paradigm are typically specified in volumes of coverage as opposed to area coverage and that is a different way of thinking about security. There are more sources of clutter, and the total volume that is of concern, goes 90 degrees vertical, we now have threats that can fly at high altitudes, fly down directly to a site and that means we need new sensors, new technology to be able to address volumes of coverage.”

Expecting terror attacks

Edward Knoch, Project Manager at Spotter RF, is concerned that weaponising drones will continue to proliferate and that it is going to be more and more of a problem in the West. He says: “Unfortunately, I think that a critical attack against infrastructure or against a population is going to occur before people actually stop to consider the

ramifications of actually not having a perimeter intrusion protection for drones.”

Lucas Le Belle believes the Western governments are taking the drone threat seriously but are still not ready for it. He says: “We have not seen so many dramatic attacks done intentionally with big financial means and organisational skills involving drones, except for in the Middle East. But it is just a matter of time before it is going to happen in the Western World.”

Dave Romero says Black Sage have been working in countries where there are customers that are seeing hundreds of drone incursions per year. There are many different problems to address, everything from well-intended civilians flying drones where they should not to malicious attacks. He says: “I think the awareness is much higher now and I think that the need for this technology is growing. It is really a shift in thinking from two-dimensional security to three dimensions and it will take a long time.”



Dave Romero, Managing Partner at Black Sage.



Edward Knoch, Project Manager at Spotter RF.



Jimmy Ek, Sales Manager, Nordics, Axis Communications.



Lucas Le Belle, CEO of Cerbair.



Mark Cosgrave, Division Manager for Western Europe at Optex.



Nick D’hoedt, Regional Sales Director, Genetec.



A critical infrastructure's site security plan needs to address all three areas of risk: traditional physical security, process security and safety security.

Critical infrastructure security needs more than perimeter protection

Perimeter protection is crucial to secure critical infrastructure. Therefore, it is extremely important to have a surveillance system to prevent intruders from trying to enter a protected area or for the early detection of intruders that have already entered the area.

But to secure critical infrastructure, the perimeter protection is just one important aspect, according to Joe Morgan, Business Development Manager for Critical Infrastructure at Axis Communications, Inc.

The challenge of securing critical infrastructure is threefold: to secure the property, secure the processes and secure the safety of personnel. With IP-based technology, it's possible to achieve all three goals with one solution.

"By integrating existing network cameras and video analytics with Supervisory Control and Data Acquisition (SCADA) sensors and mass communication systems, security solutions now have the intelligence and versatility to address virtually any scenario from attempted sabotage to equipment failure and emergency evacuation," states Joe Morgan.

Whether the intent is sabotage or copper theft or other mischief, the traditional job of security systems has been to keep bad guys off the property. In that respect, the critical infrastructure industry has become quite proficient at integrating network cameras with radar, ground and fence sensors and other technologies to detect people and objects where they shouldn't be.

"They're using thermal cameras in isolated, lowlight or dark facilities like substations to spot the heat signature of intruders lurking in the shadows or trying to camouflage themselves in the

surroundings. As an extra layer of protection, they're even integrating network audio systems into these solutions to warn off trespassers," states Joe Morgan.

Intelligent security systems

Employing intelligent onboard analytics the systems can:

- Verify the validity of the threat and assess its nature.
- Save money by eliminating responses to false alarms.
- Provide valuable data for AI and machine learning integration.

While these integrated solutions work well for perimeter security, the industry is quickly discovering they can also exploit this technology to mitigate other high priority concerns.

Keeping systems up and running

Downtime is an anathema for critical infrastructure. As such, facilities must continuously monitor processes to forestall costly repairs and shutdowns. Security cameras are particularly well-suited to the task of process security. A pan-tilt-zoom camera can easily shift from monitoring a fence line and zoom in to read a dial on a critical piece of equipment. Armed with advanced thermal imaging

technology and isothermal analytics, a thermal camera can detect subtle temperature variances that could indicate overheating ball bearings, a blocked valve or a leaky pipe. Because of their onboard intelligence and versatility, security cameras can be used to measure tank levels, monitor refinery flare stacks, even help operators avert wide-scale electrical outages by predicting transformer and switch gear failures at power substations.

By integrating network surveillance with production monitoring systems like SCADA, critical infrastructures can:

- Inspect processes and verify that they are running correctly.
- Visually assess reported failures.
- Facilitate predictive maintenance and trend monitoring.
- Provide remote maintenance assistance via integration with network audio systems.

Having the network surveillance system do double duty—protect the premises and protect processes against inefficiencies and costly down time—doubles the return on investment. It also provides an opportunity to share the cost of surveillance between several departments.

"And when you throw in health and safety, network surveillance delivers a trifecta of benefits", says Joe Morgan.

Keeping people out of danger

Critical infrastructures can be dangerous places. High voltage wires, combustible chemicals, hazardous waste and other threats make safety a major issue. Here, too, surveillance cameras can play a pivotal

role in mitigating risks.

"They can trigger alerts when they detect personnel entering dangerous or off-limit areas such as tunnels, railway tracks and bridges. In the case of thermal cameras, they can detect early-warning signs that self-igniting material, such as dust or oily rags, are about to combust. Equally important, in an emergency they can track heat signatures to ensure everyone evacuates safely. In case of harmful emissions or a chemical spill, they can identify safe exit routes that avoid the vented discharge or flow", explains Joe Morgan.

By combining network video with access control and intelligent analytics, critical infrastructures can protect the health and safety of their workers, the public and the surrounding environment. The technology can help management:

- Visually monitor policy adherence and evaluate risks in real time.
- Control access to restricted areas.
- Track and support rescue teams and confirm evacuations.

Triple duty from a single investment

A critical infrastructure's site security plan needs to address all three areas of risk: traditional physical security, process security and safety security.

"Because a network surveillance system can handle multiple duties simultaneously, they're able to help facilities achieve superior intrusion detection, more reliable operations and a safer, healthier environment for their workforce. It's like getting three systems in one: triple the duty and triple the return on investment", concludes Joe Morgan.



THE NEXT GENERATION

OF CREDENTIAL TECHNOLOGY



Seos®: 30 Years in the Making from the Leader in Access Control

We revolutionized access control in the 1980s and continue to chart new paths. Meet Seos, the next generation of credential technology from HID Global. Built on over 30 years of leadership, Seos provides the ideal mix of security and flexibility for any organization. Thanks to highly advanced encryption and a software-based infrastructure, Seos secures trusted identities on any form factor and can be extended for applications beyond physical access control.

The new wave of access control is here.

Powering **Trusted Identities** | Visit us at hidglobal.com/seos

© 2019 HID Global Corporation/ASSA ABLOY AB. All rights reserved. HID, HID Global, the HID Blue Brick logo, and the Chain Design are trademarks or registered trademarks of HID Global or its licensor(s)/supplier(s) in the US and other countries and may not be used without permission.

Beam towers secure perimeter for VIP residences

Optex IP connected beam towers have been successfully deployed in a number of villas and VIP residences in the Middle East to provide virtual perimeter protection. A custom-made solution makes sure the sunshine is not affecting the performance of the IR beams.

Unlike thermal detection, active infrared technology does not rely on the difference between human body and ambient temperature to detect – a huge advantage in the Gulf according to Optex, where for a couple of months of the year the outside temperature ranges from 36 to 38 degrees Celsius.

“The combination of sensing technologies is well suited to warm climates and seamless integration with Video Management Software platforms made Optex towers the ideal solution”, says Gaurav Mahajan, Divisional Manager for Optex in the Middle East.

Three layers

To avoid the scorching sun affecting the performance of IR beams, Optex has developed three layers of protection that include a strong UV resistant housing, an additional filter in the photo-diodes to ignore sunlight but receive the infrared light emitted by the transmitting beam, and for some models a ‘double modulation’ pulse pattern. Gaurav Mahajan says: “With a detection range up to 200 metres and the ability to be stacked in towers, the beams provide a cost-effective option for perimeter protection



“The combination of sensing technologies is well suited to warm climates and seamless integration with Video Management Software platforms made Optex towers the ideal solution”.

around large properties; they create a first layer of intrusion detection and are part of an overall security system.”

Integrated with VMS

To facilitate the integration with an IP CCTV system, Optex’s IR beams have the option to use an IP module (PiE-1) and generate

alarm events which have successfully been integrated with Video Management Software and PSIM platforms.

“Using the benefits of this connectivity, Optex’s two-metre pre-built towers have proven to be an effective intruder system at several villas and VIP residences”, says Gaurav Mahajan.

Robust connectivity is crucial for perimeter solutions

Typical components of a reliable and efficiently designed perimeter detection system include infrared photoelectric beams, microwave detection, thermal cameras, video analytics, lighting and physical fencing solutions.

“Creating robust connectivity to all the physical security devices is a design requirement to optimise an integrated solution”, says Luis Angulo, Commercial Director, KBC Networks.

While indoor security is widely used thanks to video surveillance, intrusion alarms, access control and other IoT systems; outdoor perimeter intrusion detection is also providing further protection to critical sites such as substations and power utilities, distribution centres, seaports, airports, construction sites, major events, public spaces and many others.

KBC Networks and Bunker Seguridad, a manufacturer of perimeter intrusion protection systems, have partnered together to establish a warehouse in Spain to provide fast delivery of quality products for Europe and Africa.

Enabling communication

The strategic combination and

integration of components like security cameras, thermal cameras, lighting and physical fencing solutions and more, provide a customised security solution for each unique application. KBC Networks specialises in enabling communication between video, access and perimeter systems with industrialised network products that are suitable for outdoor installation and use.

Luis Angulo says: “From a large selection of PoE switches and fibre media converters to wireless transmission and power products, KBC Networks provides reliable, secure data transmission to IP and SCADA devices. KBC also supports communications from unmanned sites, like power sub-



KBC Networks specialises in enabling communication between video, access and perimeter systems with industrialised network products that are suitable for outdoor installation and use.

stations, by providing encrypted WAN connectivity to off-site control centres.”

