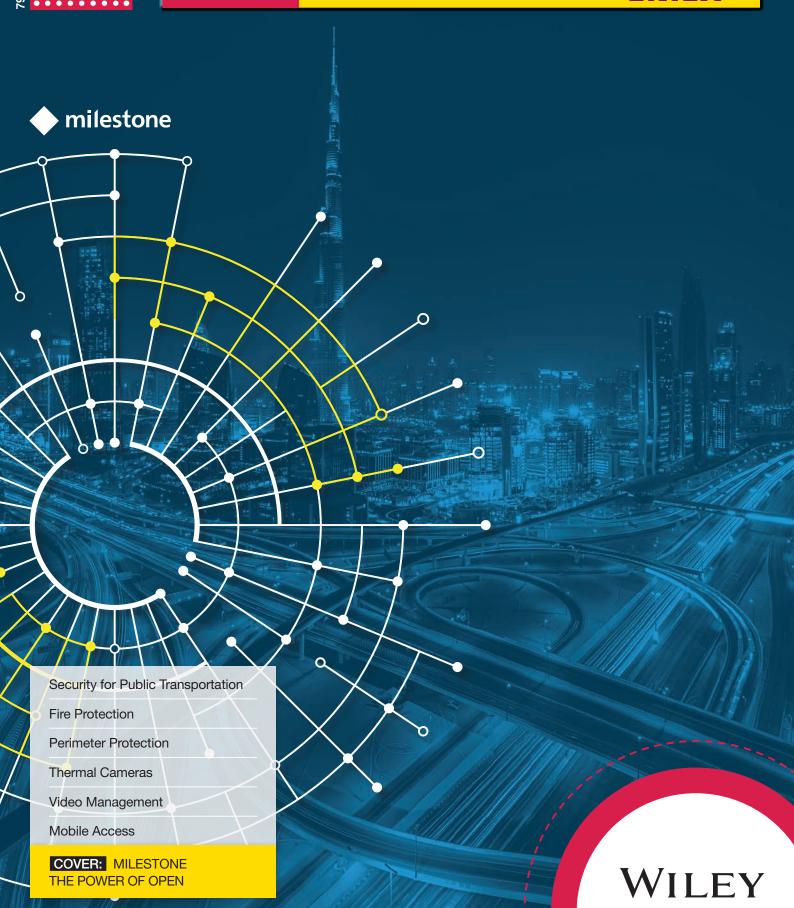


MAGAZINE FOR SAFETY AND SECURITY

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The

Good Things

Dear reader,

Shouldn't we all talk more about the positive things in our professional lives? For us, it is our main pursuit to inform the security industry, the end-

> users, the companies, as well as distributors and system integrators. GIT SECURITY meets many interesting people to talk to about many good things.

In mentioning interesting people, Kenneth Hune Petersen from Milestone talked to Heiko Baumgartner, Publishing Director, in our cover story about exactly this topic: 'The end-users need to be educated on what is possi-

ble and we at Milestone, our partners

and you as the media should work on this. The consumer, on the other hand, needs to get informed about the value these systems bring for them. A better service, help with the search for a parking lot, assistance for disabled people and clever systems showing you the best way to get to your departure gate are just some examples.' If this has now piqued your curiosity, you can read the whole interview starting on page 14.

Talking about positive things can also help to promote acceptance on topics that are frowned upon, which is often caused by mistrust and a lack of information. Some relevant examples of this include video surveillance in cities, AI in security and facial recognition, to name a few. However, the security industry shows by many examples that these technologies can be used for the right cause in the right manner, by helping to increase security. Paul Such, Vice President

for EMEA Sales at Avigilon, talks about the advantages of AI on page 31: 'We can find people quicker now and we get the details we are looking for immediately to the attention of the operator.'

In this issue, I particularly recommend the Special Focus Section which is surrounded by topic-related case studies. On page 22, you can find our Special Focus on Public Transportation, on page 32, we have one about Thermal Cameras and on page 40 about the topic of Perimeter Protection.

Let's talk about even more positive things: Intersec Building (p 18) which is integrated into the Light&Building show in Frankfurt is coming up and this is especially exciting for us, as we will be present at the show for the whole week and we cordially invite you to join us. On Tuesday, 10 March, at 05:30 pm, GIT SECURITY and Messe Frankfurt are co-hosting a 'GIT Together" at the fair. Exchange ideas with us and other security professionals in the networking area of the Intersec Forum Hall 9.1, Stand D40. Food and drinks will be provided. For you can also send an email to us with the keyword 'Intersec GIT Together' to GIT-GS@Wiley.com - we can provide you with a ticket (subject to availability) for free admission to the trade fair.

And now it is your turn: if you, dear reader, have something good to talk about, like a great product launch in 2020, look no further and hand it in for our GIT SECURITY AWARD 2021. The closing date for applications is March 31st, 2020 at www.security-award.com. See this year's winners on page 20.



Lisa Schneiderheinze for GIT's safety and security team

Protecting people and assets

with innovative business and security solutions





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Further Market Leaders at Security Essen 2020



Security Essen is continuing to consolidate its position as a platform for the security industry. Numerous companies, also big companies like Honeywell, have confirmed their participation in the international trade fair, which will take place at Messe Essen from 22 to 25 September 2020. Particularly pleasing: In addition to many long-standing customers, the registrations also include companies which will take part in Security Essen again for the first time after a break. Amongst others, Telenot and Securiton will present their innovations at Messe Essen.

Telenot and Securiton return

Thomas Taferner, Head of Marketing and Sales at Telenot Electronic, justifies the return to Security Essen as follows: "We are delighted to be on board again at Security Essen 2020. In the past three years, we have increasingly tested smaller events. But Security Essen has proved to be the only all-encompassing trade fair for us where the entire industry from the installing specialist company to security officers from industry, planning offices, trade associations, building property insurers, CID advisory centers, fire departments and many other target groups obtains information." Also after a break, Securiton Deutschland will take part in Security Essen again. The application specialist for everything to do with alarm and security systems will present its innovations in Hall 3 - the exhibition area for access, mechatronics, mechanics, systems and perimeter protection.

More market leaders on board

The two access control companies Dom and Wilka have been continuous exhibitors at Security Essen for many years already; and they have already registered again for Security Essen 2020. Many other companies - including market leaders, niche providers and new entrants - have also already confirmed their participation in Security Essen 2020. These include Abus, Evva, Kötter Security, Luna HD, NSC, Salto Systems, T-Systems International, Videor and the Wagner Group. The trade fair will be a premiere, for example, for the Bosch start-up Sast. The young company will present its Internet of Things platform for security cameras for the first time at the trade fair. Security Essen is also seeded for international stars: Hanwha Techwin Europe, Hikvision, Inim Electronics, Vanderbilt International, Zhejiang Dahua and Zhejiang Uniview, among others, have confirmed their participation in the world's leading trade fair.

First Security Essen after modernization

After a construction period of around three and a half years, the modernization of Messe Essen has been concluded since September 2019. From now on, exhibitors at and visitors to Security Essen will benefit from open, functional architecture, short distances, eight spacious, single-storey halls and plenty of daylight. For example, visitors can, for the first time, expect a complete and coherent range of available video products in the new Hall 5. www.security-essen.de

Comelit Presents VIP Security to Savoy Circus

Comelit's latest VIP door entry technology has been installed at the much-anticipated redeveloped Savoy Circus accommodation, allowing students to receive video calls via their mobile phone. The site in the



London Borough of Hammersmith and Fulham, vacant for almost 20 years, was previously home for the Savoy Circus and has been redeveloped in a conservation area. It now stands at 7-storeys and presents 306 studio apartments, complete with communal spaces including a café, student lounge, arcade and gym. Under construction company, Tide Construction, system integrators selected Comelit to create a bespoke door entry finish, using its innovative, VIP technology. With ease of install a major advantage, on completion, the system allows students to receive visual notifications to smart phones.

www.comelitgroup.com

Åke Bengtsson Appointed CFO of Gunnebo AB

Åke Bengtsson will took up the position as CFO of the Gunnebo Security Group on 10th of February 2020. He succeeds Susanne Larsson, who will leave the Group during February. Åke Bengtsson has a broad experience from working in global, industrial manufacturing companies. Lately, he has worked in Haldex AB holding the position as President and CEO, and prior to that Group CFO. 'Åke will bring experience that is very valuable for Gunnebo's change journey to become a customer focused, innovative and successful international Group within the security sector', comments Stefan Syrén. Åke Bengtsson will be a member of Gunnebo's Group Executive Team.

Idis with Al Solutions at Intersec 2020

Idis extends its deep learning capabilities with the launch of a powerful line-up of Edge VA bullet and fixed domes featuring essential onboard analytics, showcased at Intersec Dubai. The



biggest draw for visitors to the Idis stand was the latest iteration of Idis Deep Learning Analytics (IDLA) technology that is available as a modular Idis Solution Suite VMS service or via the cost-effective AI in the Box appliance for smaller applications. IDLA is proving to be the industry's most accurate AI solution for security and life safety applications, with a tested 98% accuracy rate. IDLA enables a higher level of protection for people, facilities and assets, by significantly reducing false alarms and ensuring critical incidents are never missed. For example, IDLA can recognise an intrusion, loitering, trespassing or a person falling over, all in real-time, and trigger a notification. In practice this means that critical events need never go undetected and control room operators can initiate the most rapid, appropriate responses to incidents. **www.idisglobal.com**

Siemens Modernizes Baggage Screening at Dublin Airport



Siemens Logistics has been successful in their bid to integrate a new hold baggage screening system (HBS) at Dublin Airport, Terminal 2. The contract includes replacing the existing HBS and installing an additional line to further increase capacity. A special challenge presented by this project is to conduct the work, without causing any restrictions to normal flight plan or passenger operations. The implementation of new baggage screening units is based on increased international safety regulations: All baggage inspection systems at European airports must be equipped with explosives detection systems based on Standard 3 HBS Security Regulatory Requirements. Dublin Airport is one of only two European airports that offer automatic US customs preclearance. Once passengers have successfully completed the security control process, checking through of their baggage to their destination in the USA requires no further formalities. On arriving in the US, they are treated as domestic passengers. In addition to Dublin Airport, Terminal 2, Siemens Logistics is also implementing new hold baggage screening systems in other airports, including Munich, Terminal 2 and Palma de Mallorca. www.siemens.com/logistics

Gunnebo and Loomis U.S. Partner with Cash Management Solution

Gunnebo has announced a partner-ship with Loomis U.S. where the CIT company will bring a highly-integrated cash deposit smart safe to retailers in the U.S. The seamless integration of Gunnebo's smart cash deposit technology to Loomis' core systems will enable retailers to expand and deliver superior customer service, while driving security, process improvements and cost efficiencies across retail operations. The solution, named Titan Z smart safe, provides secure, reliable, and efficient cash processing for under-counter use in retail operations with low cash volumes.

www.gunnebo.com

Hochiki Europe with first Life Tech Event

Hochiki Europe has delivered the first in a new series of 'Life Tech' events which are being delivered in collaboration with its systems partners. The first event, hosted by Tees Fire Systems, was held within the 'Legends Lounge' at the Riverside Stadium, home to Middlesbrough Football Club. The day showcased the latest life safety technology from the manufacturer and outlined best practice when it comes to using the company's smart solutions. The educational session was the first of four planned Life Tech events which bring together consultants, specifiers, end-users and building owners, helping them better understand the latest life safety innovations from Hochiki Europe. Through a combination of seminars, workshops and Q&A sessions which focused on relevant case studies and reallife scenarios, attendees had the unique opportunity to interact with and learn more about Hochiki Europe's extensive www.hochikieurope.com



A Bright Light for Hochiki

Life safety manufacturer Hochiki Europe has appointed lighting expert Ian Hill as the company's new Emergency Lighting Business Manager. Ian brings a wealth of industry experience to the role, with a technical background covering business development, sales of life safety equipment, and also product development. Ian will combine his unique set of industry sales experience with his technical expertise, amongst other tasks, to support the widening of the company's emergency lighting range and other exciting developments on the horizon. Starting his career within the design department at Simplex Lighting, Ian has developed his skillset across a variety of roles with lighting manufacturers including Philips and Fagerhult. He then made the transfer over to emergency lighting during his tenure at Eaton Electrical Systems.

www.hochikieurope.com

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Threat Detection Platform for Ohio School District

Patriot One Technologies announced receipt of a purchase order for its Patscan Multi-Sensor Covert Threat Detection Platform from its security system integrator/reseller partner Ginter Electrical of Ohio and Mt. Healthy City School District in Mt. Healthy, Ohio. The Patscan Multi-Sensor Covert Threat Detection Platform has been shipped to Ginter Electrical, where they will be joined by Patriot One engineers and Mt. Healthy City School District security and engineering teams to begin testing for deployment of



the solution. The specific location of the Platform's deployment will not be disclosed. T.J. Dooley, Ginter Electrical's Systems Integration Manager: 'No student should have to walk into a school today and feel like they are walking into a fortress. This can create unnecessary anxiety for students who may wonder if their school is safe. The Patscan Covert Threat Detection Platform not only is focused on saving lives, but also saving a way of life for our students, and our community.'

https://patriotltech.com

Qognify with Integrated Video Solutions at Intersec 2020

Qognify was present at Intersec 2020. The company demonstrated the latest version of its state-of-the-art video management system Cayuga as well as its newly released, web-based central management platform Umbrella. Focusing on the outcomes of customers that place a premium on physical security, safety and operations, both products enable organizations especially in the logistics and retail sector to increase security and process transparency and derive valuable business insights. Next to other technologies, Qognify showcased the current version of Cayuga (R14) and the new Umbrella software on booth SA-C41. The company was once again joined by its representative in the region, Electronic Design Inc. www.qognify.de

Dahua Safe City Solution Safeguards Brienon-sur-Armançon

With a population of about 3,300 located at the intersection of two rivers, the local government of Brienon-sur-Armançon chose to secure its city and residents with a Dahua Safe City Solution. The town had only one



policeman and no cables that are needed for modern surveillance systems. Dahua Technology therefore delivered a customized solution covering the whole town with wireless devices combining PTZ camera and antenna that transmit all the collected information to the highest point in the city center and on to the control center. Various camera types including Starlight IR PTZ AI network cameras, multi-sensor panoramic cameras, eyeball cameras, thermal cameras and ANPR cameras were used. When humans or vehicles trigger detection rules set by the operator (like tripwire and intrusion), the PTZ camera will automatically zoom-in and start tracking. Under low-light applications, the Dahua Starlight technology still captures color details. The recorded videos serve as crucial evidence and helped the police already in the first week of the test run by solving a cemetery theft case with evidence recorded by the Dahua PTZ camera. www.dahuatech.com

Gunnebo and Transguard sign Memorandum of Understanding

Gunnebo has signed a Memorandum of Understanding with Transguard, expert in security, facilities management, cash services in the United Arab Emirates. The MOU will allow the two companies to work more closely together on major Systems Integration projects in the UAE. In the last ten years, Gunnebo and Transguard have developed a close partnership within Cash Management Solutions where Transguard has embedded Gunnebo's solutions for cash deposit into its Cash-In-Transit services to retailers in Dubai. With this MOU, the partnership is taken to the next level, also including full system integration solutions to secure high-risk sites. 'Formalising our collaboration with Gunnebo will further strengthen our ability to offer the latest in innovative technology solutions to our customers', says Dr. Abdulla Al Hashimi, Chief Executive Officer at Transguard. www.gunnebo.com

Pelco Presents Updates to Multiple Product Lines at Intersec 2020

Intersec offered an opportunity for Pelco leaders to demonstrate the latest upgrades to the popular Sarix and Spectra video camera lines as well as its Video Management System, VideoXpert, to end-users, integrator partners, and the media. Here are a few of the key innovations



that were on display. Sarix Professional Series 3 Fixed IP Cameras: Available in mini-dome, bullet, box and wedge configurations, the latest Sarix cameras offer a variety of exclusive features for customers that need high-definition video in low or no-light conditions as well as protection against vandalism and extreme temperatures. The Spectra 7 PTZ IP Camera (soon to be launched): The latest iteration of Pelco's line of PTZ IP cameras can capture up to 30 images per second at 4k resolution. It boasts true wide dynamic range, advanced low-light performance, anti-bloom technology and comes with significantly reduced storage requirements due to advanced compression capabilities. VideoXpert v 3.7: The most recent update of Pelco's world-renowned Video Management System, VX v 3.7 includes valuable new features, such as high frame rate playback, SMS notifications for alarms, recording schedules that can be triggered by any event. www.pelco.com

Onvif at Intersec 2020

Onvif announced its participation at Intersec Dubai 2020 together with participating member companies to demonstrate interoperability between products using Onvif profiles. Attendees were able to see demonstrations of interoperability between different manufacturers' products using various Onvif profiles. Onvif executives were also participating in a number of presentations describing the standardized approach to security as part of the Intersec Future Security Summit 2020 held in the Al Multaqua Ballroom, Dubai International Convention and Exhibition Center, in conjunction with the exhibition. Per Björkdahl, chair of the Onvif Steering Committee, participated in a panel discussion titled "Enterprise Security: Challenges for New Age Security Managers," at Intersec Arena. This discussion focussed on developing, implementing and maintaining resilient programs in complex operating environments, and will also touch upon the need for flexible, simple and modular integrated systems. www.onvif.org

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The 22nd edition of the leading security, safety, and fire protection trade show, Intersec Dubai welcomed over 1000 exhibitors from 56 countries and 33,872 industry visitors. The show had a long list of dedicated features, such as live demonstrations, the Intersec Arena and Intelligence Forums to a VR firefighting experience and Drone zone, which complemented the packed exhibition floor. Intersec 2020 was officially inaugurated by Major General Expert Rashid Thani Al Matrooshi, Director General of Dubai Civil Defence; Major General Abdullah Ali Al Ghaithi, Director of the General Department of Organisations Protective Security & Emergency at Dubai Police, and Major General Khalifa Ibrahim Al Sulais, CEO of the Security Industry Regulatory Agency (SIRA).