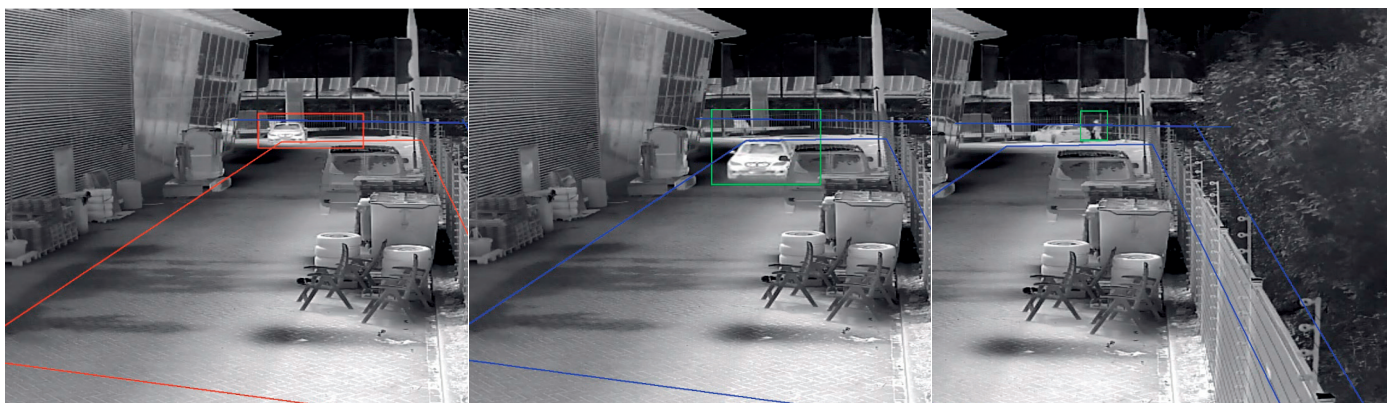
Provide power to sensors

Luis Angulo also stresses that Thrulink, an industrial hardware VPN, provides the ability to display real-time video, audio and data using 4G/LTE in addition to DSL and fibre. Thrulink enables management systems like PSIM, BMS or VMS to communicate with multiple remote sites providing real-time status.

KBC Networks wind and solar

systems on construction sites provide power to sensors and networking gear to open, close and activate power gates or entrances. The autonomous power systems available support applications without local infrastructure and are mobile to be deployed quickly throughout the site according to KBC Networks.

“KBC Networks works transparently integrating devices from different physical security manufacturers independent of how large or small the application may be”, says Luis Angulo.



Thermal cameras can provide the perfect platform on which to build more effective, 24/7 perimeter surveillance systems.

Thermal – a great technology for perimeter protection

Integrated with a bullet or PTZ speed dome security camera and video analytics, thermal cameras are a very efficient solution for a majority of perimeter surveillance applications.

“Thermal cameras can be deployed to reliably detect people, objects and incidents 24/7, and supporting lower installation costs, fewer cameras are needed to monitor a particular area of interest”, says, Stefan Li, Thermal Product Manager at Hikvision.

All objects with a temperature above absolute zero emit levels of thermal radiation. This radiation, although invisible to the human eye, can be detected by thermal camera sensors, which display images of invisible infrared or ‘heat’ radiation. A superb tool for providing situational awareness in the daytime, total darkness or within adverse weather conditions, capitalising on this attribute, thermal cameras can be used within a wide variety of applications.

Perimeter protection with dual-lens thermal cameras

Particularly suited to operating in changing light conditions, total darkness, or other challenging weather conditions such as rain, fog or snow, thermal cameras can provide the perfect platform on which to build more effective, 24/7 perimeter surveillance systems.

Whereas the latest thermal camera models have excellent detection/location performance, image identification is taken to the next level when thermal imaging is supported by a high definition video surveillance camera, where identification detail can also be dis-

played and monitored. In this respect, the choice of a ‘bi-spectrum’ integrated thermal, and bullet or PTZ speed dome video camera will yield the optimum solution for the majority of perimeter surveillance applications. Integrated with intelligent video applications, such as line crossing or intrusion detection, bi-spectrum cameras can automatically trigger an alert and at the same time, trigger a traditional PTZ camera to supply essential video detail to an operator.

Stefan Li says: “The combination of a thermal and video camera in one housing is especially effective in theft prevention and border enforcement applications, not only to detecting a target at distance, but also to reveal features of an intruder or object at shorter distances.”

Handheld thermal cameras

Thermal technology can be used in many other applications. Mobile thermal imaging devices can open up a new world of portable thermal imaging uses for some applications. Examples of which are for security patrols at night, where a handheld thermal camera is very

helpful to locate objects in the dark. Here thermal imaging can provide an effective tool to track targets, ensure personal safety, and detect unauthorised persons, even through camouflage.

Stefan Li says: “Law enforcement agencies, emergency organisations and utility companies can use handheld thermal equipment to great effective in pursuit of their work. The most vital of these being by fire fighters, who commonly use thermal imaging to see through smoke, locate people and localise fire hotspots”.

Law Enforcement agencies use thermal technology to enhance surveillance activities, locate and apprehend suspects (officers are very impressed by the ability to locate suspects in dark alleyways due to their radiated heat, even when they are hiding behind an object), investigate crime scenes, and conduct search and rescue operations.

For utilities use, power line maintenance technicians can easily locate overheating joints and conductive parts, to eliminate potential problems before they have a chance to develop into a catastrophic failure and break in power transmission.

Predictive maintenance

The deployment of thermal imaging by the manufacturing industry is the most mature commercial application. Here, the ability to accurately measure temperature data using thermal imaging provides maintenance personal with vital information about the condition of

all kinds of mechanical machinery, electrical power panels and other equipment components.

Used across a wide range of industries including manufacturing, power plants and petrochemical plants, thermal imaging can help to make production facilities more efficient, optimise the production process, reduce costly production downtime and support health & safety by avoiding the potential for injuries to staff.

Examples where thermal imaging is used for predictive maintenance of mechanical equipment inspection and monitoring of hot or cold spots include insulated vessels and pipelines, heat exchangers, air coolers, furnaces and reactor vessels, boilers, fluid or gas flow relief valves, steam traps, bearings and gears. It can also be used for predictive maintenance of electrical equipment inspection and monitoring including electrical connections, fuse panels, cables, transformers, motors and windings, electrolytic cells, and high voltage switchgear.

“Employing resolutions up to 640x512, Hikvision’s thermal image quality is greatly enhanced being supported by Adaptive AGC, 3D DNR, DDE, and high sensitivity for accurate thermography, dynamic fire detection and temperature anomalies. Add to this mix the integration of Video Content Analysis (VCA), and Hikvision thermal cameras can really help to dramatically reduce the rate of false alarms by confirming triggered events and improve detection rates”, says Stefan Li.



**Industrial Switches
and SFPs**



**eCopper™
IP over Coax/UTP**



**Gigabit
Wireless**



**Secure Video
Streaming over 4G**



**Extensive Fiber
Solutions**



**UPS, Solar
and Wind**



- Ethernet Switches
- Wireless
- Secure Wan
- Fiber Optic
- IP over Coax/UTP
- Power Solutions



kbcnetworks.com

special feature: PERIMETER SECURITY

*Passive infrared (PIR) detector
for outdoor applications.*



Outdoor PIR's are all about quality

Passive infrared detectors (PIR's) are still one of the mainstays of the security world and for outdoor applications, the market needs to be driven by quality, according to Mike Burgess, Export Sales Manager for Takex Europe.

"Not all PIR's are equal", he says.

Mike Burgess claims that the indoor market is flooded with cheap and cheerful products from all corners of the globe and that they might be adequate for stable indoor environments. However, when considering the external market, he claims PIR's are often shunned for struggling to cope with the myriad of environmental influences such as weather and wildlife. "Most of us are familiar with the outside light which randomly triggers throughout the night for no apparent reason, so heaven forbid we should risk our alarm panel doing the same", he says.

Quality is key

Mike Burgess compares the detector market with the security camera market: when looking at what makes the best cameras in the world, it is the image sensor, and then the lens – compromise on either and the results are clearly inferior. It is the same with PIR's according to him: combine a quality pyro (the sensor) with a well-designed bespoke lens and the results suddenly become far more predictable. Once this formula is perfected then the application can determine the configuration of the device. Mike Burgess says: "The Takex MS/TX series of dual-zone detectors are a great example of this. Aimed primarily at the domestic market these devices can comprise of up to 4 pyros, providing up to 226 square metres of coverage from a single device".

Adapted to animals

Furthermore, the devices are designed not to be triggered by wildlife less than one metre tall; which takes account of foxes, cats, birds, and all but the largest of dogs.

"Takex offers both hard-wired and battery-powered models that can integrate into virtually any system on the market", says Mike Burgess.



As the only IP enabled illuminator combining white-light and infrared, Raytec's Hybrid illuminators provided the greatest level of functionality, flexibility and control.

Securing the perimeter at a Lebanese palace

A residential palace in Lebanon 1,650 metres above sea level requested high level perimeter security for both indoor and outdoor areas. The chosen complete solution consists of an intrusion alarm system with detectors, cameras and video analytics, a VMS and not least Raytec IP illuminators.

The palace located in the Lebanese mountains outside Beirut, lies at an altitude of 1,650 metres above sea level. The ornate design and treasured contents meant the client wanted an advanced security solution to protect both indoor and outdoor areas. The client approached local security company, Security Engineering, who specialise in complex integration between various systems.

Remote access required

The client wanted to achieve high levels of security which they could control and activate remotely. Security Engineering recognised this would be best achieved using a range of different devices to provide a complete solution, combining video surveillance with an intrusion alarm system. As well as the need for IR lighting to assist the video surveillance system in the challenging low light conditions, the client also wanted to use white-light as a deterrent to any potential intruders.

Low light conditions

Raytec's Vario2 IP PoE Hybrid 8 units were selected, alongside Optex laser beam detectors and Bosch cameras (equipped with video analytics) and intrusion panel. All devices were linked to a Bosch Video Management System (BVMS) which would be used to control the system.