EVENT

Intersec Dubai 2020

Middle East's Safety and Security Sector Tipped for Ten Percent Annual Growth to 2022

'As the region's premier show for commercial security, fire protection and safety, Intersec plays a crucial role in shaping the future of these industries,' said HH Sheikh Mansoor. 'Protecting our people and assets is a principal responsibility for the UAE and with the Expo 2020 fast-approaching, the implementation of new best practices and technology will solidify the UAE's position as a leader in security.'

Show Director

Andreas Rex, Show Director at Messe Frankfurt Middle East added: 'No sector is exempt from technological advancement. The emergence of automation, biometrics, artificial intelligence and machine learning is transforming the face of the security sector and helping to address growing concerns surrounding unmanned aerial, cyber and identity fraud risks. As security risks become more complex, so too must the solutions designed to combat them.'

As Intersec 2020 welcomed the global security industry to Dubai, the bullish security sector growth forecast was issued by Business France, the French government organisation charged with fostering French exports and promoting inward investment into the country.

France, one of 15 international country pavilions at the three-day show at Dubai World Trade Centre, is debuting the most advanced technology emerging across seven broad product sectors: commercial security, smart home, cybersecurity, fire and rescue, safety and health, homeland security and policing, as well as perimeter and physical security.

Middle East's Safety and Security Sector

'The Middle East region represents a particularly attractive market for the safety and security sector, which is expected to grow around 10 percent per year to 2022,' said Frederic Szabo, Managing Director, Business France Middle East, which is hosting 15 French companies at Intersec – 11 of which specialise in fire and rescue.

'Increasing the capabilities of infrastructure, securing power plants and oil complexes, protecting sites and people for major events to come are all excellent reasons for French experts to extend their presence in the region,' added Szabo.

The four-pronged programme, which includes the Intersec Arena, the Future Security Summit and Intersec Fire Conference, and the Security Industry Regulatory Agency (SIRA) forum, has drawn experts from more than 50 countries to Dubai.

Intersec Arena

During a keynote address at the Intersec Arena on Sunday, Eng. Khalid Al Hammadi, Chairman of the Security Professionals Association (SPA), the first association for security professionals in the Middle East, announced the launch of SPA for SIRA, the Dubai agency tasked with ensuring the highest standards of security and safety in the emirate.

SPA is a platform that allows security professionals to share and enhance their knowledge of industry best practices. "The industry is advancing towards technologies such as AI and machine learning applications, which will be used as part of the security protocols of Expo 2020," said Eng Al Hammadi.

"This is sure to create an array of job opportunities for individuals within the security sector, and SPA for SIRA will be there to act as a platform that bridges the gap between security professionals and regulators, as well as fostering a platform for knowledge exchange and development."

"Participating in Intersec enables our members to interact with a global network of security experts and learn about the latest security applications and trends within the industry. This event showcases the latest cutting-edge innova-

tions and technologies in one of the most important years for the UAE, which will support the safe and secure logistics of Expo 2020 Dubai," noted Al Hammadi.

At the conference, representatives from 35 governments, trade associations and non-profit institutions spanning the hydrocarbon, banking and finance, municipality, police, customs and healthcare sectors in the Middle East, Europe

and the USA mapped out the future security agenda over the exhibition days. Digital security challenges, AI implementation, biometric innovations security loopholes in business ecosystems and the integration of digital and physical security to address critical threats were all key topics under the microscope.

Held under the patronage of His Highness Sheikh Mansoor bin Mohammed

bin Rashid Al Maktoum, Intersec was supported by Dubai Police, Dubai Police Academy, Dubai Civil Defence, SIRA and Dubai Municipality.

CONTACT

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Intersec Impressions

GIT SECURITY was on the Lookout of New and Known Faces and Places



IPS Intelligent Video Analytics is the first manufacturer that is taking part in the 'Heop' program of Hikvision. The abbreviation stands for "Hikvision Embedded Open Platform" – and this is where IPS is embedding five of its analysis modules into Hikvision's Series 5 network cameras: motion, sabotage, intrusion, loitering and indoor detection. GIT SECURITY asked IPS Head of Sales and Marketing Alain H. Benoit about the details.



GIT SECURITY: Mr. Benoit, video analysis from IPS can be found in many thousands of companies, critical infrastructure, control centers etc. throughout Europe. Just recently you have been able to adapt and install your systems into Hikvision cameras. What advantages does this bring the customer?

Alain H. Benoit: Our customers can now install five video analysis modules from IPS in various different Hikvision cameras and quickly and flexibly create an economic but very efficient video surveillance system. The customer saves



Alain Benoit, Head of Sales and Marketing at **IPS Intelligent Video Analytics**

The IPS Video Manager is an IP-based, scalable platform for sophisticated video surveillance significant hardware costs by using these camera-based solutions: you need less server capacity, less bandwidth and less memory because just the alarm videos are transmitted. This brings an increased level of security in the monitored areas, reliable detection, even under adverse weather conditions and - not to forget simple installation and configuration.

Hikvision's 'Heop' program enables access by third-party systems. Is this a general trend?

Alain H. Benoit: Yes it is: the hardware and software manufacturers must open up because customers are becoming ever less prepared to be dependent upon just one manufacturer - and often also service provider. In the future, they will have to be open and ready to integrate software or hardware from other companies and thereby offer the customer more capabilities and more flexibility.

Which systems can already be included - and how is the cooperation between IPS and third parties developing generally?

Alain H. Benoit: Five of our camera-based analysis modules are integrated into the Axis Acap and Hikvision Heop platforms: motion, sabotage, intrusion, loitering and indoor detection. Other camera manufacturers have also been in touch already. Our IPS Analytics Manager product already enables nine of our serverbased analysis modules to be integrated in the video management software of other manufacturers. We have been working with particular success together with Milestone. We have already integrated the ANPR camera from Hikvision in our video manager. In addition, we can receive the GPS data from any system and display it in the picture and the plan. Especially for critical infrastructure, the data from a drone detection system can be processed. This enables the position of the drone and even the pilot to be displayed on the plan. We are currently also working on including further components (HW and SW) into our VMS.

Do you consider the technical capabilities of today's intelligent video analysis to be already exhausted – or can we still expect some real innovations?

Alain H. Benoit: I don't think they're technically exhausted at all. The future will still provide many opportunities for real innovation. Thanks to artificial intelligence and neuronal networks, the algorithms are getting ever better and smarter. But the user-friendliness must still be improved.

What are you working on at the moment - and what new products can we expect from IPS soon?

Alain H. Benoit: We are currently working on a new generation of video analytics. Top Secret of course! And I really can't say anything about that today. Just wait for the surprise from IPS!

CONTACT

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info@ips-analytics.com www.ips-analytics.com





Kenneth Hune Petersen, Chief Sales and Marketing Officer

Power of Open

One Plus One Equals Three

At Intersec in Dubai, GIT SECURITY had the opportunity to talk to Kenneth Hune Petersen about Milestone Marketplace, their approach to video analytics and AI, applications beyond security and the EMEA markets.

During MIPS 2019 in Copenhagen you launched your new global digital platform, Milestone Marketplace, to increase the availability of software applications. How far have you come with this approach?

Kenneth Hune Petersen: The project started two years ago based on our community approach. With Milestone Marketplace, we open up the innovation power of our community of buyers and sellers. It enables our partners to grow their businesses through the global Milestone Systems community. At the same time, Milestone Marketplace helps simplify complex choices for our system integrators and customers, who gets access to a rich and trustworthy resources pool from which they can build video management solutions.

The number of solutions offered via the platform during its first year has exceeded our expectations. To date, we have 238 well documented software and hardware solutions verified to be optimized with XProtect available on the platform and more are uploaded every month.

What about the usage of Milestone Marketplace and do you see the number of transactions?

Kenneth Hune Petersen: The traffic to Marketplace is substantial and what is even more important; it is generating business. Already in the first months we got excellent feedback from partners who

said that they created business via the platform and showed us business cases they would never had achieved without the platform. We do not trail the transactions, but we have asked all partners to provide feedback to help us improve the platform. The feedback from our partners confirms that Milestone Marketplace is already a success, and this is only phase 1.

What do you plan for phase 2 of the Milestone Marketplace?

Kenneth Hune Petersen: At MIPS 2020 we will launch phase 2 which will be focusing on our installers and integrators. We want to make it easy for customers to discover the technologies and services that will solve their challenges. By showcasing proven installation experience along with bundles of solutions, the real power of our digital platform unfolds when you put more than one solution on top of the Milestone software. One plus one equals three here. We expect even more tangible advantages in the next phase.

Connected systems can entail certain threats. What measurements do you take to improve cybersecurity?

Kenneth Hune Petersen: We take every precaution available making sure that our system is as resilient as possible against cyberattacks. It is my impression that cybersecurity has been on top of many people's agenda for years and it is becoming even more important, the

more devices and systems are connected. We have only seen the tip of the iceberg and there is more work to be done. You can't do this overnight especially since a VMS is in the middle of the installation. We update the XProtect software including the latest security updates every four months to ensure we are on the forefront. On the technical side, it is an advantage in the system design that we use the recording server as the proxy for cameras and IoT devices connecting to the system. This enables separation of the camera and client networks, increasing the robustness against both external and internal attacks.

You mentioned that you look at applications beyond security, too?

Kenneth Hune Petersen: We are always looking at where to take our industry beyond security. The question is what we can do with the image data we collect with cameras. An open platform, like ours, is ideal for partners working together on solutions inside and outside security. We want to help accelerate the capabilities beyond security, for example in areas like transportation, retail and safe cities. If you look at the opportunities the retail segment offers with heat mapping, marketing support, staff planning tools and many more options, it is easy to state, that we have just started here. The end-users need to be educated on what is possible and we as Milestone, our partners and you as the media should work together on this. The consumer, on the

other hand, needs to get informed about the value these systems can bring them. Improved customer service, help with finding a parking lot, assistance for the disabled, and clever systems showing you the best way to get to your departure gate, are just some of the many examples.

Artificial intelligence is a vital part of solutions now and in the future. Can you show us examples of AI applications?

Kenneth Hune Petersen: We have a great success story here in the Middle East, where the use of AI improves operational efficiency. Milestone XProtect Corporate allows Majid Al Futtaim, the leading shopping mall, retail and leisure pioneer, to run a world-class video surveillance infrastructure with close to 10.000 cameras across 30 properties in five different countries, all federated directly into the UAE from Oman, Bahrain and Egypt. Everything started with security but now goes far beyond it with benefits as the ones described before. Another example is Ferrari car dealers who check the incoming cars in their service area for damage to avoid later complaints by the customers.

How do you ensure that AI and video analytics applications work better in connection with your VMS system compared to proprietary systems? Some users fear that they might lose valuable data on the way from the front end, intelligent cameras, to the management system, if the integration is not deep enough.



Kenneth Hune Petersen: As you just said, the integration is key for such an application. If you want to import, export and process the data, it is very easy with our system. A main feature of the recent XProtect release was the new centralized search platform in XProtect Smart Client, making it possible for users to search for everything in one place. Previously, users performed several standalone searches, depending on what data they were searching for. With the new search tool users can search for motion, alarms, events, bookmarks and other types of data, in one single place enabling rapid and efficient video investigations. Moreover, the new search platform also smoothly embeds partner integrations and their powerful analytics capabilities via dedicated filtering options. Through specific plug-ins and devices, search criteria such as line-crossing and objectin-field will be enabled directly in the search tab, saving time and increasing efficiency. Just one example is the Bosch Forensic Search plug-in to gain complete control on how you want to search the data - even with new criteria, not used before. This integration gives us a power that you would never get out of a proprietary system.

Can you fill us in on what your partners and users can expect from the upcoming MIPS 2020 events in Texas and Dubai?

Kenneth Hune Petersen: You already know the Milestone Community is filled with forward-thinkers, visionaries, industry leaders, and thought leaders - just one of the many reasons why MIPS is a must-attend annual event. At MIPS 2020, we will launch phase 2 of the marketplace, what makes these events especially interesting for our installers and integrators. We are looking forward to exploring upcoming trends, new technologies, and challenges, and to define the 'Power of Open' together. Looking ahead, I think business and customers will change fast and unexpectedly. Think about it, how do you keep growing when unexpected change confronts your business? In my keynote, I'll show you how to use the Power of Open to make the right choices and grow your business faster.

CONTACT

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Broendby Copenhagen, Denmark
Tel.: +45 88 300300
milestone@milestone.dk
www.milestone.dk

Milestone Systems Strengthens its EMEA Organization

Milestone Systems hired Jos Beernink as EMEA Director Channel Sales last year. Jos Beernink joined Milestone System from

Genetec as VP EMEA Sales and has had previous positions at Honeywell Security and Fire, ADI distribution, Samsung Electronics and Tech Data. Jos Beernink heads up the EMEA Sales for

the developed markets, which is comprised of four sales regions with regional sales managers as direct reports; North Europe, Middle Europe, South Europe as well as Middle East & North Africa. Since January 2020 his role has been further expanded with the inclusion of EMEA Business Development, Key Account Management and Com-

munity Management. The key objective is to strengthen communication between community stakeholders and to ensure a coherent sales effort across EMEA developed markets. "By combining the Channel and Community Sales organization into one strong team, we believe we can create synergies that in return drive focus and growth in our EMEA organization. We are pleased to present a dedicated, continuous commitment in the region and see the potential for significant growth in areas also beyond traditional security. Over the last year we have positioned the Milestone Community in verticals such as retail, transportation and safe city, and this focus will continue and be even further strengthened over the next years." Says Jos Beernink, EMEA Sales Director for the developed markets.

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EVENT

Sicurezza and Smart Building Expo Confirm Success

The Two Milan Exhibitions Running Concurrently Had More Than 28,000 Attendees



Sicurezza, one of Europe's security and fire exhibitions, and Smart Building Expo, the trade fair for technological integration in buildings, that were held in Fiera Milano from 13th to 15th November 2019, closed with 28,629 professional operators having come through the doors. The numbers were up 12% on the previous edition with international attendance from 88 countries, of which the ten most represented were Switzerland, the United Kingdom, Greece, Spain, Tunisia, France, Germany, the Russian Federation, Ukraine and Croatia.



The increase demonstrates that Sicurezza is now recognized as a reference hub for professionals from all over Europe and the Mediterranean area. The 619 exhibitors - +33% compared to the last edition, 30% from 37 foreign countries - presented product innovations and numerous previews to attentive and motivated professionals. The deep evolution that the world of security and building automation is experiencing and the rapidly changing technological scenario were the background to the three days of the exhibition. Integration, digitalization and smart solutions were confirmed to be the drivers of the exhibition.

Security increasingly sees digital, wireless (so easy to install) and customized solutions for all areas of application – from the home to the city, throughout industry, transport and entertainment. Some of the

products of the most advanced technological research in biometrics, artificial intelligence, voice recognition and the IoT are now widespread in building automation, video surveillance and access control.

As for building automation, the integration process and the potential of 5G have been much-discussed topics. Close cooperation between various technologies has eliminated the barriers between vertical applications. Building installations, building automation, audio-video systems, energy saving, digital platforms and telecommunications already work in synergy as parts of a single and dynamic system, based on intelligent management and the use of so-called big data.

More than 100 conferences and meetings – many of which have enabled operators to obtain training credits for various professional figures (industrial experts,

engineers, installers, security operators) – focused on the value of human resources and the central role of continuous training. The most topical issues for all sectors were tackled by international experts, associations and academic institutions, with content that is highly appreciated at a time when the market is experiencing a real revolution. There was also great interest in the debut of the Cyber Arena, the new exhibition, training and information area that was dedicated to the theme of Cyber Security and designed to help companies best manage IT threats.