In infrared mode, the illuminators provide high quality images for general night-time surveillance.

Together, these devices would provide the client with the video surveillance and an intrusion alarm system they required and it would be connected using TCP/IP technology in a unified communications protocol. Khaled Jaber, Security Engineering Managing Director says: "Due to low light challenging conditions, and in order to maintain quality and efficiency of our Bosch cameras,

we decided to use the Raytec product for the advanced features it offered in enhancing the overall night image and delivering optimised end results for the camera under the given circumstances".

White-light and infrared

As the only IP enabled illuminator combining white-light and infrared, Raytec's Hybrid illuminators provided the greatest level of functionality, flexibility and control. In infrared mode, the illuminators provide high quality images for general night-time surveillance. This meant the camera analytics could clearly identify any intruders. Hybrid's

dual functionality also meant white-light could be triggered as a deterrent (when an alarm was activated by the camera analytics or the Optex laser beam) to scare off any intruders.

As well as being able to control the entire system remotely through the VMS, the system also linked to an indoor keypad or mobile app which had to be activated in order to alarm the

system. This ensured the deterrent lighting was only enabled when needed and couldn't be triggered by false alarms.

Less illuminators

From the outset, Security Engineering identified the need to use both infrared and white-light. By combining this with IP capability, according to Raytec, Hybrid represents the most advanced product of its type in today's security market, providing a more dynamic security response and tight integration with the other devices.

Thanks to Hybrid's IP capability, all elements of the solution could work together seamlessly. As an open platform, all Raytec IP illuminators can easily integrate with a wide range of security devices; in this instance, Optex detectors and Bosch cameras. This gave greater flexibility when specifying the solution, according to Security Engineering.

Hybrid's dual use also helped to reduce the number of illuminators used on-site, reducing outlay on infrastructure and cabling by half. With no compromise on performance, Hybrid achieves the same power and distance as two dedicated illuminators; an important factor for the challenging low light conditions.



Worn on an individual's body or mounted inside vehicles, Truewitness sends real-time alerts, with live video and audio streaming and location data during an incident.

Five uses for Flir Truewitness in smarter, safer cities

Flir Systems is strongly associated with thermal camera technology for perimeter surveillance. Now the company launches Flir truewitness, which Flir Systems claims to be the industry's first wearable sensor platform designed for any city-level security and public safety organisation.

Truewitness works in unison with Flir's video management system, United VMS, which city command centres use to manage video surveillance. Together, they provide organisations with on-scene, real-time mobile surveillance.

Worn on an individual's body or mounted inside vehicles, Truewitness sends real-time alerts, with live video and audio streaming and location data during an incident. A city-level command centre running United VMS could connect Truewitness devices across a city to aid emergency response when needed by expanding eyes and ears for any entity to virtually anywhere, any time. It also allows situational awareness capabilities for better-informed incident-management decisions and for use during forensic video analysis.

While there are many possible use scenarios across cities, city-type and enterprise grade deploy-

ments for Truewitness, here are five professional organisations that would benefit immediately:

First Responders

For medical or other crisis response in a city environment, response time is the difference between life and death. With Flir Truewitness, first responders arriv-

From inside a train or bus, or on a train platform or bus station, Truewitness allows control rooms to connect with onsite personnel in real-time.

ing to a scene can automatically live stream everything happening to a command centre who can share information with nearby hospitals, or any other related entity to help save time and save lives. For instance, a doctor in a hospital could give real-time instruction to a first responder to help provide the best care on

the scene before transporting someone.

Subway and Metro Personnel

Subway and bus security personnel watch over thousands of riders every day. Truewitness allows central control room operators to have an on-scene view anytime they need, either when a crime is committed, security event occurs or if someone needs help in a medical incident. From inside a train or bus, or on a train platform or bus station, Truewitness allows control rooms to connect with onsite personnel in real-time.

Building and Campus Security

College campus and building campus security personnel equipped with Truewitness devices will help keep students and building occupants safe. Whether it's an unwanted person in a building or campus dormitory, Truewitness can immediately alert and capture

on-scene footage when needed to help take control of a situation and hold individuals accountable.

Delivery Personnel

Truewitness can record the live action of packages delivery people drop off at a front door for proof that the package was delivered. It can also allow drivers to signal for help in case of an emergency, allowing organisations to help keep their drivers safe on the job. Using its location data, operation centres can monitor and track their vehicles and personnel at any point in time.

Event or Stadium Security

Keeping large numbers of people safe at large events is of upmost concern for stadium operators. As such, security at these events need to have eyes and ears open on everyone, everywhere, always. Flir Truewitness allows security personnel throughout a stadium environment to report incidents quickly and stream video and audio footage in real-time to the command centre. When a safety incident occurs, Truewitness allows operators to respond swiftly in the moment, as well as have recorded evidence for forensic use after the event has concluded.

intersec

SAVE THE DATE

The world's leading trade fair for
Security, Safety & Fire Protection

19 – 21 January, 2020

Dubai, UAE

Book your stand today!

www.IntersecExpo.com



messe frankfurt

Micron Edge Storage: Optimizing Storage Costs for Video Surveillance Systems

Innovative technology adoptions—such as artificial intelligence/deep learning, machine vision, edge and cloud computing, and the internet of things (IoT) – are transforming the surveillance industry.

The industry forecast for world-wide network surveillance camera shipments is expected to grow from 66 million units to approximately 200 million units, with 20% compound annual growth rate (CAGR), from 2016-2021¹. This is a growing market with new innovations that are not only able to protect our property and improve commercial insights, but also significantly improve the ease of system deployment and management at much lower cost structures—broadening the use case for professional video surveillance.

Within the professional/commercial sector, small- and medium-sized businesses (SMBs) are a rapid growth driver. SMB use cases include retail stores like restaurants and shops, small/medium-size offices, health care clinics, school campuses, small hotels and apartment communities, etc.

Video storage is a critical element in today's surveillance systems. Choosing the right video storage solution requires a detailed understanding of the requirements, tradeoffs and options available for SMBs. This brief discusses the total cost of ownership (TCO) implications of different storage solutions currently promoted in the SMB market.

Storage Solutions for Small- and Medium-Sized Businesses (SMBs)

Generally, there are five types of storage solutions for an SMB:

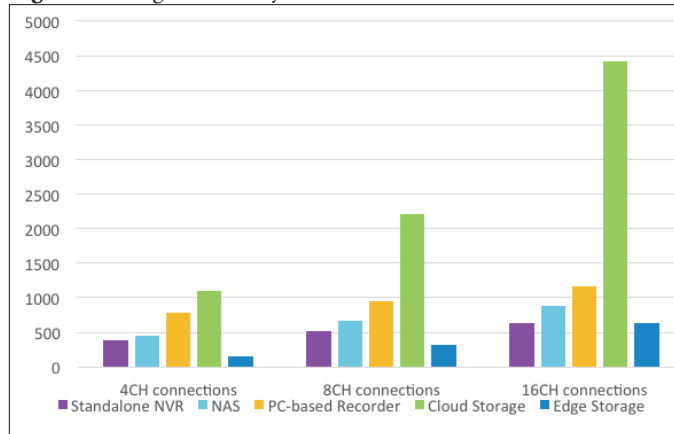
1. Standalone Network Video Recorder (NVR)

The video stream generated by an IP camera is transmitted and stored in an onsite standalone NVR system, which consists of dedicated embedded hardware with built-in surveillance-specific software and storage media, typically hard disk drives (HDDs).

2. Network Attached Storage (NAS)

The video stream generated by

Figure 1: Storage Cost Analysis



If storage redundancy is desired in edge storage deployments, an intelligent cloud backup can easily be added to create a hybrid, cost-effective solution.

an IP camera is transmitted and stored in an onsite NAS system, which is a file-level computer data storage system with add-on surveillance software, typically using HDDs as storage media.

3. PC-based Recorder

The video stream generated by an IP camera is transmitted and stored in an onsite PC-based recorder. This recorder typically uses off-the-shelf PC hardware with built-in or customer-installed video management software and hard disk drives as storage media.

4. Cloud Storage

The video stream generated by IP camera will be transmitted and stored onto a remote cloud storage space, typically available as a subscription service from various public or private cloud vendors.

5. Edge Storage

The video stream generated by an IP camera is stored in the IP camera itself, using a flash-based microSD memory card. This minimizes the need for continuous use of the network to transmit data to central on-site or offsite/cloud locations. Typically, the location of the video management software (VMS) indicates the management architecture of the system.

With standalone NVR, NAS or PC-based recorders, there is usually a physical on-premise appliance that acts as the primary way to manage cameras and the entire system, and it requires software upgrades and associated IT management. With cloud and edge storage solutions, the VMS typically runs in the cloud; therefore, the overall architecture is designed from the ground up for ease of remote management, eliminating the need for dedicated, local management and storage appliances and associated IT management overhead.

While the above five scenarios are typical system designs, they are not the only system designs. Project-specific requirements can lead to many hybrid approaches that span multiple types of storage and management options.

Storage Requirements for SMB

To simulate a TCO model for an SMB use case, we analyzed three scenarios:

Scenario 1: Convenience Store

Typically, a small retail shop can require up to 4 IP camera units to cover critical areas (checkout counter, storage, entry, goods) with at least 2-4 weeks of recorded video archives.

Configuration: 4 channels of

1080p IP camera connections with 30 days storage capacity (1TB storage capacity required).

Scenario 2: Gas Station

Generally, a gas station can require up to 8 IP camera units to cover critical areas (fuel dispensers, office, shop, checkout counter, etc.) with at least 2-4 weeks of recorded video archives.

Configuration: 8 channels of 1080p IP camera connections with 30 days storage capacity (2TB storage capacity required).

Scenario 3: Small/Medium-Sized Office Buildings

In certain cases, up to 16 IP camera units may be needed to cover critical areas (reception desk, warehouse, public office area, parking lot, etc.) with at least 2-4 weeks of recorded video archives.

Configuration: 16 channels of 1080p IP camera connections with 30 days storage capacity (4TB storage capacity required).

What Does "Storage Cost" Mean?

Typically, when we consider the storage cost for a video surveillance system, a hard disk drive is the first item we think about. However, when considering total cost, we also need to consider the cost of the recording system and the incremental cost to install a

	Local Mgmt.			Cloud Mgmt.	
	NVR	NAS	PC-based Recorder	Cloud Storage	Edge Storage
Deployment Costs					
Storage system	●	●	●	●	●
Operating Costs					
Network bandwidth	●	●	●	●	●
Power consumption	●	●	●	●	●
Local IT management overhead	●	●	●	●	●
User Benefits					
Installation ease	●	●	●	●	●
Scalability: adding cameras, build-as-you-go	●	●	●	●	●
Keeping software up-to-date	●	●	●	●	●
Remote management ease	●	●	●	●	●
Unified experience and management across sites	●	●	●	●	●
Multi-user permission domains for video data access	●	●	●	●	●
Data privacy	●	●	●	●	●
System reliability	●	●	●	●	●
Storage redundancy	●	●	●	●	●

Table 2: Total Solution Costs and Benefits

hard-wired system. Therefore, total storage cost should include: system cost + installation cost + storage cost.

Storage Cost Analysis

Based on the requirements of the three storage requirement scenarios outlined previously (with 4/8/16 channel connections), we estimated the total storage cost for each storage solution.

According to our storage cost analysis (Figure 1), edge storage is the most competitive solution from a TCO perspective, followed by standalone NVR, NAS, PC-based recorder and cloud storage.

Edge Storage-Based Systems: Better Benefits, Value

In addition to cost benefits, edge storage is easy to deploy, manage and scale because on-site recording systems are not required. Because primary video footage is stored locally in the camera, these systems require less network bandwidth and avoid cloud storage costs, offering better scalability and TCO compared to cloud-only storage solutions. These benefits make edge storage a preferred choice for many system integrators and end customers. Additionally, because video stays in the camera/on-premise, privacy concerns associated with

cloud-based storage are reduced.

Table 2 provides a side-by-side overview of total solution costs and benefits for various storage solutions. Generally, while a cloud-based management system is highly effective and is beneficial for SMBs, project-by-project specifics may require a combination of these systems to achieve an optimized solution.

Selecting the Right Edge Storage Solution

As edge storage grows in popularity, selecting the right solution is important. Some items to consider are:

Storage Capacity

Is the edge storage solution able to store up to 2 weeks, or even 1 month, of video archives at the target resolution with the chosen compression techniques? In today's video surveillance industry, 1080p resolution is a basic requirement for an IP camera (4K is on the way). With continuous recording of high-quality surveillance video, a higher-density storage device will be needed to meet data storage and archiving requirements.

Endurance and Quality

Will the edge storage solution have the rigor and design longevity to last three or more years in the field? Typical surveillance solutions need to be ruggedized, even all-weather resistant. To reduce maintenance and decommission costs during service years and to help control TCO, a high-endurance device with surveillance-grade edge storage is critical.

Remote Manageability

Does the IP camera support direct remote management, live viewing, video playback while being fully optimized with an onboard memory card? Because no additional NVR or gateway connection is needed between an IP camera and remote applications, an IP camera should be capable of supporting remote management and live/archived video streaming from a mobile app or a web portal.

Smart, Reliable, Secure

Edge storage-based solutions are an excellent, low TCO choice for SMB use cases. For your next security project, consider implementing an edge storage solution with Micron's surveillance-grade edge storage solutions.

Storage Cost	Description
System Cost	Represents the cost of a standalone NVR, NAS or PC-based recorder. These range from \$139 to \$1000 for 4, 8 and 16 channels system ² .
Installation Cost	Represents the labor fee and materials cost to physically wire a recording system (standalone NVR, NAS or PC-based recorder) to connect the installed cameras; average cost assumed is \$200 ³ .
Storage Cost	Solutions are HDDs for the recording system (from \$53 to \$118 for 1, 2 and 4TB drives ²), microSD card for edge storage (average cost is \$40 per camera ²), and 1-year subscription plan for 30 days cloud storage (\$276 per camera) ⁴ .



Scan to learn more

Spotlight: VIVOTEK Surveillance-Grade Edge Storage Solution

VIVOTEK, a global leading IP surveillance solution provider, offers IP surveillance solutions optimized with Micron's industrial microSD card. Targeted at SMB surveillance-grade edge storage solutions, this system offers:

- Full IP camera product portfolios: VIVOTEK offers a wide range of high-quality IP surveillance camera solutions that cover all SMB use cases – from indoor to outdoor, HD to UHD quality, and equipment with advanced features.
- Viewing/managing anytime, anywhere: VIVOTEK's VIVOCLOUD service enables users

to remotely monitor and manage VIVOTEK IP cameras from a mobile app/web portal on a smartphone or personal computing device. VIVOCLOUD can support up to 16 connected IP cameras with key features such as easy setup, shared devices, timeline playback, push notification, fisheye dewarp, etc.

- Surveillance-grade microSD card: Micron's industrial microSD cards are specifically designed for IP video surveillance workloads. The cards offer storage densities up to 256GB, which enables more days of video stored at the edge.

Additionally, the cards support over 3 years of high-quality, continuous, 24x7 video recording⁵ in a wide range of temperatures and environments.

- Predictive maintenance: With integrated technology that enables the microSD cards to self-monitor and report card usage information and expected useful life remaining, users will receive an alert notification from the VIVOTEK IP camera⁶ in advance if replacement is necessary.



References

- [1] IDC Worldwide Surveillance Camera and Storage 2017-2021 Forecast
 [2] Price information from retailers and vendor's MSRP
 [3] Price information: Fixer.com (Hardwired Computer Network Cost)

- [4] Price information: IPVIM (Cloud Video Surveillance Providers)
 [5] Micron lab test data-based, with up to 8 Mbls video bit rate for 256GB microSD card
 [6] VIVOTEK IP camera support list: https://www.vivotek.com/micron_sd

Civintec has acquired Cidron RFID reader range from Nexus

Shenzhen, China

Civintec, a supplier of RFID products in the global original equipment manufacturing (OEM) and original design manufacturing (ODM) segment, acquires the Cidron RFID reader product line from identity and security company Nexus Group. "Civintec will invest in product development and market growth for Cidron, focusing first on existing customers and then expanding to new customers over time," says Sally L. J. Fang, president of Civintec Global.

To simplify the transition for customers and partners, Nexus will issue an end-of-sale announcement for the Cidron RFID reader product line and refers continued supply of the products to Civintec.

Nexus has cooperated closely with Civintec since 2013; Civintec has been the development and production partner for the Cidron RFID reader range since then. As

Nexus's strategy is to focus on the Smart ID concept, it is a natural step for Civintec to now take over the Cidron. Mr. *Magnus Malmström*, CEO of Nexus, says "I believe they have both the competence and the passion to continue the Cidron journey in the best way possible. It is important for us at Nexus to leave our customers in competent hands. We are

thankful for the cooperation with Civintec over the years and wish them great success in the future."

Sally L.J. Fang, VP of Civintec expresses: "We fully respect Nexus's decision. Nexus's core business is within trusted identities, and issuing and managing physical and digital IDs, and as I have understood, they want to keep their focus there. We deeply appreciate the efforts by the Nexus organisation and the Cidron team during all these years – they have provided excellent service to their customers. Civintec will continue to provide the best possible service to the customers, and we will also expand the business to the global market."

Peter Bergström, CEO of Civintec Europe says: "The Cidron product range is a result

of our successful cooperation with Nexus. We are very proud of how we have provided development as well as manufacturing services for the Cidron RFID reader and accessories. Today Cidron is one of the best RFID readers available on the market, and with its customisation possibilities and accessory range I dare to say it is unique. Cidron has increased its market share a lot during the last two years, especially in the Nordic countries. The addition of the Cidron reader range products to Civintec's standard product portfolio gives Civintec countless new opportunities. Our ambition has always been to provide innovative products with a high level of quality that meet any client's requirements on a global scale."



Raytec releases new surveillance lighting options

Ashington, Northumberland (UK)

Raytec is launching *Urban-X*; a new range of general area lighting solutions designed for applications including perimeter fence lines, pathways, car parks and other industrial applications

All *Urban-X* luminaires combine the performance of a commercial light fitting with the durability and quality of a security luminaire. The Mini represents the first product in the *Urban-X* range and is available now.

Urban-X Mini is available with a choice of three standard beam angles to suit a wide range of applications. Raytec is also offering a free 3D lighting design service, to ensure the correct specification for the project which provides a visual representation of the final solution and indicates the light levels on scene.

The white-light luminaires are according to Raytec, designed to security market standards. The arrival

of the *Urban-X* range gives security specifiers a more complete range of products to meet all the lighting requirements of any site. The *Urban-X* Mini offers extreme levels of durability and protection while also delivering significant energy and cost savings to the end user. In addition to being tough, *Urban-X* luminaires are also Smart with the ability to be programmed and controlled remotely as a network.

Raytec will be exhibiting at



Security Essen, from 25th-28th September 2018. Visitors will be able to see the company's latest innovations and discuss any surveillance lighting needs.

Alarmtech detector upgraded to VdS Class C

Stockholm, Sweden

Alarmtech Sweden announces that the company's *VD 500* seismic detector has been updated with VdS approval class C.

Designed for excellent detection ability, the new *VD 500* incorporates inventive algorithms and the latest electronics. With these new features it is possible to offer one reliable detector covering multiple applications.

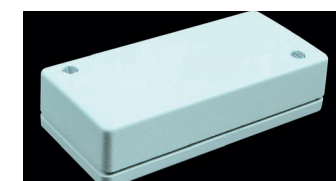
Standard applications protect a wide range of objects such as safes,

strong rooms and ATM machines amongst others. However, seismic detectors are also used today in banking, museums, military services, weapon cabinets, ticket- and vending machines etc.

This miniature, low-profile detector for applications with limited space includes featured highlights including a noise filter system providing high immunity to environmental noise; a quick sensitivity adjustment facility in 4

ranges using a DIP switch; built-in settings for protection of walls, ATMs and depository safes.