CONTACT

Fiera Milano Milan, Italy +39 024997 1 www.sicurezza.it







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EVENT

Intersec Building 2020 Preview

Connecting Safety and Security Technology with Building Management

Intelligent infrastructure needs protection. The growing field of safety and security technology is an increasingly indispensable aspect of different building services segments. Thus, in the context of lighting, electrical engineering and home and building automation, Intersec Building puts the focus on connected safety and security technology.

mbedded in Light + Building (8 to 13 March 2020), Intersec Building profits from the international power of attraction and the large number of high-grade, experienced trade visitors to the leading trade fair for the sector. Light + Building 2018 set a new record with over 220,000 visitors from 177 countries. The proportion of visitors interested in safety and security technology has risen by 53 percent since 2014 while the percentage of trade visitors from outside Germany with an interest in safety and security technology almost doubled (+85 percent) from the previous edition of the fair.

Product groups

- Video systems
- Warning and alarm systems
- Smoke and heat extraction systems
- Internet of Things (IoT)
- Access control / biometrics / perimeter protection
- Fire protection
- Lighting
- Security services
- IT and cyber security
- Electro-acoustic systems

As an integral part of Light + Building, Intersec Building joins forces with international market leaders and entrepreneurs from the field of safety and security technology to bridge the gap between theory and practice. Flanked by the trade fair, Intersec Forum is the main information interface of Intersec Building whereby the conference focuses on connected safety and security technology in the world of building automation.

Intersec Forum 2020

The Intersec Forum is the topic platform for the further development of networked security technology in modern buildings. In 2020, the Intersec Forum

offers its attendees high-ranking expert lectures on all days of Light + Building, and the opportunity for expert exchange and networking in the direct environment of the providers of security and building technology in Hall 9.1.

Join the "GIT Together" Networking Event

On Tuesday, 10 March, at 05:30 pm, GIT SECURITY and Messe Frankfurt are cohosting a "GIT Together" at the Intersec Building in Frankfurt. Exchange ideas with GIT SECURITY and other security professionals in the networking area of the Intersec Forum Hall 9.1, Stand D40. Food and drinks will be provided. You can also send an email to us with the key-

word 'Intersec GIT Together' to GIT-GS@ Wiley.com – we can provide you with a ticket (subject to availability) for free admission to the trade fair.

Intersec Building GIT Together

When: 10 March at 05:30 pm Where: Intersec Forum area, Hall 9.1, Stand D40

CONTACT

Messe Frankfurt Exhibition
www.messefrankfurt.com
www.light-building.com
www.Intersec-Building.com
www.intersec-forum.com



Iris Jeglitza-Moshage Chief of Communications, at Messe Frankfurt Exhibition

Heiko Baumgartner, Publishing Director of GIT SECURITY, asked Iris Jeglitza-Moshage, Chief of Communications, Senior Vice President Technology at Messe Frankfurt Exhibition, how they link the security topic between Light + Building and Intersec Building.

'To begin with: Connected security has always been a vital element of Light + Building. And, indeed, exhibitors put their according innovations at display all over the fairground. That is why we set-up a Special Interest Guide. From that, it is easy to deduct for visitors where to find the connected security technologies at disposal. For instance, there will be emergency lighting at Hall 8 and street lighting at Hall 4.0 – as generally light is one of the most crucial factors for increasing security. Moreover, we shall be concentrating the range of security technology products and services in a particular hot spot: Intersec Building is therefore present at Hall 9.1. This international platform for connected security is a vital element of linking both, product groups as well as specialists. Its high-density know-how is a direct re-sult of 13 Messe Frankfurt Safety, Security and Fire trade shows from around the globe – among them Intersec Dubai and Secutech Taipei.'



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Golden Twenties Winners

no on ow it has begun, the hopefully golden decade of the current century. And around the turn of the year or decade, the winning products, the winning solutions were announced, which have won a GIT SECURITY AWARD 2020. As a reminder: In the middle of last year, supported by a neutral jury, we nominated and presented a large number of products for voting. Afterwards, all market participants were called upon to vote for their favourites. As a reminder, votes for an own company were deleted and not counted. Towards the end of the year, the winners for 2020 were then determined - and we presented the products in issue 4/19. In the meantime, many trophies and certificates have been presented - the happy people behind the products are presented on these pages.

The next GIT SECURITY AWARD is coming

If you want to register or recommend a product or solution for the next award, you can do so now. Registrations are possible until 31 March 2020 on www.security-award.com



Stefan Haug (l.) and Hanno Vogels (m.) from Bosch receive the winner's award for Aviotec at Intersec in Dubai



Proud winners: The safety experts Dr. Wetter, Sander and Roland Bent from **Phoenix Contact (from left)**



Markus Busch (l.) and Mathias Leichtle (m.) are happy about an award for ePed from Assa Abloy



Axis CEO Ray Mauritsson (2nd from left) and Germany CEO Edwin Roobol (3rd from left) are beaming winners with their P3807-PVE video camera



Great show for Mobotix: CEO Thomas Lausten (4th from left) and his team at the Global Partner Conference at the end of 2019: Anke Steingaß, Christian Heller, Klaus Kiener, Phillip Antoniou and Svenja Meisenheimer (f.l.t.r.)



Thore Peters and AG Neovo have won: Award for their QX Series Monitor



Great: The founders Marco Pizzato and Giuseppe Pizzato, Silvia Guerra, Joachim Hauslohner are happy about the trophy



An award-winning product is also doing great at trade shows: Philipp Landmann and Jürgen Rumeney from Siemens can confirm this for Siveillance Perimeter (at the Perimeter Protection show)



Advancis-COO André Meiswinkel (r.) gives the winning product WinGuard X4 a place of honor in the showroom



Jasper Sterenberg is proud of a trophy for the **Nedap Global Client Programme**



Enrico Dani (right) sees a success for the Nelysis product Vanguard as an important milestone



Ksenia founder and boss Raffaele di Crosta at Sicurezza: a great success of his product Domus in the special category Smart Home



A victory for the Schmersal team - Klaus Schuster, Philipp Schmersal and Oskar Arias



Newcomer and straight to the top: GIT SECURITY AWARD for the access system from Provialarm and chief Stefan Goetz



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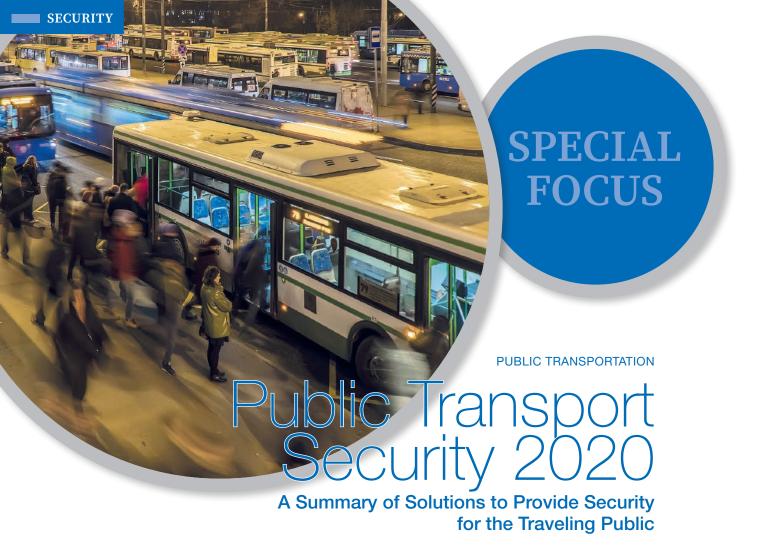
www.security-award.com



Coen van Luijken, Director Business Development at TKH Security, receives GIT SECURITY **AWARD for Juno controller**



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When evil minds want to spread their message and set about causing significant damage to property and people to get themselves noticed, security personnel can be one step ahead and prevent the worst happening. They are aided increasingly by intelligent surveillance methods that cope with the inhuman amount of decision-making that has to be done 24/7. GIT SECURITY has gathered some information about just a few of the components and solutions on the market that are ideal for securing public transport hubs.

he terrorist who plans an attack on the public transport infrastructure will not be an opportunist but rather someone who researches his – or her – target, obtains the necessary materials, possibly brings in like-minded individuals into the plan, and then puts the plan into action. All these actions leave traces that can be found and followed. Together, they can shed light on the intention, but can rarely all be coordinated to provide reasonably convincing evidence that such an attack is about to take place.

Well, that used to be the case. With the continual progression of artificial intelligence development, gathering all the elements mentioned above becomes a manageable task. If an AI system is fed with good information, it can analyze and predict much better than any team of people, no matter how large. And that is crucial to success in preventing such attacks – the gathering and input of good

information. So the quality of video surveillance, movement analysis and system instructions is still going to decide how effective such an effort will be.

Video Surveillance of Public Places

The amount of public video surveillance that is already in operation, and that is tolerated by the general public, varies considerably from one country to the next. Sometimes it is discreetly installed so as not to alarm anyone; sometimes it is intentionally installed in very obvious locations to act as a deterrent to any form of disorder. How effectively public places can be observed depends not only upon the number and type of cameras that are installed, but also how effectively the video material that is gathered is observed in real time or analyzed very shortly thereafter.

With a range of cameras that cover every conceivable need, **Axis Communications** has already contributed to the safety and security of transport terminals. Their P13 and Q16 series in particular fall into the ,deterrent category, are therefore well suited for the surveillance of passenger terminals, day and night, and provide excellent high-resolution images even under very poor lighting conditions. Their interactive lens calculator lets you specify the right objective for the job at hand.

The multifocal approach of the **Dallmeier** Panomera cameras is an alternative method to capture both the broad overview and the close detail of a scene at the same time, with just one device. The entire scene can also be recorded and a specific area analyzed close up later on.

By Air

We've been used to having cameras watching us every time we pass through an airport for many years. Indeed, it would be surprising – and not a little worrying – if we didn't see that someone



Dallmeier's Panomera multifocal camera can be integrated into advanced video management and analysis systems

was keeping an eye on what's going on. There are, of course, the cameras that we see, and those that we don't, even though they're there and helping to prevent criminal acts. They are all just one part of a complete security plan that has evolved at each location over time and is tailored to the situation at that particular airport.

The plan includes not only video surveillance within the terminals and on the apron, but also strict entrance control for people and vehicles, perimeter security and intruder detection, fire detection and extinguishing, public address and evacuation and, more recently, drone detection. Individually, these can become very complex installations. Together, and importantly today, they form a powerful and reliable source of information, on the basis of which informed commercial and operative decisions can be made.

Keeping the airport perimeter secure can be achieved with intelligent fencing, such as with the Absolute Pro infra-red



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A complete system for passenger information and video surveillance built around this rugged mobile PC and known as the ITA 5000 can be obtained from Advantech

columns from **Sicurit**, using movement detection. Visible light and thermal cameras from **Flir** are also specifically designed for such a job and, together with the company's VMS, they can track people and vehicles without any operator interaction being necessary. Their Cameleon system goes one stage further and itself controls supporting security systems such as radar, drones, recorders and more.

By Train, Bus or Tram

A rail terminal or station is also a condenser of the mobile public and will benefit equally from the same type of security measures as an airport. As the 'transport tubes' remain on the ground in this case, however, there is the additional option of installing video surveillance in the train carriages. It is not unusual these days for a city metro system to be equipped with ceiling-mounted dome cameras that feed their signal to a control room to provide a network-wide overview.

Together with images obtained from the platforms, continuous coverage of evolving events can be viewed in realtime, and recorded for later analysis. **Hikvision** offer a range of cameras for just these jobs in their "Deepinview" range. These already perform image analysis within the camera itself thanks to dedicated modules for each particular task. Advantech's ITA 5000 rolling stock video surveillance system, for example, can become part of a comprehensive data exchange system that includes passenger information displays, public address and on-board wi-fi. Managing video streams from many mobile units and carrying out analytics of the received images are just some of the tasks performed by the Omnicast suite from **Genetec**. Routine tasks are handled quietly in the background by the system, and anything untoward will be by brought to the operator's immediate attention.

Keeping passengers informed and letting them know exactly what is going on when things don't run as smoothly as normal will help to prevent irrational behavior that, in itself, can pose a significant security problem. The REM system in Montreal, Canada, aims to meet its passengers' everyday public transport needs by providing competitive travel times and full integration with the city's other public transit systems. To support the smooth passenger flow and easy traveling, Teleste's TFT LCD display technologies are used to share information from various data sources and display it at stations, platforms and entrances. They have automatic brightness control and low reflection making them highly suited for installation both indoors and outdoors.

What's Going on?

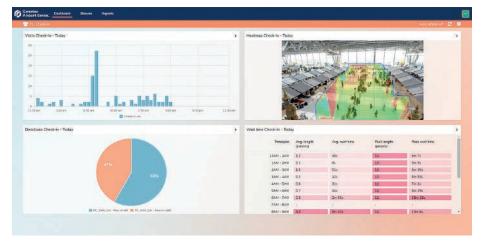
Trying to watch dozens of Battenberg cake images on large monitors was yesterday: today - and this is where AI comes in - those images are analyzed and evaluated by machines. A comprehensive video management system must nowadays be able to distinguish between ,normality' and ,unusual' situations. One specialist in this field is Qognify whose analysis products will scan the incoming flood of video material and raise an alert if anything untoward is detected. That's the short description! The solutions will in fact deliver detailed statistical information, enable effective incident management, and integrate with third-party systems to provide further functionality such as the assignment of personnel resources at busy check-ins or gates.

The Next and Intellect Enterprise systems from **Axxon** achieve similar results through the on-site analysis of incoming video, while the Axxon Net solution is a cloud-based application that provides remote situational awareness. Over in Phoenix, Arizona, **PureTech Systems** have developed a multi-functional analysis system which, apart from looking after critical resources and military installations, also has modules that are ideally suited for application in public transport environments.

The Top Level

So let's assume we have an intelligent video management system that will point out any suspected problems for us. Next to that, utilities management systems are monitoring essential functions such as air temperatures (HVAC), the water supply, (solar) power distribution (EMS) and the like. Beside those two watchdogs, the fire alarm system is constantly checking for conflagrations of any sort, ready to douse any flame with a hefty dose of cold

Genetec's Airport Sense web portal displays valuable insights and performance indicators through intuitive dashboards, graphs and maps



List of Suppliers

water from the sprinklers. Meanwhile, the intruder monitor and access control system is quietly letting the right people in and keeping the wrong ones out of critical areas.

But when an emergency situation occurs, it's likely that at least two of those systems will start delivering multiple alarm messages to the control room operators at the same time, if not more. This situation can quickly overload most human operators. Integration of all those individual systems into one overarching user interface will, however, make sense of the sometimes cryptic cries for intervention, and guide the safety and security personnel through such a crisis situation. They will be given a list of tasks to perform, in the correct order of priority, which will defuse the situation and ensure that all the necessary steps are taken for that particular scenario. Call it a ,Building Integration System', whereby the word ,building' can be replaced by object and in fact mean anything, such as a railway station, an airport terminal or a bus terminal.

Business solutions for transport from **Panasonic** create integrated solutions with a palette of products and services. Starting with multi-focal cameras and



video analytics for the complete view, rugged mobile hardware gathers other inputs and then provides reliable data on which informed decisions about security and operations can be based. The BIS from **Bosch Security** provides the link between disparate systems and coordinates their monitoring and control. This unified management is much more human-friendly and will deliver a single user interface for operators with a clear visualization of the emerging situation that is delivered from the various subsystems. The Sky-Walker open integra-

tion platform from **Entelec** and systems from **Alertus** are also conglomeraters of separate systems; video, access control, security as well as HVAC and others.

One of the important benefits of applying such a superior system to your transport terminal is that, while the security of your traveling public will be ensured by multiple separate systems, together they provide a workable and reliable security concept in an otherwise difficult to manage environment that delivers valuable operational data.

Smoke Alarm System with PX-iP Gateway

The Pyrexx Wi-Fi Smoke Alarm System for residential homes embeds PX-1C Radiolink Smoke Alarms in a network of devices that communicate with each other. The base component of the system is the PX-iP Internet Gateway, which integrates into a home Wi-Fi network and connects all of the linked smoke alarms to the Internet Gateway.



VdS Support for Foam and Water Spray Extinguishing Systems

VdS bundles over 110 years of experience in ensuring the effectiveness of fire protection systems into numerous Guidelines, and has now adapted its well-known practical assistance for safe foam and water spray extinguishing systems (VdS 2108en / 2109en) to new capabilities, hazards and risks. The new editions of VdS 2108en and 2109en offer all installers, planners and operators of foam and water spray extinguishing systems the usual precise, up-to-date recommendations for ensuring optimum effectiveness. The VdS CEA 4001en, known today as the international 'Sprinkler Bible', now fills around 300 pages. Together with other industry experts, the VdS engineers have developed numerous solutions for specific applications, including flammable liquids, tires and foam materials.