The detector incorporates a user programmable mode for customised settings, and a built-in self-test generator and a tamper-lid and removal detection facility. The device supports a wide range of supply voltage – from 8 to 30 V and there is also low-voltage indication - detection. A built-in events log ensures all information is main-



Alarmtech seismic sensor upgrades to Vds Class C approval

tained and a built-in PC interface provides facility for a monitoring software support package. There is also a temperature alarm at 75°C or at a rate of rise of 6°C/min.



New version of Security Center from Genetec

Montreal, Canada

Genetec is launching a new version of Security Center, the company's open-architecture platform that unifies video surveillance, access control, automatic license plate recognition (ALPR), communications, and analytics.

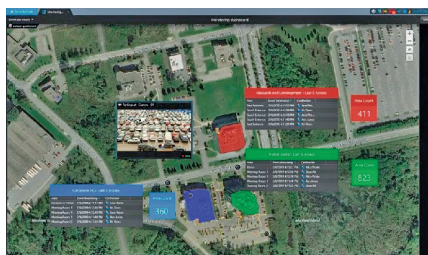
With customisable live dashboards, enhanced privacy protection features, a brand-new map-driven mobile app, and new functionalities that help users actively monitor the health of their system and ensure compliance with cyber security best practices, version 5.8 is engineered to ensure that users can optimise their physical security environment while benefiting from greater visibility into their operations.

Security Center 5.8 will enable users to create custom dashboards that will display real-time data, such as video feeds, alarms, reports and charts in a way that is meaningful to them and their specific job function (security, operations, IT etc.)

Mobile app

This new version will also introduce a brand-new collaborative mobile app to provide operators complete access to their Security Center system when they are on the move and allow them to turn their smartphone into a valuable contributing sensor to their security system.

In addition to recording incidents, accessing nearby video, access control, and ALPR devices as well as sharing video from their phones to Security Center, the new mobile app will let operators share their location with colleagues in the operations centre, send in-app messages and share live and recorded video through an intuitive map-oriented interface.



Dashboards lets users mix data from their entire security environment with maps, charts and camera streams to build a unique experience tailored to their day to day.

Increases understanding for cyber security risks

Security Center 5.8 will introduce a new Security Score feature to track each system's compliance with hardening guidelines, firmware availability and updates, password strength, as well as several other dimensions of cyber security. This feature will enable users to get a better understanding of the cyber security risks they face and enable them to take the necessary steps to harden their system.

With the new Kiwivision Camera Integrity Monitor feature, the system will also automatically detect potential camera position changes, loss of image quality or tampering, and alert administrators immediately.

Enhanced privacy protection layers

This new version of Security Center will also feature enhanced privacy protection layers to help customers comply with global privacy regulations such as GDPR, and the California Consumer Privacy Act.

Security Center version 5.8 is expected to be available in Q2 2019. 

ANPR camera for parking and access control

Stockholm, Sweden

Tagmaster, has released the CS40 - the company's new ANPR camera which is aimed at the parking and access control markets.

This latest model in a new range of intelligent ANPR cameras from UK based Citysync Limited, part of the Tagmaster family, is an intelligent (all-in-one) camera for the parking (free-flow) and access control markets. New features like PoE+, Linux operating system, on-board OCR Engine and ANPR processing ensure high performance and scalability. The onboard OCR engine boasts one of the fastest and most accurate algorithms for reading

license plates on the market.

The new CS40 camera has been developed through extensive and co-operative collaboration within Tagmaster Group's joint technical team, with valuable input from partners in the parking and access control markets.

The CS40 includes the latest plate fingerprint technology increasing the already high accuracy. For greater flexibility, multiple CS40 cameras can be connected to the Citysync Jet Management Software suite, enabling car park counting, overstay, frequent visitor and dwell-time analysis. 

ASSA ABLOY

Aperio® H100:

Simple. Secure. Stylish.

Add access control capabilities to any interior door.

campaigns.assaabloyopeningsolutions.eu/aperio-h100v



 aperio®

The global leader in door opening solutions

Hanwha set to add radiometrics to thermal cameras

Chertsey, Surrey (UK)

Hanwha Techwin Europe strengthens the Wisenet T Thermal camera range with the introduction in the near future of three new radiometric thermal models, each of which have a temperature measurement feature.

The Wisenet TNO-4030TR, TNO-4040TR and TNO-4041TR will be all able to accurately detect if the air temperature is higher

or lower than set parameters, e.g. above or below 40°C. They have been designed to help monitor areas which are vulnerable to fires, such as oil and chemical facilities, construction sites and forests, as well as recycling and waste management centres which can experience spontaneous combustion. The cameras are also ideal for monitoring poultry and livestock

farms in order to detect temperature changes which could foster disease.

The TNO-4030TR is equipped with a 13mm lens and has a maximum range of 1,173m for vehicle detection, whilst the TNO-4041TR, which is designed to be mounted onto a PTZ unit, and the TNO-4040TR, have a 19mm lens and a maximum range of 1,714m.



The new cameras will be all able to detect if the air temperature is higher or lower than set parameters.

swm

SPC gains new cyber security accreditation

Wiesbaden, Germany

The *SPC intrusion system* was tested by CNPP to ensure that it meets the latest needs for cyber security. This is part of **Vanderbilt's** continuous endeavour and commitment to work with approval bodies to ensure both the best in class security and the confidence that your security system is secure.

"By certifying our SPC intrusion ranges on the latest CNPP NFA2P at Cyber Type 2 and 3 repositories, Vanderbilt provides all its customers with high-level security for all remote monitoring transmissions, as well as for cloud applications such as our service SPC Connect to combine

user-friendliness, availability, and security," says Hervé Houy, Vanderbilt Country Manager for France.

SPC, an IP-ready intrusion alarm system, has been designed with communications and security at its core. Using the Flex C protocol to communicate with AES256-CBC encryption, the communications between SPC and other systems are secure and protected. This communication also allows for flexibility using the SPC user models. The rights and permissions of users protect the user and the system from malicious attacks. Customers can use the system with confidence whether they are

on-site or using the SPC Connect to enable cloud services. Their data is secure, and communications are protected.

Vanderbilt has been working with CNPP for many years to ensure the quality of intrusion products for the French market. This innovative step by the approval body to have a defined standard for cyber is a clear indication of the path of security systems. As the cloud becomes an element of security, we move forward with confidence in working with partners like CNPP and ANSSI.

"The market is flushed with cyber security standards, but the NF cyber security standard from CNPP



The award-winning SPC system from Vanderbilt has been accredited to the NF A2P Cyber-RTC cyber security standard from the CNPP.

is the first specifically developed for intrusion alarm systems. It is a great way to benchmark and improve our SPC intrusion systems," concludes Nick Pegtol, Vanderbilt's Country Manager for Benelux, Greece and Cyprus.

swm

New anti-drone solution for airports

Cary, NC (USA)

Mydefence launches *Knox*, a new anti-drone system that can effectively solve the problem of protecting large scale areas against the threat of drones.

Knox is a customisable end-to-end anti-drone solution with purpose-built RF sensors, drone radars, and integrated EO/IR for visual tracking, and is designed for commercial use at airports, prisons, critical infrastructure as well as for military use for base security.

This solution fortifies an area against unauthorised drone flights, providing both passive detection and active defeat solutions to neutralise any small drones in the secured airspace. To accomplish the

most effective detect-and-defeat solution, Knox utilises different sensor technologies, which each serves a purpose in detecting, locating, tracking and defeating a drone threat in the vicinity of the secured area.

The anti-drone system includes RF sensors to detect and ultimately defeat drone threats. For military customers, reactive smart jamming effectors can be supplied – a next generation jamming technology with the least possible impact on other radio communication. Other sensor technology includes purpose-built drone radars that track the location of drones as well as integrated EO/IR for

visual tracking in real-time. The combination of sensor technologies complements each other to provide the best possible protection against unauthorised drones.

Knox is designed for any scale of installation sites, from prison facilities to large international airports spanning miles across. The anti-drone solution can be utilised to protect critical infrastructure and military bases that require scalable anti-drone solutions, which will fortify and harden the perimeter against unauthorised drones in the airspace.

The underlying modularity of the software suite handling inputs from the sensors allows for the anti-



The anti-drone system includes RF sensors to detect and ultimately defeat drone threats.

drone system to be integrated into a customer's existing security setup, without the need for a stand-alone system. The seamless integration into a customer's existing security setup results in less required operational training and for a more open platform that can accommodate current and future requirements of the customers.

Optex WX Infinity line launched in EMEA and Americas

Maidenhead, Berkshire (UK)

The new series of outdoor PIRs, just launched in the EMEA and South and North America from Optex, offers 180° detection coverage and 12m/40ft radius to detect any intrusion around a residential or commercial building.

The *WX Infinity series* comprises two wired and two wireless models available either as the standard or anti-masking version. The new models are built upon **Optex's** extensive track record in providing effective sensing performance for outdoor intruder detection applications, while the wide (180°) detection area coverage brings a new feature that is ideal for protecting larger residential grounds.

"Outdoor warning technology can help prevent crimes by detecting and reporting intruders before they attempt to break into a building," says *Hiraku Shibuya*, Section Chief, Sales and Marketing

Department, Security Division at Optex Global Headquarters. "Early intrusion detection is what Optex has been focusing on for the last 40 years by delivering an extensive line-up of outdoor intruder detection sensors that provide reliable outdoor security."

The WXI sensors can provide two independent 90° 12m/40ft detection areas, one for the left side and one for the right. The detection distance ranges from 2.5m (8ft) to 12m (40ft), and the sensitivity and alarm output can be set up independently for these left and right areas. For instance, the left output can trigger for a simple awareness

alarm while the right side output prompts CCTV camera system to set an event index.

A patent pending area-masking shutter allows a sliding mechanism to quickly mask an area and makes the detection area narrower to avoid obstructions such as swaying vegetation. The set-up procedure has been made easier by including an automatic walk test mode to ensure a quicker and more accurate installation.