Simple PIN Locking Handle Deters Shoplifters

Code Handle locks from Assa Abloy fitted on key doors were the answer were chosen by upscale fashion boutique Patio who sought an easy, low-cost deterrent. With around €900 million lost annually to thieves in Belgium alone, theft from stock rooms

and shop floors is a persistent problem for retailers. During a store renovation, manager Jeff Van den Bergh decided Patio's offices and customer toilet needed proper



security. Shoppers and visitors should not enjoy free, casual access to these sensitive rooms. However, he did not want staff wasting their time tracking physical keys when they could be helping customers. Door security is now provided by a discreet PIN-pad built into a brushed-chrome handle. Two standard batteries slot inside each Code Handle to power the digital security. These typically last for 30,000 lock/unlock cycles.

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TRANSPORTATION SECURITY

Extracting the Potential of Surveillance

Dahua Technology Offers Smart Solutions for a Secure and Efficient Transportation System

In a world busier than ever, it's not exaggerating to say that our lives and businesses cannot afford even an hour's delay of transportation, yet its safety and efficient operation are constantly threatened by potential terrorist attacks and unexpected accidents. Security challenges are faced by the transportation hubs of railways, subways, public buses, ports and parking lots. These areas are typically flooded with people from all places and all types of cargo, making it costly and time consuming to track and check them manually.

ahua Technology has been developing video-centric smart IoT products and services for years to provide comprehensive, smart transportation solutions that give users more security, more efficiency and more profit. Thanks to the rapid development of AI technology in recent years, the company's Smart Transportation Solutions have already been widely applied in major transportation hubs.

For example, in 2018, one of the largest airports in Sri Lanka adapted the Dahua Thermal Imaging Perimeter Monitoring System to protect the safety of its flight zones. The system has secured the takeoff and landing of more than 60,000 aircraft, guarding the safety of 10 million passengers each year. The system collects images around the clock and enables the automatic monitoring of intrusion events under special weather conditions such as total darkness, glare, backlight, fog or smog, which ensures accurate detection with very few false alarms.

Railway Solution

As the expansion of cities and population causes a series of traffic problems on roads, railways and subways have become one of the most popular ways people choose to travel. Due to the increasing importance of railway safety, traditional video surveillance solutions can no longer meet modern security needs. So to ensure the safety of railway facilities, passengers and staff security, the Dahua Railway Solution combines AI, big data and other technologies based on video surveillance with actual business scenarios, to help railway operators respond to various emergencies and to ensure a pleasant journey for passengers.

Last year, Australia passed The Crimes Legislation Amendment (Police Powers at Airports) Bill enabling the police to perform random ID checks, which is somewhat inefficient, and gave passengers an unpleasant experience. Dahua face recognition cameras can, however, be deployed at station entrances and exits to capture and identify human faces without any police interaction. Faces are then compared to images in a database and the system will trigger an alarm if a wanted or blacklisted person enters the perimeter, aiding the police in capturing suspects.

Extracted Knowledge

Providing functions such as people counting and queue management, the smart Dahua security system assists retailers in increasing operating efficiency and enhancing their profits by analyzing and classifying the traffic flow in their

shops at the train station. And to provide an early warning of incidents, intelligent perimeter technology analyzes the images and detects passengers who fall off the platform edge into the track area, helping to ensure the safety of passengers getting on and off the train.

Dangerous train driving behavior such as driving while tired or smoking can be identified by analyzing a video feed, and it can trigger an alarm accordingly to inform both the platform staff and the driver. Dahua Public Bus Solution aims to help bus companies reduce the safety risks: a camera in the front of the bus can detect and analyze a driver's behavior, such as yawning or using a cellphone while driving, which will then trigger an alarm. As part of the same installation, the onboard screens can display advertisements and station information for passengers, bringing more benefits to bus companies.

The Dahua Highway Solution provides HD video surveillance regardless of the weather conditions or lighting level. Highly compatible with other systems, it allows road operators or authorities to monitor the highway from a remote central control center. And in a similar application, the Dahua Port Solution HD video surveillance allows cost-saving management of people, vehicles and containers. Container number recognition technology enables cameras to identify license plates, ISO, vehicle weight and other information automatically.

Road to the Future

To enable automatic driving in and out of parking lots without manual interference and to improve parking efficiency, the Dahua Parking Solution integrates ANPR and video analytics. An additional feature of this solution is guiding and locating vehicles via an embedded E-map to enhance the user experience. These are just some of the end-to-end solutions that Dahua has developed for the transportation sector that combine contemporary technology to provide better, safety, security and efficiency for city operations, corporate management, and the traveling public.

CONTACT

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isaac.lee@dahuatech.com
www.dahuasecurity.com/de

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Like many national football leagues, the teams of the English Premier League also suffer from unacceptable incidents such as people lighting pyrotechnics and throwing projectiles, hate crime and vandalism. This is why as early as 2013 the managers at Everton F.C. opted for a patented video security solution from the German video technology company Dallmeier.

oday, fourteen out of twenty clubs in the 2019/2020 Premier League season have implemented Dallmeier 'Panomera' multifocal sensor systems – including Arsenal, Chelsea, Liverpool and Manchester United. Many teams in the top flight of English football are also involved in the Champions

League and Europa League, so it is also extremely important for them to satisfy the safety regulations imposed internationally by UEFA and similar bodies.

For this purpose, Dallmeier's solutions enable high-resolution capture of expansive areas, such as the stands, with a minimum number of camera systems.

With Panomera cameras, multiple operators have the capability to zoom in on suspicious activities independently of one another, while the system continues to record the entire scene. An optimum overview of the situation is obtained with this combination of the advantages of PTZ and megapixel cameras, which can also be searched at the required minimum resolution at any time later. This enables the clubs to achieve continuity of video evidence, get instant identification of people and events, and so to reduce potential penalty payments.



Multiple optics inside one Panomera housing deliver both a panoramic overview and close detail at the same time

Smart Content Analysis

Besides ensuring the usability of video recordings in court, the 'minimum resolution density' is also important for video analysis applications. As stated so succinctly by the rule 'quality in, quality out', the quality of the results of analysis can of course only ever be as good as the quality of the image, and accordingly the



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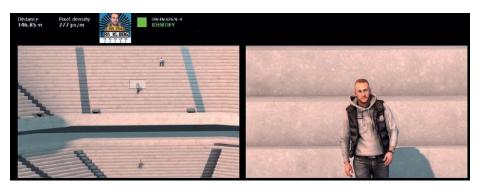
Email: info@business.panasonic.co.uk **Website:** business.panasonic.eu/facepro

^{*} In independent testing by NIST in 2017, the product achieved the highest level of facial recognition performance in the world in a comparison test.

quality of the input data. This is particularly true, for example, in crowd analyses for counting people in stands, for hostile vehicle mitigation or to detect intrusion in sterile areas.

With Dallmeier solutions, customers can precisely specify their required pixel density values defined according to DIN EN 62676-4 for each region of the area to be captured as early as the planning stage—for example, whether at least 62.5 px/m are required for AI-based object classification, or 125 or even 250 px/m are required to guarantee that recordings of persons will be usable in court.

"Throughout our selection procedure, the Panomera cameras from Dallmeier were able to deliver images of the highest quality time after time, not only in normal daylight conditions, but also under weaker floodlighting, that is to say, not only live but also in the recording with the highest resolution quality in all regions of the images. The Panomera cameras also capture the entire area of the stands with just a small number of systems. Ultimately, these considerations were the critical factor in our decision to award Dallmeier the contract for video



Specifying the required pixel density for the job at hand during the planning phase ensures that the best possible images are obtained

security at Goodison Park", says David Lewis, Head of Security and Stadium Safety for Everton F.C.

3D Planning Approach

The innovative 3D planning approach by Dallmeier provides stadium operators with the ability to place each individual camera with the highest precision in advance by using a 'digital twin'. So the planning even contributes to a reduction of total costs. At the same time, the in-house planning team manages any potential difficulties such as visual ob-

stacles (e.g. a video cube) or subsequent structural changes. This ensures that there are no 'cost traps' for the customers, and that compliance with all the requirements is guaranteed when the system is actually implemented.

CONTACT

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Innovations at the Intersec Middle East Trade Fair

Uhlmann & Zacher was represented at the Intersec Middle East trade fair in Dubai for the first time. The three-day fair took place from 19–21 January 2020 at the Dubai International Convention and Exhibition Center. On site, the team presented the latest product developments on an international level. The highlight was the variant



with Bluetooth Low Energy for which Uhlmann & Zacher won the Intersec Award in the Access Control category at this year's prize-winner's ceremony in Dubai. The system distinguishes itself from other solutions by using Blockchain technology, so the locks are not dependent on a central server, which in turn ensures maximum security.

www.UundZ.de

Video Wall Series Extended

Barco has added the Unisee 500 to its range of LCD video walls. With a brightness level of 500 cd/m², it has some new features for environments with controlled and reduced ambient lighting conditions. These include meeting rooms, television studios, simulation systems and smaller control rooms. For ergonomic reasons, the brightness levels of such video walls rarely exceed 400 cd/m² and don't require the brightness levels of the company's original models. With a small optical seam, and almost eliminating the 'black raster' that traditionally interrupts the content shown on LCD video walls, the video walls significantly reduce this disturbing impact on the viewing experience and avoid information loss.

www.barco.com

Fan Safety Enhanced and Data Privacy Maintained with Panasonic's Facial Recognition

Danish Superliga Football Club Brøndby IF has enhanced fan safety by using Panasonic security solutions to prevent banned football hooligans from entering the stadium, whilst maintaining visitor privacy and complying with European Union General Data Protection Regulations (GDPR). Installing Panasonic's Face PRO facial recognition



system at the stadium entrances helps identify those on the banned list. With an average attendance of 14,000, and up to 100 registered persons on the stadium blacklist for causing trouble, the system operators in the surveillance room now double check matches made by the system before sending notification to the stewards at the gates to prevent them from entering. The automated procedure also decreases congestion, so genuine fans can get into the stadium faster. To meet Brøndby IF's requirements, data from the camera is encrypted and the data and images of people not on the blacklist are never stored. The details of banned individuals are encrypted

and only stored on a server blocked from the Internet and all other external systems. Brøndby IF sought permission and approval on its approach to GDPR compliance from the Danish Data Protection Agency.

www.panasonic.com





INTERVIEW

Right Results for the Right People at the Right Time

How Video Analytics and Al Assist in Taking Decisions

At Intersec in Dubai Avigilon showcased its latest video, artificial intelligence, video analytics and access control solutions at the combined Motorola Solutions stand. GIT SECURITY talked to Paul Such, Vice President for EMEA Sales at Avigilon about advances in their video management system, the use of AI and their latest product developments.

The Motorola stand here at Intersec shows the whole portfolio of Motorola Solutions' security solutions and it looks like there were some nice additions to the video surveillance offering.

Paul Such: Yes, one of the things that Motorola has brought to the table since we last met were the acquisitions of Watchguard, Vigilant Solutions and Edesix. These acquisitions have added body-worn cameras and onboard police vehicle cameras with ANPR to our portfolio. The acquisitions expand our mission-critical ecosystem, adding to the video security solutions platform of fixed cameras and advanced analytics from Avigilon the license plate recognition cameras and software from Vigilant Solutions and Watchguard's body-worn cameras. They are a great fit to our Avigilon products, which allow us to strengthen our video analytics and AI capabilities.

Artificial intelligence is on most people's agenda. Can you outline what you have to offer here?

Paul Such: I think we are at the forefront of using AI for security needs. AI has become an integral part of the newest version of our video management software, Avigilon Control Center (ACC) 7.4 that incorporates artificial intelligence-powered facial recognition technology. Talking about AI, I need to mention the latest updates of our Avigilon Appearance Search technology, the sophisticated

deep learning AI search engine that can help you to sort through hours of footage with ease. We have launched 'Focus of Attention' a cutting-edge user interface for live video monitoring. Rather than watching static video feeds, Focus of Attention uses AI-powered Avigilon self-learning video analytics and Unusual Motion Detection technologies to determine what information is important and should be presented to security operators. By providing actionable information immediately to users, the system is designed to help ensure that critical events do not go unnoticed. This new level of proactive response is set to help change the future of video security operations

Can you explain the function of what you call 'Unusual Motion Detection'?

Paul Such: Unusual Motion Detection is AI technology that brings a new level of automation to security. Without any predefined rules or setup, the technology is capable to continuously learn what typical activity in a scene looks like, and then detect and flag unusual motion. This allows operators to filter through large amounts of recorded video faster when using Avigilon Control Center (ACC) video management software, as it flags atypical events that may need further investigation, helping to reduce hours of work to minutes. Unusual Motion Detection is the perfect example for Avigilon's strength to deliver the end-user the information they need via an intuitive user interface.

AI only works with sophisticated hardware. Are you working on advances in your camera portfolio, too?

Paul Such: We are continuously working on developing our products and solutions. The latest updates to our Access Control Manager with enhanced video security unification are remarkable. It is introducing a new concept for managing access control offering a streamlined ordering and licensing delivery system. The H5A camera line on the camera side is built with the next generation of advanced video analytics with the ability to detect more objects with even greater accuracy. Our new high-resolution H4 Thermal camera combines patented Avigilon technology with heat-sensing capabilities to improve perimeter security in areas with poor visibility, difficult lighting conditions and absolute darkness. Another highlight is our most advanced multi-sensor camera, the H4 Multisensor, which features up to 32 MP total resolution, self-learning video analytics, H.265 compression and content adaptive infrared technologies.

CONTACT

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THERMAL CAMERAS

See What Others Can't See

Status Report Thermal Cameras

Very often advances in security technology come in small steps or can be described as marginal gains improving existing products. Those small improvements should not be underestimated as they may change a system from underperforming to the status of exceeding the requirements. When I had the chance to experience the performance of one of the first thermal camera systems live years ago, it was clear that this new technology would not be a small improvement but a game changer.

hen we gathered for a life demo in the room of a local integrator, we could see two cameras pointing into the twilight of a November late afternoon. As we had heavy snow on that day, with the best video camera available, we could hardly see anything outside on the street that was farer away than 50 meters. With the thermal camera we could clearly see a man walking his dog in about 250 m distance. Already this demo almost ten years ago perfectly showed the capabilities of thermal cameras. No matter how poor the visibility is because of darkness, fog, rain or snow, with a thermal camera you may spot an object moving towards a perimeter or restricted area, as thermal cameras capture images based on heat radiating and not via visible light.

"Under normal daylight conditions, we can recognize possible hazards most easily using CCTV cameras. But they show weaknesses at night and in adverse weather conditions", explained a security officer from a major European airport, when asked about thermal cameras and added: "Thermal imaging cameras work very well day and night and even in cases of light fog or smoke, but they also reach their limits during tropical rainstorms. In this case the water acts as a wall which is impermeable to thermal radiation."

Lower Costs Allow More Options

Already in the early days of thermal cameras they were a very valuable tool for high end security solutions whenever normal camera technology was not enough. In a lot of projects thermal cameras were chosen when there was simply not enough light in remote areas or when there was a need to cover large areas like at borders or large perimeters 24/7. But due to very high prices for thermal cameras, one could easily spend more than 5,000 Euros for a single unit, their prevalence was very limited.

This has radically changed when more and more vendors developed thermal cameras and their price was lowered. At

the same time higher resolution cameras with a better performance became available. These days thermal cameras are an option for more security projects and it is worth to look at other advantages they offer. For David Montague, Senior Director Security EMEA at Flir Systems, one of the pioneers in thermal imaging, the level of performance of modern thermal cameras clearly provides advantages over many other technologies, reducing the need for civil works as there are less cameras as opposed to standard CCTV cameras. Further, no additional lighting is needed, reducing cost and having less of a negative impact on the environment. He adds: "In recent years the price for thermal cameras has reduced to a level which has allowed for additional markets to be created. Thereby, offering the best technology solution at an affordable price with significant environmental advantages. When compared to other detection technologies, thermal provides earlier warning with consequent savings on lives and assets. Also in areas with smoke from a fire situation, thermal cameras will be able to equally perform as smoke does not affect the thermal image. This allows the user to stay in better control of the situation, enabling guidance for public address systems, and rescue and evacuation tasks."

Accurate Detection

Unlike standard video surveillance cameras equipped with first generation video analytics, thermal cameras are sensitive in their detection abilities and do not raise too many false alarms. The task of thermal cameras used as sensors consists first and foremost of reliably detecting potential intruders. Priority number one is that if someone or something violates the perimeter, then the system has to reliably detect it. Priority number two are low numbers of false alarms. They should always be kept to an absolute minimum to ensure efficiency and with the integration of thermal cameras this is an achievable task. According to Martin Jensen, Global Product Manager Thermal Cameras at Axis Communications, thermal cameras can be used for various applications where accurate detection is crucial. He points out, that from perimeter protection and patient monitoring to ensuring equipment is operating safely, thermal cameras are in use in many different applications. He adds: "Thermal cameras are continuing to grow in popularity due to their ability to detect the nature of a threat and reduce false alarms, saving both time and money for, which cuts the total cost of ownership (TCO). Due to the wider detection range, thermal cameras reduce the need of numerous cameras as even a few of them can cover a whole property."

System Integration

For accurate detection, cameras need to be integrated into the operation chain. When a thermal camera detects motion or somebody is crossing a virtual trip wire, an alarm can be triggered via video analytics software. Modern motion detection system can distinguish between movements in different directions. Often only movement in a certain direction is defined as unusual. The software then sends such an event to the video management system and the VMS forwards the event to the security control center. Some thermal cameras do the analytics already on the edge with built-in analytics. The Avigilon H4 thermal camera for example is embedded with self-learning video analytics to provide long-range perimeter protection and leverages thermal technology to operate under challenging conditions while minimizing false alarms. It is designed to detect the presence and movement of people and vehicles in areas with poor visibility, including partly camouflaged scenes, low lighting and even absolute darkness, without the need for additional light sources. The camera easily integrates with Avigilon Control Center video management software, for seamless analytics configuration and alarm notification, helping users to focus on critical events and take decisive action when it's needed most. The self-learning video analytics recognizes threats with greater accuracy to help to detect, verify and act faster.

Data Protection

A thermal cameras is no tool to identify individuals but thermal imaging cameras have a big advantage that often is overlooked with regard to data protection. They don't show individual features, but only depict "temperature signatures". Therefore, they can be used in all cases requiring special data protection, as they are not problematic in this regard as compared to CCTV cameras. One example are hospitals where thermal imaging can detect patient incidents – such as falls – that need attention, without invading their privacy by recording their image 24/7.

Calibration and Training

In former times proper calibration of thermal cameras was a complex task, as it actually requires a full cycle of the seasons. The conditions in winter are completely different than in a hot summer and a wet autumn is different from spring. When it comes to calibrating thermal imaging cameras, the most important factors are not, as one might think, the extremely high or low temperatures. The medium temperature range is actually much trickier because there is not such a big difference in temperature between the environment and objects.

Safety and Fire Detection Applications

Increasing safety is another task, thermal cameras can help with. There are applications in harbors for example, where thermal cameras can detect manoverboard situations and can help to find a victim in the shortest possible time so that we can get him out of the water before hypothermia sets in.

Fire detection is the application Hikvision has in mind with the launch of a new thermal bi-spectrum turret camera, which brings enhanced capabilities of indoor fire detection, including an advanced temperature anomaly alarm and visual warning. This new camera supports fire detection using high-quality internal hardware components to capture images using both visible light and infrared light, also called "bi-spectrum" image technology. The bi-spectrum image technology creates a picture-in-picture preview and image fusion, which can capture what caused the alarm and help personnel to check the situation quickly. It monitors through only one channel, reducing bandwidth and simplifying the live preview procedure of switching channels between thermal and optical channels. The camera features a reliable temperature anomaly alarm, which will trigger an alarm once the temperature goes higher than a user-set limit.

Another vendor, Mobotix, works with two directly adjacent lenses, too. Their M16 Thermal aims to complement perimeter protection and fire prevention solutions with this technology. The cameras detect and register objects and people using a thermal signature, even in total darkness at a distance of over 100 meters, safeguard privacy and are also extremely effective in detecting lifethreatening heat sources early on. There is a thermal overlay function with image overlay (thermal and optical) to pinpoint the exact location of hotspots like smoldering fires in a visible image.

The Author

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Thermal Cameras

- 1. What applications are best suited for thermal cameras?
- 2. How can users integrate thermal cameras into AI and video analytics solutions?
- 3. Please, describe one highlight of your product offering.
- 1. Thermal cameras capture images based solely on the heat radiating from people and objects. This means they can see a clear outline of a potential threat, no matter how poor the visibility - they're as accurate in complete darkness as they are on a bright sunny day. This is particularly useful for 24/7 monitoring in hazardous or remote areas where there may be no light at night and that are impossible to monitor physically. Combined with features such as cross line and motion detection and advanced analytics, thermal cameras consistently deliver a low rate of false alarms. In addition, as thermal cameras don't deliver images that allow reliable personal identification, such as specific facial features, it's a useful device in areas where surveillance is necessary but mustn't interfere with people's privacy (e.g. hospitals)
- 2. When combined with analytics technology, thermal cameras can examine a potential threat that has been detected, automatically dismiss non-threatening ones, and immediately notify guards of potentially critical situations. By using

the video analytics directly in the camera – at the edge – it allows for the system to be more time efficient when it comes to determining the threat-level. The image can be analyzed immediately within the camera, reducing bandwidth for data transfer as well as storage costs.

3. Axis Q1941-E Thermal Network Camera is an outstanding product in our portfolio and together with the video analytics application Axis Perimeter Defender it provides a cost-effective and stable solution to protect properties as well as design and calibration for an easy installation and usage. The camera includes Electronic Image Stabilization that delivers more clarity in the footage, and the software allows simple and remote configuration of the system. Thanks to the recently added Axis Perimeter Defender PTZ Autotracking application, it's also possible for a fixed thermal camera running Axis Perimeter Defender analytics to automatically steer a PTZ camera to zoom-in on and follow an alarm object.



Martin Jensen
Global Product Manager,
Thermal Cameras at
Axis Communications



Stefan Li
Thermal Product
Director at Hikvision

- 1. The most ideal and critical application of thermal cameras is for perimeter protection, especially those have higher requirements on alarm & detection. Thermal cameras are super adaptive to all kinds of environments and can pick up movement and give security teams eyes on objects, vehicles and intruders, even in complete darkness, or with complex lights, or under extreme weather conditions. When incorporated with deep learning algorithms, thermal camera can even enable human/vehicle classification for more precise target detection, and more reliable perimeter protection. Secondly, non-contact temperature measurement. Thermal can help to detect and 'visualize' temperature anomalies and trigger alarm when it approaches dangerous temperature, this effectively enhances the pre-warning capability before a fire occurs. Ideal for industrial applications, waste management etc.
- 2. Currently there are two types of product in the industry. The first is that thermal cameras are produced with AI and video analytics embedded, processed by GPU, the Hikvision thermal camera is

- the example. Employed with deep learning-based AI technology, the cameras are enabled with behavior analysis, temperature measurement, fire detection and others. This can greatly help customers to save the license cost for third-party video analytics. The other one is for device manufacturers to allow third-party algorithm companies to integrate their video analytics solutions into the hardware, so as to achieve behavior analysis, people counting and many other applications.
- **3.** Hikvision introduced the cost-effective thermal products featuring 160x120 resolution in 2019. This product series is designed for short-distance perimeter protection and fire prevention, ideal for applications such as warehouses, museums, data centres, and offices. It makes thermal technology an affordable solution for small to medium businesses for the first time and helps raise more awareness about the public perception towards thermal and its advantages. I can especially recommend the Hikvision DS-2TD2617 series Thermal & Optical Bi-spectrum network bullet camera, for example the S-2TD2617-3/P.

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- 1. Within commercial security, thermal cameras are well suited as one component within a total Perimeter Security solution. Thermal technology enables visibility in total darkness and in almost all weather conditions, providing excellent image contrast. This has significant advantages, providing accuracy and reducing false alarms. In addition thermal cameras will detect for considerable distances, depending on the lens and technology used, 20km can be achieved. Thermal cameras should be considered for any Perimeter Security project, such as those in Oil and Gas, Mining, airports, and VIP residences. A notable application across a range of markets is early fire detection based on radiometric which is enabled using thermal cameras capable of measuring temperature.
- 2. Embedded or external AI delivers exceptional performance when combined with thermal cameras compared to visible ones as thermal cameras deliver the lowest rate of false alarms, reducing operational costs. This is due to simplified and constant visuals regardless of light conditions. This is key for installations connected to remote alarm monitoring centers or with limitations on bandwidth and connectivity, reducing operational and infrastructure costs. Thermal cameras enable AI on long distances without the need of illumination, reducing the number of cameras

- needed, civil works and total cost of ownership. Thermal cameras will operate on adverse climate conditions like fog and rain, providing customers a true 24/7 operational security system. Thermal cameras are the best option available for accurate and effective auto tracking hand off from fixed cameras, enabling automatic and autonomous intruder tracking operations.
- 3. Flir Systems has a strong history and legacy of working in the military market space and many of the technologies created through rigorous development programs are available for commercial applications. Driven by the desire to innovate and develop technology, Flir Security have software, VMS and PSIM and also many complementary hardware products. This offers the best and most extensive range of thermal cameras, fixed and PT with many lens options. These cameras operate with analytics on the edge or server based and can be used with third part analytics if required. In addition to thermal, there are sophisticated radar systems, drone detection, CCTV cameras, drones, and TruWitness, a central security system for global event handling. Flir is the only vendor in the market that can source multilayered advanced Total Security Solutions with warrantees system functionality.



David Montague Senior Director EMEA Security at Flir Systems

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www.GIT-SECURITY.com GIT SECURITY 1/2020 35



◀ Smartair wireless locks are already deployed at offices and coworking spaces around Europe

Most likely, tenants and visitors to a coworking space will value agile, modern solutions. In other words, pretty much the opposite of mechanical lock-and-key technology. Thankfully, there is an intelligent security alternative that won't blow the budget or create renovation chaos.

ACCESS CONTROL

Attracting Coworkers

Four Ways Access Control Matters in a Coworking Space

forecast by the Global Coworking Unconference suggests flexible, non-dedicated workspaces in the EMEA region will number around 17,000 by 2022. Such coworking spaces are designed to provide a productive and collaborative environment for their users, without the typical corporate constraints of an office environment.

Coworking provision is a dynamic market, with increasingly fierce competition for a user base that knows what it wants. The right access solution helps a space to stand out from its competitors and can deliver real benefits for users and the way they work.

Smarter Space Usage

Many creative and tech-oriented coworkers demand round-the-clock access. Indeed, according to the Harvard Business Review, the sense of control this flexibility gives is one reason people thrive in coworking spaces. If you have an access

system you can manage remotely, from a PC or smartphone, staff need not be onsite to manage people coming and going 24/7.

An intelligent access system can also feed back critical business data in real time. Who is using your facility? And when? The more you know, the more likely you will make better business decisions.

Safer Belongings, Slicker Incident Handling

Open, collaborative coworking involves lots of expensive tech and personal items lying around. In the words of one report by commercial property experts Jones Lang LaSalle (JLL), "While coworking spaces are perhaps safer environments to leave equipment unattended than your typical coffee shop, companies still risk a loss of equipment." You can maximize security and minimize space users' risk with effective access control. Cowork-

ers will not rent desks where intrusion is easy — and you do not want to operate a space with a reputation for petty theft.

Imagine the worst happens to a tenant: something unexpected occurs or their valuables go missing. An access control system helps you sort it out quickly and efficiently. Because everyone carries personalized credentials — and you can order instant audit trails using access system software — you can quickly find out who went where, and when. Investigation is easier.

Cutting Out Cutting Keys

In any sizeable workspace, standard physical keys are difficult to track without a dedicated key management system. Some types of physical key are relatively straightforward to cut without permission. How much time do you waste when a key is lost or stolen? Changing a standard mechanical lock is time-consuming and expensive.

When you install an access control system, one click cancels any 'key', key-card or smartphone credential. You can program and reprogram door devices as many times as you like. You'll never change a lock again.

Another study by JLL found around two-thirds of coworking providers expect to expand their workspace in the future. The good news is that wireless access systems like Assa Abloy's Smartair are almost infinitely flexible; you can bolt on new areas, easily move locks around, or add new sites as you grow. Wireless access control helps you change the security status of a door at any time — or expand your coworking area to another

floor cost-effectively. Add a meeting space; connect two offices; no keys or cables are needed.

Image Can Be Everything

Modern workers prioritize convenience and user experience. The latest electronic access systems include an option for people to carry virtual keys on their smartphone in place of a physical key or key-card. Savvy, smartphone-enabled access will set a space apart from its local competitors. And Assa Abloy are currently offering a free coworking access control guide via their website to help affordably transform the security of coworking spaces.

Could a coworking space find another revenue stream by hosting weekend or evening events? Because smartphone keys are so flexible, they make it easy to issue time-limited access for temporary staff or one-time attendees. When the event is over, their 'keys' no longer unlock the doors. Nothing needs to be done — it's all automatic.

CONTACT

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Smart Surveying at Care Home

C-TEC's Quantec Surveyor2 cloud-based data management software has been installed at Croft House Care Home in Yorkshire. With its capacity to generate reports on busi-



est shifts, call response times, most frequently visited rooms and more, the owners and managers of the facility, Victoria and Giles Bateman, say that Surveyor2 has revolutionized operations at their family-run residential care home, recently rated outstanding in care by the Care Quality Commission (CQC). The system also sends email notifications to Croft House's management team so they can monitor response times when not on site. As the system has remote access capabilities and displays 'real-time', call, reset and room occupancy information, the senior member of staff on shift can view the status of all current calls and respond accordingly if a call is taking too long to be answered. **www.c-tec.com**

Night Visibility with Infra-Red PTZ Security Cameras

Panasonic's latest i-PRO Extreme PTZ infra-red security cameras provide high night-time visual quality and intelligent functionality, packaged in a device designed for reliability and low-level maintenance. The two models in the range are the WV-X6533LN with a powerful 40x zoom and the WV-S6532LN with 22x zoom. Able to capture low light evidence even at distances of up to 350 meters in a zero lux environment, the cameras improve visibility by mixing visible and IR LED lighting through a new auto focus system with a visible light cut filter. Multiple light sources in one frame are

no longer an issue. To ensure CCTV footage is kept safe from unauthorized external access, the cameras are under vulnerability assessment and come with Digicert (formerly Symantec) certification, which includes end-to-end data encryption and FIPS140-2 CAVP compliance without any built-in backdoor access.

business.panasonic.co.uk

Secure Access

Ksenia Security exhibited at Intersec Dubai 2020 in January where they launched a number of new devices. The gemino 4G-LTE/IP Communicator IoT is designed to remotely control dual-path communication on lares 4.0 control panels; Se-



cure Access software synchronizes the management of users on several control panels installed at different sites; the porta 4.0 KNX device can control all the Ksenia lares 4.0 control panels; the velum-C curtain sensor in the wire version, with 6m of capacity and a 7,5° opening creates an insurmountable barrier against any intruder; the bi-directional universal radio interface matrix connects third-party motion detectors to the lares 4.0 control panel; the Bus switch is a little board that allows fast wiring and related maintenance operations; the energia module continuously monitors total system power consumption; and the new version of Ksenia Secure Web is a secure Cloud service providing system setup and management.

www.kseniasecurity.com

Cyber Secure and Web Embedded Access Controller

Now available from TDSi channel distributors is the new web server embedded GARDiS access controller from TDSi. Designed to be fully cyber secure, as well as easy and quick to install, the new controller is avail-



able in one, two or four door versions to suit all requirements and budgets. The controller embraces the GARDiS ethos by featuring an intuitive design and full expansion capabilities, including integration with Simons Voss and Assa Abloy wireless locks. It also features a five year warranty and no quibble returns policy. It fits up to 10 wireless locks using Aperio / Smart Intego (either using Aperio, Simons Voss, or additional doors), has a 5,000 card capacity + 15,000 event buffer and capacity for up to 10 slave units per master controller giving control of up to 44 doors through the web server.

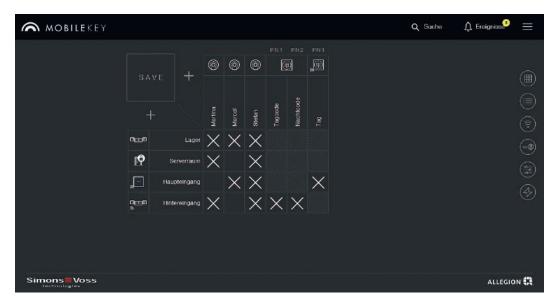
www.tdsi.co.uk

ACCESS CONTROL

Served Best Of All

Update: More Convenience – More Features

The usage and operation of the MobileKey electronic lock system for buildings with up to 20 doors from SimonsVoss has been further simplified. The manufacturer has optimized the user interface and added additional features.



MobileKey from Simons Voss is an electronic locking system for buildings with up to 20 doors

feature of the update of the MobileKey lock system from SimonsVoss is the use of color in the top menu bar. The new search field has also been included here, where all available components and transponders in the matrix can now be found. There are six quick-selection buttons vertically arranged on the right-hand side that give direct access to specific functions. Among others, these included the Key-4Friends module and the ability to set up temporary access authorities (e.g. for external service providers, suppliers or guests) as well as sending these by email.