The WXI motion sensors benefit from Optex's sensing analytics that filter out noises that are common in outdoor environments, and also distinguishes between humans and small- to medium-sized animals thanks to its super multidimensional analysis (SMDA) logic. The sensors also include temperature compensation and double conductive shielding to ensure best performance in sunny



The WX Infinity series comprises two wired and two wireless models available either as the standard or anti-masking version.

and hot outdoor environments. The selectable pulse count also has the option to enhance the sensor sensitivity when needed.

All WX Infinity models feature a tamper-proof back panel to detect if anyone is attempting to move the sensor from the wall, and the anti-masking models (WXI-AM/ WXI-RAM) will alert when anyone tries to cover the lens.

swm

TAKEX

Q | Which covers 226m²?



40,000

Playing cards



5,500

Tablet Computers



55

Kingsize beds



15

Parking spaces



1

TAKEX MS-12FE

Thanks to our dual-zone technology, your four legged friends and uninvited feathered guests won't set off the alarm.

Versatile settings and supplied masks allow varied bespoke coverage, ideal for windows and doors.

MS-12FE

up to 12m x 180 degree

MS-12TE

up to 12m x 90 degree

If you don't need the HUGE coverage offered by the MS12FE, you can halve it without compromising on quality with the MS12TE.

A | Actually, they all cover the same area, but only one can cover your property...

TAKEX EUROPE LTD
www.takex.com

Fermax expands portfolio with the Meet IP system

Valencia, Spain

Fermax is expanding its range with the *Meet IP system* products and features for intercom and security systems in residential buildings.

The new IP video door entry system from Fermax is designed for residential construction projects where an IP infrastructure will be installed, which in addition to providing effective HD video quality and interference-free audio communication, allows the integration of alarm systems, video surveillance, access control and lift control, as well as home automation systems and multiple applications for smart homes.

One of the new releases of Fermax's new IP system, which

is very much in demand in the video door entry market, is the call divert to smartphones, the installation of which is simple both for the installer and the end-user, on downloading the free Meet Me application. This app allows you to receive calls from the video intercom on your mobile phone, establish communication with the visitor, open the door or auto on the camera.

Another new feature incorporated in Meet is facial recognition as standard in Meet outdoor panels, a function now regularly demanded by the security market.

The new Fermax IP system includes the Milo digital video door entry panels, with capaci-

tive or mechanical touch keypads, which integrate all the advanced functionalities of this innovative technology.

As for the indoor terminals, Fermax has added the new Wit monitors, available in 7 and 10 inches, to the standard range of Mio monitors. Wit monitors have a renewed aesthetic for the most demanding environments, thanks to their distinguished metal frame. And for the techiest homes, the 10-inch Wit monitor is the most suitable option for the installation of home automation management Apps, not only because of the larger screen size, but also because there are two RJ45 network interfaces that allow the house IP



As for the indoor terminals, Fermax has added the new Wit monitors to the standard range of Mio monitors.

network to be isolated from the building IP network.

Finally, the Meet Guard Unit stands out because it is the comprehensive intercommunication management device for buildings, which can be supplemented with an intuitive system management software, which allows messages to be sent to homes. 

Videotec releases Ulisse Evo

Schio, Italy

Videotec is introducing the *Ulisse Evo*, an innovative and versatile PTZ camera.

This super low-light, full HD, 1080p, 60 fps IP camera with 30x optical zoom and integrated Delux technology offers effective clear and detailed images with vivid colours, day or night. The camera's motion detection function, with masking of privacy zones, allows intelligent management and immediate raising of alarms if an unwanted intrusion is detected.

Ulisse Evo can operate with maximum efficiency constantly, even in the presence of hostile environmental conditions and temperatures from -40 °C to +65 °C. The IK10 and IP66/IP67/IP68 protection ratings guarantee maximum resistance to dust and severe weather, hard impacts and vandalism.

The camera is also equipped with a wiper to ensure a clear view in any environmental conditions. An LED illuminator is available to give visibility even in total darkness. This comes as a separate accessory, with 850nm, 940nm or white light, and can be integrated directly into the unit. The camera will automatically recognise the

type of illuminator installed and calibrate the light beam accordingly.

Ulisse Evo stands out due to its modern, linear design that combines maximum strength and operational reliability with greatly reduced weight. This means easy and quick assembly, and therefore lower installation and maintenance costs.

The unit can be installed in different ways, even in the inverted position typical of the speed domes, using the large variety of brackets and adaptors available to satisfy every installation need. The brackets are also available with quick connectors for Ethernet/PoE, for power and I/O, which allow fast and easy installation operations.

Ulisse Evo is available in two standard colours, black or grey-white, to suit specific application requirements. 



Ulisse Evo, a new PTZ camera from Videotec.

Explosion protected camera from Axis

Lund, Sweden

Axis Communications has launched a new fixed box camera *F101-A XF P1367* Explosion-Protected network camera certified with Class I, I/II/III, Division 1 and Zone 1, as well as ATEX and IECEx.

The easy-to-install and integrate IP camera is enclosed in an aluminum red housing to be used in hazardous areas, such as those found inside industrial plants.

By using red, the camera is more visible and is a more effective deterrent, providing a significant association towards safety and security. It has been designed to help detect unauthorised individuals and monitor employee safety in potentially explosive atmospheres. The incorporation

of i-CS lens allows the camera to automatically set its focus, and the field of view can be adjusted remotely. Images are also optimised for forensic purposes irrespective of lighting conditions, thanks to the Lightfinder and WDR-Forensic Capture.

Key features include - Certified for Class I/II/III, Division 1 and Zone 1 - Certified for ATEX and IECEx - Cost-efficient installation with PoE - Remote zoom and focus with i-CS lens 5 MP resolution at 25/30 fps.

The camera's low weight makes it easier to install and manage on high towers or on buildings. The product remains cost effective for the end-customer due to the support provided for PoE. 



New Axis red explosion protected camera used in a mining application.



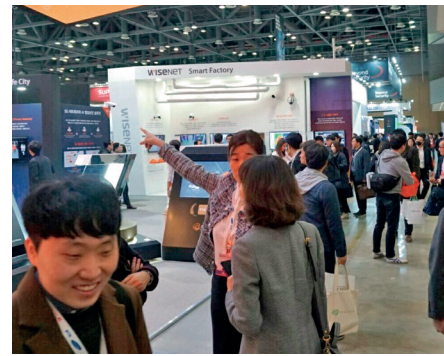
Thomas Choung, Vice President of Cmintech, was present at Secon.



Andy Ahn, GM and Head of Marketing, Suprema, enjoyed presenting their latest biometric terminals.



Tai Qun-xin, General Manager for Hikvision, had some busy days at Secon.



Secon attracted more than 47 000 visitors to Kintex Seoul.



Secon attracted more than 47 000 visitors to Kintex Seoul.



Jung-a Huang, Director of Amano Korea, enjoyed showcasing their parking control solutions.



Iris ID launched Icam D1000, a solution that provides iris and face capture.

Secon 2019 in Seoul 6–8 March:

Secon in Korea continues to grow

Secon is the biggest security exhibition in South Korea and this year, some 47,402 visitors came to Kintex Seoul for the three-day shown in March. Security solutions for parking, mobile applications and AI were some of the highlights at the show.

A total of 450 exhibitors from 17 countries displayed their products and solutions on the 22,000 square metres show floor. Secon had 47,402 visitors, of which more than 45,000 were domestic and over 2,000 had travelled from overseas. Both the number of exhibitors and visitors grew by approximately 3 per cent compared to the previous Secon show in 2018.

Many big players present

Big South Korean security companies like Samsung S1, Hanwha Techwin and ADT Caps had big stands at the show, but Cudo Communication, Suprema, Techsphere, Amano Korea, Wonwoo, Innodap, Mpolesystem, Fsnetworks, Indusvision, Iris ID, Soltech Infonet, Incon, Union Community, Vision I&C, Saenoon, Catis, Jinmyoung

I&C, Truen and many more were also there. The leading Chinese brands such as Hikvision, Dahua, Uniview and Zkteco were exhibiting as well as other global leaders like Milestone, Ytot, Visionlabs, Xafer SRL, LG, and Hitachi. Video surveillance, video analytics, AI, mobile solutions, and solutions for parking were popular themes at the show.

Satisfied exhibitors

Based on an on-site survey and interviews, more than 65 per cent of the exhibitors were satisfied with the show and would consider participating again in 2020.

"The Secon show offers a great opportunity for us to showcase our latest products and systems at the beginning of each year. We will definitely attend the Secon show

again", said Jung-a Huang, Director of Amano Korea, which has become the biggest brand for parking control solutions in South Korea.

Parking control system

Amano was showing its parking control system, which is a smart parking total solution including parking system manufacturing, parking lot operation, system

business in Korea."

Suprema was showing its new Facelite, a compact face recognition terminal for access control and time attendance.

Mohammed Murad, VP of Global Sales & Marketing, Iris ID, said: "Iris ID has attended the Secon exhibition since it was founded, and we will be at the show in the following years".



The Secon show offers a great opportunity for us to showcase our latest products and systems.

development and a mobile parking service. The system's license plate recognition function captures and can read 99 per cent of all car plates.

Face recognition terminal

Andy Ahn, General Manager and Head of Marketing, Suprema Inc, was also very satisfied with the show. He said: "We will continue to exhibit at Secon as it is an important event for us to grow our

High speed iris and face capture solution

Iris ID was showcasing its Icam D1000, a product line that provides a high quality standards compliant iris and face capture solution. It is able to do high speed simultaneous iris and face capture and has an intuitive user interface with real-time visual feedback, auto zoom and auto focus iris cameras and automatic face illumination.

IFSEC

INTERNATIONAL 18-20 JUNE 2019
EXCEL LONDON UK

SECURITY IS

CRITICAL

IFSEC IS ESSENTIAL

Meet the suppliers behind the future of security face-to-face

IFSEC International is your unmatched opportunity to see the latest security technology put to the test, learn directly from world-renowned industry leaders and network with security directors & managers, installers, integrators and distributors from across the globe. Source specialist security solutions across IT, cyber, perimeter protection, access control, CCTV and more.