In the latest update, a Key4Friends is no longer defined for a specific lock but instead for a particular user, whereby any number of networked locks can be selected. The Key4Friends are now only included in and administered from the component list, just like the other keys.

Rearranged: "Rule administration"

The event management automatically sends messages to the MobileKey app or to email addresses. 'Events' that have been defined in the system could be the locking or unlocking of a door that has been reported by a door monitoring cylinder for example, but also a low battery alarm or a system message.

The event management and the rules to be defined can now be found directly with the events, where previously only the generated messages appeared. There is now a button in the menu bar called "Rule administration".

Accelerated Online Opening

'Open' commands that are generated via a network online (remote opening via a web app or app, Key4Friends, PIN code keypad online), will be prepared by the system in advance so that only the actual command to open the lock must be sent. Remote opening commands are thereby speeded up considerably (note: also activate the "Fast communication" option for the online locks).

A further addition is the possibility to generate a log list of access events or opening events as a pdf file. And for easier operation and better readability in poor light conditions, an optional light-colored theme (white mode) can be selected.

CONTACT

SimonsVoss

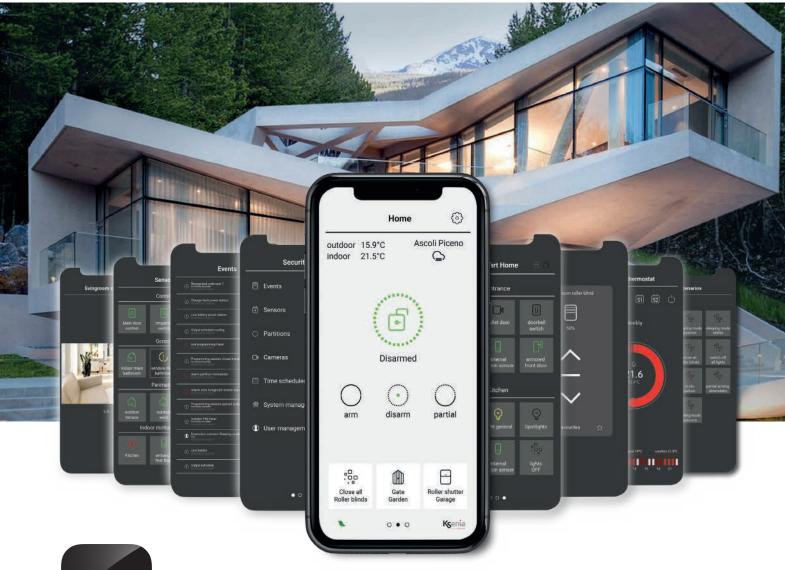
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ALWAYS CONNECTED





The new dimension of Security





lares 4.0







Perimeter protection has always been an important subject in military applications and later was further developed in the civilian sector to become an important part of security systems. Today it is indispensable for airport security, industrial sites, embassies, power plants, prisons, harbours, cities, public places and many more. GIT SECURITY explores different options on safeguarding perimeters and also informs about the latest solutions.

Then we think about intrusion, a person who enters a building comes to mind, although the burglary actually begins much earlier, namely at the borders, fences and properties. As soon as an unwanted someone or an object enters prohibited area the clock starts ticking and a quick reaction is of the essence. The possibilities on the market are seemingly endless. One first essential step is to gain insight about your properties and the options that are best-suited to protect it. A kilometre-long fence for a boarder, for example, has different requirements than an airport.

Barriers and Fences

As we've established, time is essential. The faster and the more precisely an intruder is detected the longer security personnel has time for action. Or – the other way around – the longer a protection system can stall an intruder the better. Physically hindering protective measures like barriers and fences are a very underrated form of protection.

Comprehensive perimeter protection can be created by a combination of

mechanical and electronic components. Depending on the type of perimeter, this should include exterior protection with fences, crash bollards or other barriers, vehicle sluices with quick folding gates or a barrier/sliding gate combination if necessary, entrance and access control systems for pedestrians as well as additional video monitoring. Perimeter Protection Group, for example, offers different movable or fixed crash bollards for sites. Pedestrians may enter unhindered, but vehicle traffic is to be stopped. All bollards feature robust construction with heavy gauge material and high tensile steel. Due to their modern design the crash bollards can be used in inner city surroundings for city security as well as for securing the perimeter of large properties like airports. The area of aircraft maintenance hangars forms a specific security risk. Especially flag carriers form attractive targets for attacks. These are i.e. those airlines or airplanes, which are owned by a state or represent it. Size and complexity of modern airports require various components like the so-called taxi gates with large opening widths for the convenient passage of airbuses, typetested quick folding gates and other fences. All of their products are particularly well-suited for connection to integrated central control platforms which will be talked about later in this article.

From Fence to System

It all comes down to functionality: Perimeter fences must be highly reliable, difficult to bypass and not generate false alarms, even in adverse conditions. Gallagher, as another company who is specialised in perimeter security, also delivers robust perimeter security systems suited to the most rigorous requirements of high security sites. Their monitored pulse fence system consists of a grid of energized, high tensile wires that can be constructed inside a new or existing perimeter fence. The monitored wires detect unauthorized entry or exit into defined areas and trigger instant alerts. Attempts to breach the perimeter are deterred by an energized pulse sent around the perimeter fence line. Monitored pulse fencing meets stringent safety criteria, while delivering a short but safe shock, making it almost im-

possible to climb the fence. Zoned fences allow voltage levels to be adjusted to meet varying needs: high for maximum deterrent and low for periods of low risk. A networked perimeter solution incorporates sensors that continuously measure and report on wire tension and monitor fence structure vibration or movement.

Electronic Deterent

Sicurit is another well-known producer and distributor for perimeter protection solutions, especially in Italy. One of their latest product developments for high-end applications such as border and Airport security is a High Security Fence that combines high resiliency, pin-point detection and a unique design that makes it seemingly impossible to climb with bare hands (hand and footholds reduced to 76.2x12.7mm only). Additionally, the fence has been designed to hide any electronic component and cable required for its activation in case of an attempted penetration making it vandal and tamper proof. The HSF Activa fence is the result of a strong cooperation between Sicurit and Cavatorta.

As we can see, fences, bollards and gates increase the possibilities of intrusion detection immensely. Hindering an intruder may be or may have been one of their fundamental functions, yet they have been developed to detect intrusion data and even deter very effectively, thus being oftentimes an integral part of the entire security system.

Long Distances

Moving on to solutions that focus on data collected by the intrusion detection system. They can be collected by buried, fence-mounted or video-based sensors, and can be used to direct cameras, automatically track intruders, and activate deterrent devices such as security lights, intercoms or sirens. **Senstar**'s FiberPatrol



The quick folding gates by Perimeter Protection Group are type-tested, trackless bi-hinged gates and ideally suited to keep driveways secured

family of intrusion detection sensors, as an example, are ideal for border applications and large facilities with unmanned perimeters. The fiber optic sensor supports distances up 80 km (49.7 mi) and uses no in-field conductive or powered components. The sensor is EMI and lightning immune and can be buried to provide covert detection. Senstar sensors work with virtually all security systems. Software integrations are available for industry standard video and security management systems, while built-in I/O capabilities ensure that sensors can report zone, supervision, and equipment status events to on-site intrusion panels or alarm systems.

Radar Technology

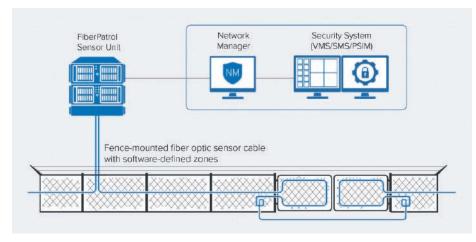
With a range of around half a million square metres, a single radar unit can already cover a comparatively large area – even in poor weather and light conditions. The number of devices can be minimized when securing outdoor areas, thus reducing infrastructure and mainte-

nance costs. One of the radar companies, Magos, has developed an intelligent solution. Mass-AI software can be roughly summarized as follows: Radars and cameras are displayed on a dashboard map. The displays of detected events are defined as targets and camera control is taken over, so that the camera follows the object automatically. The AI software permanently analyses the objects on the video stream. Finally, Mass-AI classifies objects as animals, for example, and identifies them as such. The visualization is done with the graphic boxes around all objects, such as vehicles or people.

Navetch Radar is another radar technology provider, whose sensors scan 360°, and can detect up to 3 kilometres. It is a rules-based software, meaning operators can choose which behaviour and movement in and around the site is considered a threat. It provides the exact location of intruders anywhere on the site and analyses target parameters such as speed and direction.

Innosent would be another interesting company when it comes to radar solutions. Their isys-50xx product series is perfectly suited to be combined with further security technologies such as video cameras in order to reduce the rate of false alarms. Thanks to the Tracker license available for isys-50x1 product variants, the series is also available as a standalone solution. The new isys-5011 and -5021 systems allow commercial security applications to incorporate such functions as radar tracking, object classification, defined danger zones and filter options for the first time.

Deployment Diagram: Senstar's FiberPatrol communicates with the security system via Ethernet. Integrations using output relays are also supported



The Author
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PERIMETER PROTECTION

Illuminator

Beaver Antics Caught on Camera

Raytec's Vario2 IR illuminators have been used to capture the antics of a pair of beavers who are helping to reduce the risk of flooding using their dam-building skills. Achieving exceptional images, the footage has since been used for BBC's 'The One Show' (which will be aired in early 2020).



VAR2-i2-1 Infra-Red illuminators are the smallest variant within the Vario2 range

Film, work closely with wildlife trusts, environmental agencies and the BBC to provide effective wildlife footage for documentaries and educational content. The aim of this particular project involved monitoring beavers to study how they can help with flood management. The project consisted of approxi-

reelance producer, Wildlife on

mately 18 months of filming, with constant monitoring of the beaver's progress throughout.

The Challenge

The goal was to achieve exceptional images of the beavers in their natural habitat, and with filming often taking place at night, high-quality illumination would be essential. The client was also restricted by; Illuminator size - using a custom-made, portable frame, the client was restricted by size of the illuminator they could use. They needed an illuminator which would be small enough to mount within the limits of the frame, but also powerful enough to generate the best possible images of the beavers building their dams. Non-invasive lighting - visible White-Light would be likely to disturb the beavers, so the client needed a high-quality Infra-red solution that could enable the camera to see during the night and allow the beavers to behave naturally in their habitat.

Small and Powerful

After coming to Raytec for support, Wildlife on Film found a solution using two VAR2-i2-1 Infra-Red illuminators; the smallest and most compact variant within the Vario2 range. Both illuminators were mounted to the custom frame, sitting above the camera (see right), which meant the field of view could be illuminated wherever the camera was pointed.

The compact size of the Vario2-i2-1 units were ideal for mounting to the custom frame and was essential to the success of the project. Owner of Wildlife on Film, Russel Savoury, commented, "I have been looking for suitable IR lights for some time. Having found Raytec, it's been a game changer for me. The compact size of the lights has enabled me to make a very handy, portable rig". Despite their small size, the illuminators still had the power to deliver outstanding images with an even distribution of light across the target area. This allowed every element of the beavers' activities to be monitored in close detail.

In fact, the quality of the images was so good that the footage was selected for use on national television. Russel continued, "The images I've been able to obtain using the Raytec illuminators are outstanding and, as a result, has led to the footage being shown on the BBC. Look-

ing forward, I'll be using the kit on other, up and coming projects too."

Interchangeable Lens

Another feature of the illuminators which proved invaluable was Vario2's interchangeable lens, available on all variants as standard. This allowed the client to modify the beam angle of the illuminators to best suit each scenario.

The unpredictable nature of filming wild animals meant the flexibility of being able to change the angle of illumination, in just a matter of seconds, was imperative to obtaining the best images, whatever the beavers' position and distance from the camera was. The result was high quality, even illumination of the target areas throughout the project.

In summary, Vario2 allowed the client to achieve outstanding results, and the quality of illumination was crucial in the footage being selected for use by the BBC. Vario2 provided the perfect solution in capturing every detail of a very lively pair of workers.

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Al Video Analysis for Police and Security Authorities

At the GPEC 2020 trade fair in Frankfurt from 18 to 20 February 2020, Dallmeier, the German manufacturer of video information technology, will show visitors how they can implement future-proof



video analysis applications in Hall 11 at Booth E068. A lecture by Dallmeier Safe City expert Frank Salder at the "Video Intelligence 2020" conference on February 18 complements the trade fair presence. The automatic or semi-automatic analysis of data plays an increasingly important role in video security technology nowadays. The possibilities range from crowd analysis to count people in public spaces to the securing of sterile areas with the help of AI-based object classification. The company's AI-based systems support emergency services by means of an intelligent pre-selection of events, people counting, automatic object tracking or forensic evaluation, all in absolute compliance with data protection regulations such as GDPR. www.dallmeier.com

Hikvision Securing Safety Deposit Boxes

De Nederlandse Kluis, a provider of professional safe deposit boxes in the Netherlands, recently upgraded its security system using a Hikvision solution. De Nederlandse Kluis needed to back up video recordings



from cameras in locations all over the Netherlands in a central datacenter. The locations needed to be able to see each other's feeds. There was also the question of being able to see in a vault after another security measure filled it with smoke. The solution comprised 720 Hikvision cameras of various resolutions. These are installed at 32 locations around the Netherlands, each with its own Embedded 4K NVR (DS-7716NI-K4). The security in each of the vaults has been increased with a bi-spectrum thermal camera, which can pick up thermal signatures and detect people. A central Hikvision Hybrid SAN storage server (DS-A82024D) was installed, boasting a 64-bit multi-core processor and 24 HDDs. The solution was completed with a Hikcentral video management system to bring all of the elements together.

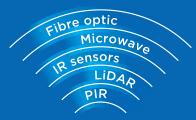
www.hikvision.com



Empty threats waste time and missed threats could have disastrous consequences.

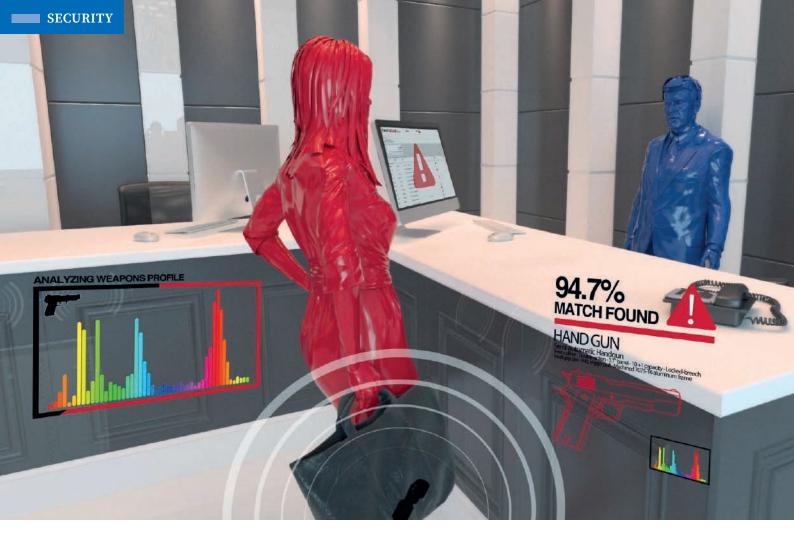
For enhanced security, it makes sense to bring the power of two technologies together. Our intelligent sensors can detect without being influenced by light or weather conditions and integrate with video systems to provide visual verification. Because vision can't do it all, it makes sense to have sensor-led visual verification.

For more information visit www.optex-europe.com



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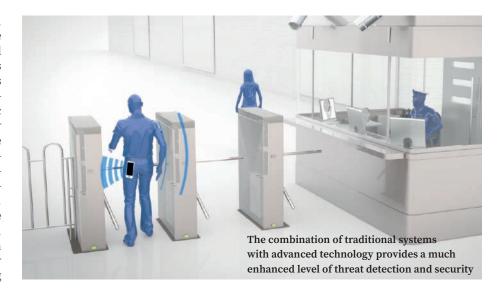
THREAT DETECTION

Discreet Detection

Protecting Soft Targets Using Al-Based Technology

Gun violence continues to be a serious issue across the US. With 24 mass shootings recorded already in 2020 alone, protecting vulnerable soft targets such as educational institutions, houses of worship, retail stores, office buildings, and music/event venues continues to remain a key priority for law enforcement across the country.

n order to best protect the public, those in charge of safeguarding these locations must begin to think beyond traditional security systems. This means looking for and implementing solutions that capitalize on the benefits of technology to enhance existing security. Eric Plummer, Associate Vice President for Public Safety and Chief of Police at the University of North Dakota (UND), considers incorporating advanced technology into security systems highly important, and explains his reasoning below. Institutions are beginning to embrace this approach and adopt new solutions, for example, at the University of North Dakota where cutting-edge, multi-sensor threat detection technologies are being





tested to detect concealed weapons. In UND's case, this includes Patriot One technologies.