Register for IFSEC 2019 today

www.ifsec.co.uk/detektorinternational

Proudly in partnership with



Organised by





Intersec in Dubai 20–22 January 2019 attracted some 35,889 visitors from 126 countries – a 23 percent year-on-year increase.

New record at Intersec 2019

Intersec in Dubai 20–22 January 2019 attracted some 35,889 visitors from 126 countries – a 23 percent year-on-year increase. Smarter and safer cities were key themes at the show.

Andreas Rex, Intersec's show director, says: "We put a lot of effort into making this edition of Intersec the most comprehensive yet in terms of increasing the diversity of our exhibitor range and offering a more engaging conference format."

The 21st edition of the Intersec show delivered on its promise of an action-packed three days featuring the latest market trends, innovations and exciting new opportunities.

A new record in visitor numbers has underlined what has been the most successful edition yet for the trade fair for security, safety, and fire protection in Dubai. The number of visitors increased from 29,000 in 2018 to 35,889 this year. The show had 1,212 exhibitors from 54 countries, six show sections, 15 country pavilions, live outdoor demonstrations, a drone zone, and the new Future Security Summit.

Many Chinese exhibitors

Fire and Rescue made up the largest section comprising 431 exhibitors and Commercial Security was the next largest area with 375 exhibitors, followed by Safety &

Health (142 exhibitors), Information Security (120 exhibitors), Homeland Security & Policing (90 exhibitors), and Physical & Perimeter Security (54 exhibitors). In total, Intersec took up some 60,000 square metres.

87 per cent of the exhibitors were international and 13 per cent domestic. Most exhibitors were Chinese (247), UAE had 162, UK 117 and India 85. However, more than half of the visitors were domestic (more than 18,000). Other common nationalities were Saudi Arabia (almost 3,000), India (1,112), Egypt (951) and Iran (858). There were 619 visitors from the United Kingdom, which was the most from a Western country. Canada, China, Czech Republic, France, Germany, Hong Kong, India, Italy, South Korea, Pakistan, Russia, Singapore, Taiwan, UK and USA had their own country pavilions and there was

also a pavilion for safety design in buildings.

Market leaders were present

Nearly two-thirds of the world's top 50 security manufacturers were also on-board, including 17 of the top 20 incumbents comprising Hikvision, Dahua, Assa Abloy, Bosch Security Systems, Axis Communications, Flir Systems, Hanwha Techwin, Tiandy Technologies, Avigilon, Infinova,

year unveiled a hydrogen-powered drone which will be used to survey mountainous and marine areas.

Continued big demand

Show Director Andreas Rex was very pleased with the show. He says: "A lot of exhibitors used Intersec 2019 to not only announce important strategic business partnerships, but to launch their latest products for the global marketplace. The visitor response has

A lot of exhibitors used Intersec 2019 to not only announce important strategic business partnerships, but to launch their latest products for the global marketplace.

Optex, Vivotek, CP Plus, Nedap, Raysharp, Milestone Systems, and Kedacom.

Intersec is supported by the Dubai Police, Dubai Police Academy, Dubai Civil Defence, the Security Industry Regulatory Agency (SIRA), and the Dubai Municipality. A further 35 international government partners, trade associations, and non-profit institutions also participated this year.

Dubai Police was among the hundreds of exhibitors launching their latest solutions, and this

certainly been the most pleasing aspect of the show this year."

According to the organiser, the resounding visitor response to Intersec 2019 comes as demand for security, safety, and fire protection in the Middle East continues to climb. According to analysts 6wresearch, the regional market for physical and perimeter security, commercial and information security, fire protection, and drones, is currently estimated to be worth 14.5 billion US dollars, with this estimated to grow to be worth 31 billion dollars in 2024.



Ifsec 2018 attracted more than 27,350 visitors from 113 countries and had more than 500 exhibiting companies.

Ifsec 2019 in London, 18–20 June:

The European highlight of the year

Europe's leading integrated security event, Ifsec International is taking place on 18–20 June 2019 at Excel, London. Cyber security, artificial intelligence and mobile solutions are some of the key trends to expect for the almost 30,000 visitors who will experience the latest news in the physical security industry.

Ifsec 2018 attracted more than 27,350 visitors from 113 countries and had more than 500 exhibiting companies. This year's event will probably see similar results. However, this year will be the last time the event takes place in June – in 2020 the show will be moved to mid-May and will be organised alongside Security & Counter Terror Expo (SCTX), Ambition and Forensics Europe Expo at Excel London.

More than half are end users

Ifsec International is probably the best opportunity in Europe to see the latest security technology and to meet and network with security directors & managers, installers, integrators and distributors from across the globe. Products and solutions within video surveillance, access control and alarms

are expected to dominate the show floor. Cyber security, artificial intelligence and mobile solutions as well as IoT are some of the main trends in the physical security industry today and they will all be displayed at Ifsec.

Last year, a majority of the visitors came from the UK (almost 70 per cent), while 20 per cent had travelled from other parts of Europe and 6.5 per cent from Asia and 1 per cent from North America. According to the organiser, 56.5 per cent of the visitors were end users, 19.2 per cent manufacturers/distributors, 14.8 per cent installers and 8.9 per cent integrators. One third of the visitors had an annual purchasing budget of over 1 million pounds.

New conference concept

The Ifsec International security seminar and conference

programme was dramatically overhauled in 2018, with the new Keynote Arena playing host to an inspiring series of presentations placed at the heart of the event. In addition, the new Show Me How feature gave visitors a deeper and more comprehensive look at what the latest security technology takes to install, use and maintain.

In the Keynote Arena this year, renowned speakers will discuss and debate some of the most topical and critical issues facing the secu-

features insights about future security solutions. Here, experts and industry leaders will share a vision of the industry's future in a series of sessions and presentations, and will answer burning questions about critical topics, technologies and issues. Another arena is the LPCB Attack Testing Zone where security experts will conduct live attack tests on a wide range of perimeter and façade security products, as well as safes, security enclosures and padlocks.

“ Last year, a majority of the visitors came from the UK (almost 70 per cent), while 20 per cent had travelled from other parts of Europe. ”

urity industry, from cyber security and ethical and legal challenges through to extremism. In 2019, video analytics, AI, machine-based learning, a year of GDPR, Brexit and security in smart cities will be among the topics covered.

Future of Security Theatre

Future of Security Theatre is hosted by Ifsec's education partner, Tavcom, and this theatre

LPCB will demonstrate the performance difference between certified security equipment and products which – while seemingly similar – fail to deliver equivalent levels of protection.

Finally, there will also be an Engineers of Tomorrow competition, which sees young security apprentices compete against each other in a live installation challenge.

A BROADER HORIZON with our 180° sensors

WXI series

Outdoor,
wired/wireless,
12m, 180° PIRs



OPTEX's WXI series provides an outdoor 180°, 12m radius detection area to protect homes and commercial premises against intrusion. Its two independent left and right detection zones, and two individual alarm outputs make the outdoor PIR ideal to use with both alarm panels and CCTV systems. The panoramic sensor features all of the smart OPTEX algorithms to make it reliable in hot, cold, sunny, windy, rainy, and dusty environments. The new series is available as wired or battery-operated models, both with or without anti-masking.

For more information visit www.optex-europe.com

INTRUSION DETECTION | TAILGATING DETECTION | VEHICLE DETECTION | PEOPLE & VEHICLE COUNTING | ENTRANCE DETECTION

Security buyers guide

Access Control



Nedap Security Management

Parallelweg 2, 7141 DC, Groenlo
PO BOX 103, 7140 AC, Groenlo
The Netherlands
Tel + 31 544 471 111
www.nedapsecurity.com
info@nedapsecurity.com



Touchless Biometric Systems AG

Rietbrunnen 2, Pfaffikon SZ,
CH 8808, Switzerland
Tel +41 (0)55 533 20 00
tbs@tbs-biometrics.com
www.tbs-biometrics.com

Perimeter Protection



Manufacturer of
perimeter protection systems

Forteza, JSC

Tilzes str. 38, 91112 Klaipeda
Lithuania
Phone +370 46 441195
forteza@forteza.eu
www.forteza.com



Manufacturer of perimeter
protection systems

Tel +7 967 445 0161
Tel +7 967 445 0162
info@forteza-eu.com
www.FORTEZA-EU.com



outdoor protection
our profession

Via Gadames 91, 20151 Milan, ITALY
Tel +39 02 380 701
Fax +39 02 308 80 67
www.sicurit.com, export@sicurit.it



TAKEX Europe Ltd.

Aviary Court, Wade Rd, Basingstoke,
Hampshire RG24 8PE, UK
Tel +44 1256 475555
Fax +44 1256 466268
sales@takex.com • www.takex.com

Spread
your word!



ADVERTISE HERE

 **security**
WORLDMARKET.COM

Security Events Calendar

April



14-16 April Intersec Saudi Arabia – Jeddah, Saudi Arabia

Venue: Jeddah Center for Forums & Events
Organiser: Al- Harithy Company for Exhibitions
Tel: +966 12 6546384
Email: ace@acexpos.com
Website: www.intersec-ksa.com



16-17 April Securex West Africa – Lagos, Nigeria

Venue: Landmark Centre
Organiser: Montex
Tel: +44 (0) 20 7886 3048
Email: joleen.sibley@montex.co.uk
Website: www.securexwestafrica.com



25-27 April Securex West Africa – Lagos, Nigeria

Venue: Bombay Exhibition Center
Organiser: Messe Frankfurt New Era Business Media Ltd, Taiwan Branch
Tel: +886 2 8729 1099
Email: stid@newera.messefrankfurt.com
Website: www.secutechindia.tw.messefrankfurt.com/mumbai/en.html

May



1-4 May Segurex2019 – Lisbon, Portugal

Organiser: CCL
Tel: +351 21892 1500
E-mail: Helena.costa@ccl.fil.pt
Website: www.ccl.fil.pt



8-10 May Secutech – Taipei, Taiwan

Venue: Taipei Nangang Exhibition Center
Organiser: Messe Frankfurt
Tel: +886 2 8729 1099
Email: info@newera.messefrankfurt.com
Website: www.secutech.tw.messefrankfurt.com/taipei/en/



14-16 May Securex South Africa – Johannesburg, South Africa

Venue: Gallagher Convention Centre
Organiser: Specialised Exhibitions
Tel: +27 10 003 3082
Email: zeldaj@specialised.com
Website: www.securex.co.za

June



18-20 June Ifsec International – London, United Kingdom

Venue: Excel London
Organiser: UBM
Tel: +44 (0)20 7921 8166
Email: IFSECcustomerservice@ubm.com
Website: www.ifsec.events/international/



26-27 June Sicherheits Expo – Munich, Germany

Venue: MOC Munich (Hall 3)
Organiser: NETCOMM GmbH
Tel: +49 (0)89-88 94 93 70
Email: info@netcomm-gmbh.de
Website: www.sicherheitsexpo.de/en/

July



19-20 July Police Expo India – News Delhi, India

Venue: Pragatti Maidan Hall 8,9,10
Organiser: NexGenex
Tel: +91 11 41536990
Email: info@internationalpoliceexpo.com
Website: www.internationalpoliceexpo.com



24-26 July Security Exhibition & Conference – Sydney, Australia

Venue: ICC Sydney, Darling Harbour
Organiser: Diversified Communications Australia
Tel: +61 3 9261 4500
Email: securityexpo@divcom.net.au
Website: www.securityexpo.com.au

August



14-16 August Secutech Vietnam – Ho Chi Minh City, Viet Nam

Venue: Saigon Exhibition and Convention Center
Organiser: Messe Frankfurt New Era Business Media Ltd, Taiwan Branch
Tel: +886 2 8729 1099
Email: info@newera.messefrankfurt.com
Website: www.secutechvietnam.tw.messefrankfurt.com/hochiminhcity/en.html



27 August Skydd Detektor Open 2019 – Nykvarn, Sweden

Venue: Golf South Stockholm
Organiser: Ar Media Int. AB
Tel: +46 8 556 30 680
Email: deniz.baykal@armedia.se
Website: www.detektor.com/scandinavia/sv/SkyddGolfen.asp

September



10-13 September DSEI 2019 – London, United Kingdom

Venue: ExCel
Organiser: DSEI
Tel: +44 (0)20 7384 7770
Email: enquiries@dsei.co.uk
Website: www.dsei.co.uk



24-26 September Securex East Africa 2019 – Nairobi, Kenya

Venue: Visa Oshwal Centre
Organiser: Montex
Tel: +44 (0) 20 7886 3048
Email: joleen.sibley@montex.co.uk
Website: www.securexpoeastafrica.com

October



2-3 October Finnsec – Helsinki, Finland

Venue: Helsinki Expo and Convention Centre
Organiser: Messukeskus
Tel: +358 50 450 3250
Email: customer.service@messukeskus.com
Website: www.finnsec.messukeskus.com/



17-20 October Isaf – Istanbul, Turkey

Venue: Istanbul Expo Center Hall 9/10/11
Organiser: Marmara Fair
Tel: +90 212 503 32 32
Email: marmara@marmarafuar.com.tr
Website: www.isaffuar.com/en/



22-25 October Interpolitex – Moscow, Russia

Venue: All-Russian Exhibition Centre VDNH
Organiser: Bizon Group, International Department
Tel: + 1 (416) 970-4576
Email: eshatrova@mvkexpo.com
Website: www.interpolitex.ru/en/



28-31 October CPSE – Shenzhen, China

Venue: Shenzhen Convention & Exhibition Center
Organiser: Shenzhen CPSE Exhibition Ltd
Tel: +86 755 88309123
Email: overseas_market@cps.com.cn
Website: www.cpse.com.cn



28-30 October Bidec – Bahrain, United Arab Emirates

Venue: Bahrain International Exhibition & Convention Centre
Organiser: Clarion Events
Tel: +971 4 435 6101
Email: ahmed.jarakji@clarionevents.com
Website: www.bahraindefence.com



28-31 October Secutech Thailand – Bangkok, Thailand

Venue: Bangkok International Trade & Exhibition Centre (BITEC)
Organiser: Messe Frankfurt New Era Business Media Ltd, Taiwan Branch
Tel: +886 2 8729 1099
Email: info@newera.messefrankfurt.com
Website: www.secutechthailand.tw.messefrankfurt.com/bangkok/en.html

November



13-15 November Sicurezza – Milano, Italy

Venue: Fieramilano - Rho
Organiser: Fiera Milano S.p.A.
Tel: +39 02 4997.6241
Email: fierasicurezza@fieramilano.it
Website: www.sicurezza.it/en/



18-20 November DSEI Japan – Tokyo, Japan

Venue: Makuhari Messe
Organiser: Clarion Events
Tel: +44 (0) 20 7384 8274
Email: alex.soar@clarionevents.com
Website: www.dsei-japan.com/welcome



19-20 November Sectech Sverige – Stockholm, Sweden

Venue: Stockholmsmässan
Organiser: AR Media International AB
Tel: +46 8 556 306 80
Email: deniz.baykal@armedia.se
Website: www.sectech.nu

Detektor International takes no responsibility for any changes to the details of the above mentioned events. Please always contact the organisers in each case to confirm the dates and venues. www.securityworldmarket.com/int/Security-Events



Improve security for the most valuable parts of your school

ASSA ABLOY

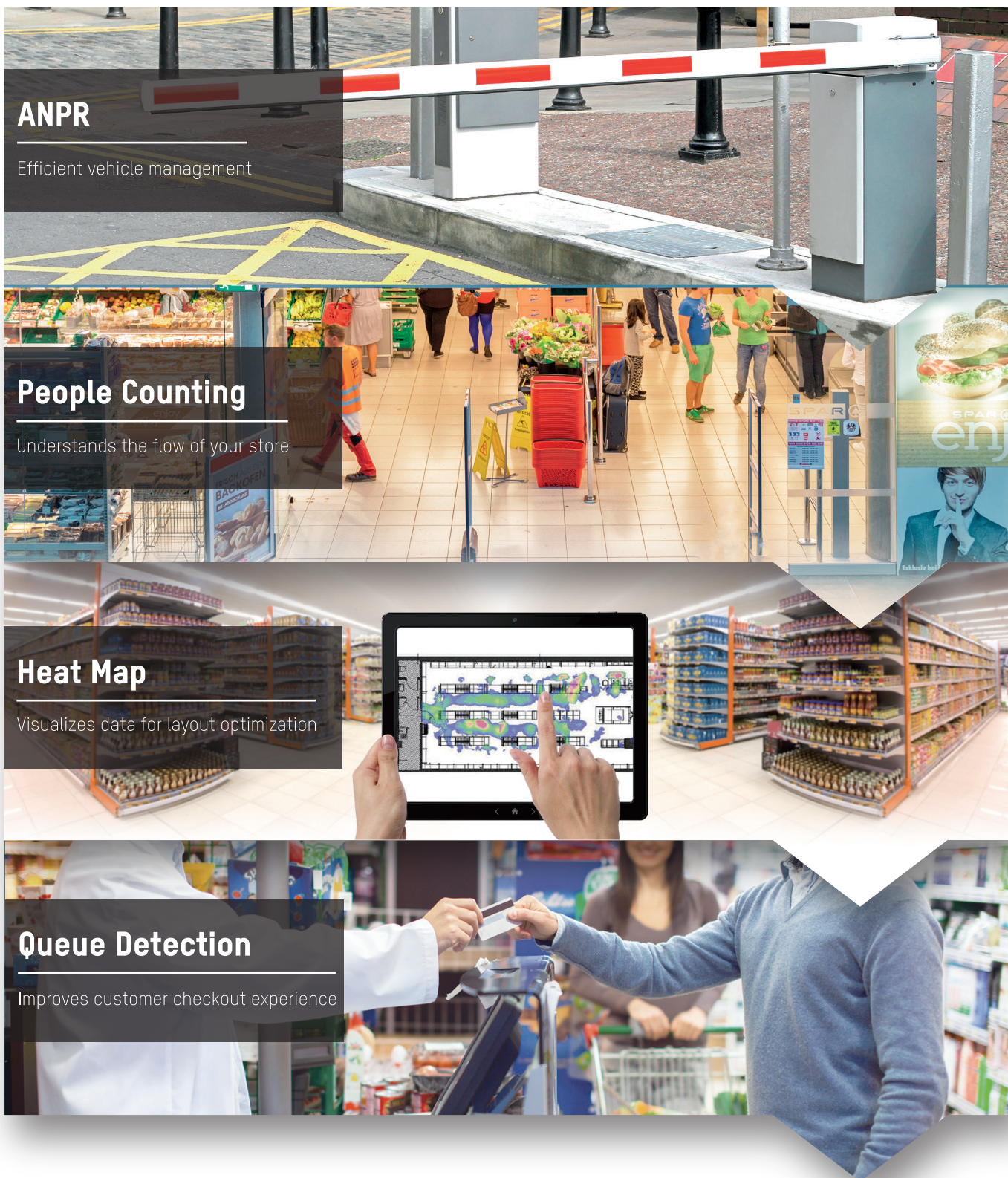
SMARTair®, access control that cuts hassle and costs

Download now
our solution guide!

<https://campaigns.assaabloyopeningsolutions.eu/smartair-schools>



The global leader in
door opening solutions



ANPR

Efficient vehicle management

People Counting

Understands the flow of your store

Heat Map

Visualizes data for layout optimization

Queue Detection

Improves customer checkout experience

OPTIMIZED OPERATION, INSIGHTFUL DECISIONS

AI APPLICATIONS

FOR SUPERMARKETS



Hikvision Headquarters
T +86 571 88075998
overseasbusiness@hikvision.com



@HikvisionHQ



@HikvisionHQ



@Hikvision

Visit us at
IFSEC International
Booth #IF1530

HIKVISION®

www.hikvision.com