The university is a public education and research university located in Grand Forks, North Dakota. It was established in 1883 by the Dakota Territorial Assembly and is the state's oldest institution of higher education. It is home to several high-profile programs and national research institutions, including a School of Aerospace Sciences, the Energy and Environmental Research Center, the School of Medicine and Health Sciences, and the USDA Human Nutrition Research Center. UND also has several large athletic facilities which are used as special event and concert venues, drawing thousands of visitors from across the region.

Time Critical

With the increase of international and domestic threats to soft target locations such as schools and universities, government facilities and event and sports venues, protecting these sites is becoming an increasingly urgent challenge. As

threats evolve and become harder to detect, it's essential to work with new technologies to minimize threats and protect communities. In the event of a critical incident, every second counts, and the ability to quickly respond to and stabilize the incident is crucial.

At UND, integrating technology to work with existing security systems allows the university to defend against and deter potential incidents of violence. It had worked with other vendors in integrating security systems, but some of these partners did not meet expectations, either with integrating legacy systems or addressing privacy concerns from the community.

Triple Benefits

Interest rose in Patriot One because of its artificial-intelligence (AI) driven platform approach to physical security, and its philosophy of incorporating people, policy, and platform within the security concept. Taken as a whole, this approach combines human expertise and skills, contemporary technology and fundamental policies that initiate appropriate responses to quickly and accurately detect threats.

Deployment of the Patscan Multi-Sensor Covert Threat Detection Platform at UND is still in the early stages, but it has already seen overwhelming support for the technology from students, the faculty, and staff. It's widely recognized that this technology will assist in keeping UND a safe place to live, learn, work, and visit.

CONTACT

Patriot One Technologies
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PERIMETER FENCING

Security, Quickly

Gallagher Fence Safe-E Rapid Deployment Fencing Can Provide One Intelligent Layer of Security Around Temporary Sites

The evolving methods of terrorists, organized crime and opportunistic intruders have led to leaps in perimeter security technology, but the age-old principles still apply. Whether it's an ABC or Triple D approach, remember the basics, argues Richard Huison, general manager of Gallagher Security Europe.

he emergence of the vehicle as a weapon (VAW) as a deadly terrorist attack method has led high-security site operators to consider hostile vehicle mitigation measures to avert against vehicle-borne attacks. The obvious preference is to send all traffic through a single funnel. But customer experience and staff ease may demand a multi-funnel solution with its consequent challenge of cost, staff and risk management.

Site operators are therefore looking to harden their perimeter security with automatic bollards, barriers or turnstiles, speed gates and automatic number plate recognition systems. This ensures that only authorized personnel are on site. Cameras may also help at the perimeter, and an increasing use of drone technology and sophisticated object-recognition motion-detection algorithms to identify suspicious behaviors and send alerts to security guards can be noticed.

Appropriate for the Job

Sadly, VAW isn't the only threat. As the Manchester Arena bombing at an Ariana

Grande concert in May 2017 illustrated, events where thousands of fans gather, all with their smart phones, and lots of international media present, represent a ,terrorist playground' where global publicity for their cause can be gained. Here, permanent installations may be neither appropriate nor effective in protecting high-value temporary works. Precisely to offer a solution to this threat, especially around the highest risk or most vulnerable sites, we've introduced a zero ground strike temporary host and PID fencing system with CLD Fencing Systems.

The Fence Safe-E rapid deployment system offers the classic three-fold perimeter protection of Defend, Detect and Deter in a viable temporary solution. While a physical fence provides defense and deterrent, it offers no detection. Video with complex analytics is great at detecting but doesn't provide any deterrent. The Fence Safe-E, with Gallagher's monitored pulse fencing (MPF), offers all three Ds in one solution. Even without delivering a shock on attack, an intruder's

mindset on seeing the MPF, with warning signs that are required by law every 10m, is to avoid an attempt at breaking in.

Whatever physical and electronic solutions you opt for – from physical perimeter fencing and MPFs, gates, barriers, bollards and blockers, electronics such as PIDs, CCTV, video analytics, access control and even biometrics and mobile credentials – it is best to link them via a single control hub like our Command Center. It can receive and control, then analyze and report on threats, attacks and exceptions, sending bespoke images or instructions to mobile security patrols to achieve the smartest and most efficient perimeter protection.

Conduct the Usual Security Risk Assessment

Personally, I favor what's often referred to as the ABC model here. This considers the Area, Boundary and Contents. I recommend an increasing level of security the closer an intruder is to the most critical and sensitive assets. The perimeter serves as the first ,cordon of security'



Gallagher's Fence Safe-E builds Defense, Detection and Deterrence into one solution



The Command Center receives and controls, then analyzes and reports on threats, attacks and exceptions, sending bespoke images or instructions to mobile security patrols

in these successive levels of protection, though some now argue that, given the increasing power and definition of radar and CCTV, you could even establish security layers outside of the perimeter.

This principle was perfectly, but tragically illustrated by the story of former England one-day cricket captain Adam Hollioake, who remained in the International Cricket Stadium in Kabul, where he was working as a coach, while a bomb blast killed at least three people. Hollioake explained their protocol included three stages of security. Attackers had to breach the first stage, which was 100m from the ground, then the second, roughly 50m from the stadium, and finally only 15m away. In this episode, the man involved was caught at the first checkpoint and, on being apprehended, detonated his device and killed at least three of the security team and members of the public. So, I design from the perimeter inwards towards the center, taking each successive boundary as an opportunity to harden the security to thwart an intruder and enable security personnel to respond to any attempted security breach.

The Physical and the Virtual Threats

And remember that perimeter protection isn't simply about securing infrastructure or data. Done well, it should be about appropriate risk management against both cyber and terrorist attack as well as more traditional threats and, in turn, actually realize an opportunity for the host business to improve customer service, increase business efficiency and reduce

costs. People, first and foremost, should be at the heart of the process in terms of the safety and security of premises and resources and also when it comes to planning and decision-making on appropriate protection measures.

For instance, the impact of any infection at a London desalination plant that produces 150 million liters of water per day would make the death toll at 9/11 appear totally insignificant. The next key point of potential vulnerability is at building access points. Too many facilities are still using standard key fobs and access cards as their electronic access control solution. Sure, there are cutting edge and somewhat costly solutions that use thumb prints or retina scans to track staff or visitors while on site.

Trusted Identity

Alternatively, you could consider upgrading to a solution that uses a mobile app for access control. After all, people very rarely lose their mobile phones - and they dare not even put them down any more. Such a system can set in motion an arsenal of recording and monitoring systems that are controlled and tracked by security managers. This is one of a number of ,trusted identities' that I see increasingly in healthcare, government and finance and other sectors with a strong focus on regulatory compliance. Other ,smart device' options include embedded chips and wearables. Critical national infrastructure may even benefit from biometrics to restrict access both to physical areas and to intellectual property.

Such systems recognize authorized personnel's unique ,print' – such as their fingerprint, facial characteristics, voice or iris – to verify them, sometimes combined with another form of identification for double security. And AI technology such as Light Detecting and Ranging (LiDAR) potentially offers some ideas for improving security and safety in the future. It uses the pulse from a laser to collect measurements to create 3D models and maps of objects and environments.

Richard Huison is general manager of Gallagher Security (Europe), whose customers include a wide selection of major European utilities companies. The



largest is in the UK, which is also their biggest client worldwide for perimeter protection, covering 700 sites through different channel partners via the Gallagher Command Center at two Alarm Receiving Centers.

CONTACT

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www.gallagher.com

Second International VdS Fire Protection Systems Conference in Bucharest

On April 29th, 2020, the second international VdS-conference on fire protection systems will take place in Bucharest, Romania. International experts from industry and fire protection organizations will present an overview



of current technology and developments as well as numerous solutions based on practical experience. The conference will be held in cooperation with ROFMA, the Romanian Facility Management Association with an accompanying exhibition. The conference will offer an exciting information forum for planners, installers and operators of fire protection systems, as well as for fire protection engineers, fire safety officers, loss prevention experts from the insurance industry, fire brigades and authorities. Among the topics of the VdS-conference are sprinkler systems, case studies of sawmills and an underground mass transport system as well as the challenges posed by architecture and users' requirements. Conference languages are Romanian and English with simultaneous translation.

Innovations at the Light + Building Trade Fair

Uhlmann & Zacher will be represented at the newly-created Intersec Building platform as part of the Light + Building trade fair taking place from 8–13 March 2020 at the Frankfurt Messe. Innovations in networked safety technology are showcased at the trade fair to ensure that modern building structures are still protected against



undesirable access by third parties. U & Z provide a modern and innovative access solution enabling the company's electronic locking units to be opened with a smartphone via Bluetooth. Applying Blockchain technology, the locking units are not dependent on a central server but instead decentralized networks ensure the transparent transmission of digital keys while maintaining the highest security standards. The team on site is looking forward to your visit at booth B48. **www.UundZ.de**

Traka integrates with Maxxess eFusion Platform

Traka has integrated with Maxxess' award-winning security management software, eFusion, to present users with a powerful route to achieving operational efficiencies across a wide range of systems and functions. Traka in conjunction with Maxxess Systems, has developed a seamless integration with Maxxess' eFusion open platform, to allow complete site control, centralize site visibility and present real-time monitoring, ensuring situational awareness for all assets, safely and securely. eFusion with Traka makes it simple for authorized staff to gain access to a wide range of controlled assets, from keys and premises to high value equipment, vehicles and machinery. The new integration enables full traceability and audit reports that can include video and audio recordings, as well as transactional data from systems such as access control, intruder, HR and fire.

Real-time Access Management And Device Aesthetics Make Aperio and The Camp a Perfect Fit

Aperio has provided locking devices tailored to interior and exterior doors at The Camp, where 221 Aperio Wireless Escutcheons, 42 Aperio Wireless Cylinders and 10 Aperio Wireless Handles have been



integrated within a TIL Technologies security system. As a provider of future-oriented business education, The Camp sought a forward-thinking access control solution at their campus site near Aix-en-Provence. The diverse site with offices, event spaces, kitchens and two accommodation blocks totaling 170 units remains open around the clock, all week, while maintaining security for staff and visitors. Integrated online with the central system and controlled from the same interface, the Aperio devices effortlessly handle daily staff traffic of around 250 people. Meeting rooms, server rooms, living spaces and kitchens are secured with Aperio wireless locks.

www.assaabloy.com

Central Security Management Solution

Traka has developed a seamless integration with Maxxess Systems Efusion open platform, to allow complete site control, centralize site visibility and present real-time monitoring, ensuring situational awareness for all assets, safely and securely. This integration makes it simple for authorized staff to gain access to a wide range of controlled



assets, from keys and premises to high value equipment, vehicles and machinery. It enables full traceability and audit reports that can include video and audio recordings, as well as transactional data from systems such as access control, intruder, HR and fire. The integration brings together intelligent key and equipment management systems with flexible cloud architecture, developing a solution that will not only benefit major new build projects, but also open new opportunities for existing users. www.traka.com

Cameras with Essential Onboard Analytics

Idis has launched its Edge VA bullet and dome cameras, featuring onboard analytics, that may assist the efficiency of security operations in retail, banking and busy commercial settings. The new cameras, unveiled at Intersec in Dubai build on the company's Instant Meta



Filtering, allowing users to easily access and search large volumes of video data using the cost and license-free Idis Center VMS. This can speed up investigations from days and hours to minutes. The full toolkit of Edge VA functionality includes line cross, loitering and object detection as well as audio detection, active-tampering, trip zones, and alarm in capability. The new domes include full HD IR domes (DC-D6233RX), full HD flush IR domes (DC-D6233FRX), full HD vandal-resistant IR domes (DC-D6233HRX and DC-6243HRX), and the Lightmaster full HD IR dome (DC-D6233HRXL). All deliver full HD (1080p) resolution, two way audio, and Smart Failover protection against loss of data. www.idisglobal.com

GIT SAFETY INNER COVER

Personal Protective Equipment with Style

from page 50





The silicone-free Garant cut resistant, PWIS conform gloves, tested by the Fraunhofer Institut, Stuttgart

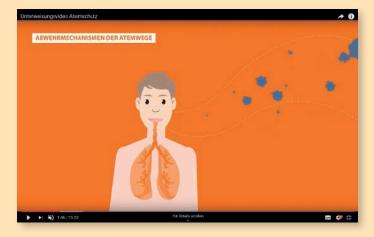
There are numerous special and niche suppliers on the market for Personal Protective Equipment (PPE). This makes procurement timeconsuming and expensive.

In addition, there is a flood of legal requirements, a growing number of products on offer and increasing demands from the employees. In view of these developments, the Hoffmann Group, a system partner for quality tools, workstations and storage, has set itself

PERSONAL PROTECTION

Protecting Employees Means Protection of Investment

High Quality and Manufacturer-independent Professional Advice for Personal Protective Equipment





ver the last few years, Personal Protective Equipment (PPE) has enjoyed a real boom in demand. The good economic situation, new legal requirements and increasing demands from the companies themselves have contributed to this. Now it is no longer a question of protecting employees. PPE should also foster motivation and identification with the company. As a result, the range of products on offer has changed. Christoph Hörmann, responsible for PPE at the Hoffmann Group explains: "Design and being comfortable to wear are gaining in importance. As the PPE market is very fragmented and the range of products on offer is growing, it's becoming more difficult and time consuming to select and procure products. We reacted to this trend and extended our assortment to a full range of products roughly two years ago, to be able to provide everything from a single source."

Finding a Way Through the Jungle of Offers

The Hoffmann Group made a careful selection when designing the new product range. The result: approximately 6,500 products from 60 leading manufacturers, who cover all protective areas from head to toe, from protective helmets, to work clothing and work shoes. To help customers not only select the right product but also how or where to use PPE, the Hoffmann Group has also set up a professional consultant team. "Roughly a year before we entered the market we started to recruit 80 consultants," Hörmann explained. "High quality and manufacturer-independent professional advice plays a key role in all areas of our business and is regularly used by our customers."

At the Hoffmann Group, there is actually not only the traditional field sales



The Gatant Tool24 goods issuing systems can supply PPE around the clock

representative who covers the complete range and is constantly in contact with the customer. There are also specialists on hand with lots of experience in their respective field: technical engineers to answer any questions about using tools, workstation and storage consultants and now also PPE consultants. Initial support is provided by field sales. If a customer has a particular problem, the PPE consultant comes into play, providing cross-manufacturer support when selecting products and is a competent advisor when drawing up risk analyses and protection plans. In addition, he helps determine suitable clothing and shoe sizes, accompanies clothing tests and trains the employees on site.

Boosting Motivation and Employees' Identification

Asked about the role of PPE in companies, Christoph Hörmann explains: "A high proportion of industrial companies today no longer regard PPE as a necessary evil and cost factor within C-item procurement to comply with legal regulations. Rather, PPE is seen as a valuable investment in employees. New materials for cut-resistant gloves, for example, are flexible, and free from steel and fibreglass. This means that they cause less skin irritation and the hands don't tire as quickly. The employees can thus work more productively, and also appreciate the extra wearing comfort." Visually appealing and comfortable to wear PPE also improves



Breathing protection: http://ho7.eu/breathingprotection-video
Hearing protection: http://ho7.eu/hearingprotection-video

Unterwesungsvideo Gehörschutz

with their duty to brief their employees

Ansell Reaffirms Commitment to Customers at A+A

In keeping with its status as the largest international trade forum for occupational safety, security, and health at work, the recent A+A Congress in Düsseldorf in November was an exhilarating mix of product innovation, revealing glimpses into the future, and a celebration of excellence. Ansell's presence focused on innovation and was an opportunity to reaffirm Ansell's commitment to its customers and the industry as a whole. The awareness of its responsibilities was characterized in its umbrella tagline: "Your SAFETY. Our priority." This commitment was clear in the showcasing of four new high-performance gloves: Alpha Tec 53-001 provides advanced chemical protection against solvents, acids and hydrocarbons; the Microflex glove is a disposable chemical protection glove with three layers against ketones; the Bio Clean S-BCRL gives cut protection when handling sharp objects or cleaning apparatus and the much anticipated Hyflex 11-561 was also launched. www.ansell.com



Video Support Portal Launched

Tyco, the security brand of Johnson Controls, has launched a new video support portal at support.americandynamics.net, which offers a comprehensive and easy to use one-stop resource for installers, system integrators and distributors who may require technical support for American Dynamics and Illustra video solutions. Visitors to the site are able to raise a support ticket for any product under warranty or use a Live Chat facility to instantly connect with a member of the video technical support team based at Tyco's Centre of Excellence in Belfast. They are also able to participate in a Tyco video Q&A forum which provides the opportunity to share information with other customers, as well as register to receive regular product updates. An easy to navigate technical library provides a wide range of support material, such as installation and user guides, knowledge articles, 'how-to' guides and technical advisory bulletins.

www.johnsoncontrols.com

wearer acceptance, so that employees implement safety regulations more consistently. If employees also feel comfortable in their PPE and enjoy wearing it, then their sense of belonging to the company increases. Consequently, well-chosen PPE also promotes employee loyalty and raises employer attractiveness. In times of a shortage of skilled workers, these aspects should not be underestimated. "Protecting employees means protecting your investment," Hörmann summarises.

Own Brand with Premium Standards

To meet the demands on PPE, the Hoffmann Group is also continuously developing its own Garant brand. The aim is, in the medium to long term, to be able to offer Garant products for the complete range. The requirements are high: Garant products must stand out from other products, either in design or by the product characteristics. Therefore, the brand is distinguished by premium quality, functionality and attractive design: 44 design awards speak for this. "Our new Garant multi-purpose gloves are not only truly silicone-free, but also produced in a silicone-free environment - hardly any other manufacturer can offer this," explains Hörmann. "We have had our gloves tested by the Fraunhofer Institute in Stuttgart for paint-wetting impairment substances (PWIS) in accordance with the VDMA 24364 standard sheet. PWIS compliance has now been confirmed. This means that the gloves leave neither fingerprints nor other traces on sensitive surfaces and are pre-destined for use in the automotive industry and paint shops."

Support for Any Size of Customer

The Hoffmann Group has designed its new PPE services for any size of company. These companies have two things in common: the need for specialist advice and the desire to reduce their procurement costs. Small and medium-sized companies often need more advice as they do not have the time to keep up with the latest technical standards and be aware of all the new regulations. For larger companies, on the other hand, the advice is more complex. According to Hörmann, it is often also a question of creating cross-location concepts to standardize PPE and streamline ordering and procurement processes. "We develop cross-location and cross-national product and procurement concepts for our customers throughout Europe, helping them to save costs," says Hörmann. "We also create electronic catalogues for them which they can integrate into their eProcurement system and in which only the PPE approved by them is displayed. In our online shop, customers can also hide any other PPE products for their employees." With these measures, the Hoffmann Group significantly increases security for customers procuring PPE. When the Hoffmann Group receives an order, over 99 percent of the goods are readily available and are delivered within 24 hours within Germany. In Europe, the regular delivery time is less than 48 hours.

Automated PPE Procurement

In companies that want to provide their employees with simple and secure access to PPE around the clock, the Hoffmann Group is also installing goods issuing machines from the Garant Tool24 product family. With these systems, the procurement process can be partially or fully automated. At the same time, customers always have an overview of their consumption, because employees must log on to the system before a door opens and they can remove a product. As soon as the stock falls below a minimum level, the machine sends a message to the purchasing department or an order directly to the supplier. MAN Energy Solutions in Zurich has completely automated their ordering process in this way and shortened the procurement process from 5 to 8 days to 1 to 2 days. As a result, PPE is always available and process costs have been significantly reduced.

Summary

PPE procurement is becoming more and more complex. It has ceased to be just a matter of safety regulations for a long time now. As well as the continuing shortage of skilled workers, issues relating to wearing comfort and employee loyalty are coming to the fore. Valuable assistance in the jungle of offers can be provided by a system partner who offers PPE products and advice from a single source, who is familiar with modern procurement solutions and ideally also understands something about ergonomic workplace concepts. The average age of the workforce is rising in most companies, and measures to protect and keep employees healthy are thus becoming a means of protecting productivity.



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Risk Assessment

Machinery Safety Risk Assessment

The topic of safety of machinery, also known as "safety", addresses the protection of people against machines. Specifically, against potential hazards posed by the operation of machines. The requirements for a machinery safety risk assessment are described in the EC Machinery Directive. According to the directive, a risk assessment begins with the design of the machine. Manufacturers have an obligation to consider both further findings gained during manufacturing and field information from past projects.

As a first step, the limits of the machine must be identified. The limits of the machine are not only determined by its weight, dimensions, and materials used, but in particular by the persons present in the surroundings of the machine. The surroundings are not only relevant during normal operation, but also when maintenance work is being carried out; different hazard potentials have to be considered. Additionally, the users' personal training, experience, and skills have to be taken into account. The second step is to identify hazards posed by the machine. Then, the hazards are evaluated using certain factors. This is helpful for users when deciding whether risk reduction measures are required. Finally, necessary protective measures are defined. Useful guidance can be found in EN ISO 12100.

To ensure a structured risk assessment procedure, using a detailed list in tabular form is recommended. The risk assessment is used by the machine manufacturer as legal proof that the requirements of the Machinery Directive have been

met. The risk assessment ends when the machine is implemented, that is, built.

Risk Analysis for Industrial Security

The term "security" describes the protection of machines against unauthorized access by people. Machine manufacturers are under no legal obligation to carry out such a risk analysis. Exceptions may contractually be agreed on with the operator.

Any risk analysis begins with the development of the automation concept. The risk analysis must be continuously verified because the threat situation and the effectiveness of the implemented measures are constantly changing. The IEC 62443 standard is a helpful document for those carrying out a risk analysis.

First of all, a threat analysis is performed. It is done to identify relevant threats in the industrial environment. The BSI (German Federal Office for Information Security) provides a document called "Industrial Control System Security – Top 10 Threats and Countermeasures", which may serve as a useful template. The risk

assessment is used to estimate possible effects and damage caused by the identified threats as well as their probability of occurrence. The probability of occurrence is calculated from various individual parameters and pieces of context information, such as the complexity of the possible attack or the access rights of the potential attacker. From a business perspective, there are several different options for handling the identified risks: risk avoidance, risk reduction, risk transfer, and risk acceptance.

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GIT SECURITY: Mr. Salmon, you have been Ansell's President of the Industrial Global Business Unit (IGBU) since April 2019. What does this involve within Ansell's Company structure?

Neil Salmon: As President of the Industrial Global Business Unit at Ansell I'm responsible for the worldwide Mechanical and Chemical Protection product portfolios sold under our core Industrial brands such as Hyflex, Alphatec, Activarmr, and Ringers.

With 1.4 billion US\$ of sales, 13,000 employees and ten R&D Innovation Centers worldwide, Ansell is definitely a heavy-weight in the industry. What are the key factors that make Ansell stand out from your competitors in the field of hand and body protection?

Neil Salmon: In more than 100 countries around the globe, Ansell stands for safety. For the past 125+ years, Ansell has evolved from an Australian rubber manufacturer to an advanced hand and body protection solutions provider. Our category expertise, innovative products and advanced technologies give millions of people peace of mind and confidence at work, at home and in harm's way.

As a company, Ansell's mission is to provide innovative safety solutions in a

trustworthy and reliable manner – creating an 'Ansell protected' world. With a truly global presence, the company continues to grow through new-product development, acquisitions and the expansion of the company's footprint in emerging markets. The products and services within the Ansell brand umbrella enable our customers to perform better and be more productive. This has earned Ansell respect as well as a track record of impressive growth.

In addition to products and services, Ansell believes that safety goes hand-inhand (no pun intended) with regulatory compliance. For example, our part in the adoption and sustainable compliance to PPE legislation, implemented through Regulation EU 2016/425, which came into force last year, provided our customers with timely information as implementation approached via our #TrustAnsell campaign. Ansell's leadership, preparedness, and drive to find solutions that fit the industry are designed to fundamentally improve the market for all affected by this vital legislation, whether they are a manufacturer, distributor or end-user. As the company continues to evolve with first-to-market innovations across a wide range of protection solutions, we remain committed to enabling the safety, wellbeing and peace of mind of workers in an Ansell protected world.

Ansell had quite a large booth at last year's A+A in Düsseldorf. You presented quite a number of new products there. What was it that visitors were interested in the most?

Neil Salmon: For years, A+A has been the perfect opportunity for Ansell to showcase our innovative safety solutions, as well as to meet our customers, make new contacts and assess the trends in our sector. We are continuously investing in the research and development of new materials, products and services, improving worker safety and efficiency. This forum serves as a reminder of our commitment and responsibilities and what the industry expects of us.

Ansell is acknowledged as a global leader in protection solutions and an authority on the certification of regulated products. The Company works with global regulatory bodies trying to ensure PPE standards continue improving in defining minimum protection requirements for workers globally and playing a leading role in both formulating legislation and in defining the industry's response. On the product side, two particular stand-outs at the booth were new chemical protection gloves providing exceptional comfort and protection against solvents, acids and hydro-carbons, and our range of impact protec-

tion solutions with the newly acquired Ringers portfolio.

Let's enlarge upon hand protection a bit. Which industries are strategically the most important for Ansell's business in this field?

Neil Salmon: The most strategically important industries for Ansell's Industrial division are automotive, chemical, first responders, food processing, machinery and equipment, metal fabrication and oil and gas. The industrial products supplied to these industries are mechanical gloves and sleeves, chemical hand protection, chemical body protection and disposable gloves.

There have been quite a lot of innovations regarding materials and designs. What are the most important developments from an Ansell point of view?

Neil Salmon: Our investment in innovation and partnership with our customers to meet their unique needs means we are at the cutting edge of developing new products and solutions, enabling better protection and performance. We invest millions of dollars each year in research and development in the PPE industry to bring new innovative protection solutions to market.

Our material science capabilities allow us to satisfy protection needs with products that are comfortable to use and improve worker productivity. Many of these capabilities are patent protected. Our commitment to maintaining optimum comfort and dexterity means many products are unique in their field in having ergonomic certification. We also lead our industry in providing high cut protection using lightweight yarns. Ansell is constantly striving to provide our clients with unprecedented protection and comfort, from the expansion of our proprietary Intercept Cut Resistance Technology to increasingly higher ISO and ANSI cut levels, to maximizing protection while also reducing the risk of skin irritation and allergic reactions.

Smart PPE is an important topic for the entire industry. How does this affect hand protection?

Neil Salmon: The annual cost to businesses of lost-time workplace injuries is greater than the gross domestic product (GDP) of 91 countries, according to data from the World Monetary Fund. This statistic among others has leaders in the safety industry tapping into another resource to take worker safety to the next level: the workers themselves – connect-

ing smart PPE to a platform focused on producing real-time data to and from workers on key safety categories like PPE management, risk management, safety communications and worker engagement.

The opportunity exists to leverage technology to develop smart and ergonomic hand safety solutions that are engineered to address the most common workplace safety frustrations. Smart PPE allows companies a cutting-edge view through neverbefore-seen data and actionable insights on safety, creating greater efficiency, flexibility and quality. This will allow for the creation of innovative protection solutions, offering real-time data collection capabilities for precise and immediate information in addition to meeting practical everyday worker concerns and enabling compliance to safety recommendations.

Green industry, sustainability, etc. have been discussed ever more frequently over the last decade, and they are obviously getting more and more important. In what way has this changed the way you develop hand protection products?

Neil Salmon: At Ansell, we continue our journey towards becoming an ecofriendlier company by improving our environmental management standards and minimizing our carbon footprint. In our commitment to reduce climate impact, we are establishing achievable, multi-year reduction targets for GHG emissions, water, energy and waste. Adopting the pillars of human rights, community, environment and governance has brought significant progress on our sustainability journey. We will continue to invest our resources to create positive transformational change within Ansell, building sustainability into our business strategy and in the way we engage our stakeholders, which include our employees, customers, suppliers and communities. This engagement, especially with our distributor partners and customers, allows for full transparency and creates a trusted bond because we listen, understand and collaborate.

We are committed to creating positive transformational changes in human rights, community, environment and governance at Ansell, even as our business continues to grow. The Company has been actively working in these areas for many years on innovative strategies to consume less energy, water and space per unit of output, support the communities we live and work in, and ensure



Ansell's products help in the adoption of and sustainable compliance to PPE legislation, implemented through Regulation EU 2016/425

ethical behavior and a safety culture that is foremost in our minds for our diverse workforce. We are embracing change without losing the values that have made us a great company for over 125 years.

You have also created a 5 Point Safety Charter, and an Environmental Policy ...?

Neil Salmon: In accordance with global human rights, labor standards, country law and Ansell values, we support and respect the rights of our employees and communities in the 55 countries in which we operate. We continuously strive to maintain world-class occupational safety and health performance, keeping our coworkers safe on the job, whether that means a manufacturing facility in Malaysia, an office in Belgium, or a warehouse in the United States. As a safety company, we particularly want to take care of the people who take care of us - from our valued coworkers to stakeholders in our supply chain; from our customers to the communities in which we operate. Ansell is committed to protecting the environment and minimizing any impact of our operations on the environment by adopting sound environmental practices in all our activities, products and services.

Mr. Salmon, in November, Ansell joined forces with Pro Glove. Could you tell us a bit about the content, purpose and aims of this cooperation? Are there already concrete projects running?



The mechanical and chemical protection products are on the market under industrial brandnames such as Hyflex, Alphatec, Activarmr, and Ringers

Neil Salmon: Pro Glove and Ansell's partnership began as we identified a common belief: the importance of putting the worker at the center of the Industrial Internet of Things (IIOT). Even the most advanced companies in the use of automation and data analytics in manufacturing recognize that the worker will remain at the heart of manufacturing for as far ahead as anyone can see. However much of the focus on the IIoT is exclusively in the digital realm and forgets the requirements of workers. So we have to keep workers productive and safe in a digitally-enabled manufacturing environment.

Pro Glove, since its foundation, has pioneered smart wearable devices that allow a worker to interface with the digital world more efficiently and effectively. Ansell and Pro Glove in collaboration are looking to extend this approach to safety management and PPE. In the current phase of our development work, we are working with a

number of major global manufacturers to confirm the most important areas in which such an approach can create value to workers, safety managers and manufacturing operations.

> Long-standing customer frustrations, such as ensuring workers are wearing the right PPE at

> > all times, that workers are getting the proper life out of PPE, and that workers have real-time information on their risks and protection needs, are all areas in which Pro Glove and Ansell are generating breakthrough solutions.

Working with customers will allow us to refine our approach.

Are you planning further mergers and acquisitions regarding PPE?

Neil Salmon: Ansell takes a very strategic approach to acquisitions. Any acquisition represents a strategic move to drive Ansell forward in fulfilling our growth strategy in target industry verticals and is consistent with Ansell's strategy of creating additional shareholder value by exploring inorganic growth opportunities. We are always working on our M&A strategy and opportunities that arise. Success with any individual transaction requires us being confident it fits with our disciplined strategic and financial criteria that have served us well over many years.

What will be important in 2020 regarding Ansell's corporate strategy?

Neil Salmon: Our business priorities always include a strong focus on new product development, continually growing our emerging market footprint, strengthening our brand position and building stronger and deeper partnerships with our key distribution and end user partners.

Of particular focus in 2020 will be our Smart PPE strategy discussed earlier, continuing to show progress against our sustainability goals and further enhancing our communication

> with customers on this topic and improving service and quality metrics to ensure Ansell is the leading company globally on

> > Ansell's products are used in the automotive, chemical, first responder, food processing, machinery and equipment industries as well as in metal fabrication and the oil and gas industries

these criteria as well as in product performance.

Within our mechanical portfolio we expect continued success with our cut and general-purpose ranges and also see significant growth opportunity from the Ringers acquisition as we integrate this business and allow all of Ansell's global sellers to bring the impact range to their customers.

Within our chemical protection offering we are introducing new multi-risk protection solutions in a single product, while also providing industry leading support to customers on understanding the chemical risks their workers face and the right solutions to protect against these.

Finally, we are seeing great results with our digital strategy and expect this to continue as a major focus in 2020. Both improving our ability to help our distributor partners roll out their own digital approaches, while also improving Ansell's presence through online channels.

What is Ansell's research & development currently working at? Can you give us a sneak preview of 2020?

Neil Salmon: Ansell has created and patented several break-through foundational technologies, making our hand and body protection solutions more comfortable, more durable and more versatile, combining the attributes of what would traditionally be a multitude of different PPE solutions into a single product. Our R&D focus will continue to be on rolling out this approach into a range of product solutions providing multi-risk protection in a form that is also convenient for a worker to wear and use in a digitally enabled work place.

All this development is supported by Ansell Guardian, our proprietary service to help companies select the right Personal Protective Equipment solution and to improve their safety and business performance. We conduct thousands of Ansell Guardian audits with end users to listen to their needs, wants, and pain points and then define the optimal offering to reduce injuries and interruptions to customer workflow. This vital first-hand information is then passed back to our R&D teams to help shape future product innovation and technologies.

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Where Wireless Access Control Is Making a Difference in Universities

Universities push traditional access control to its limits and want to monitor access all over campus, to know who comes and goes to computer rooms and classrooms. They also like to filter access to conference and seminar rooms according to the time. Meanwhile, they want



students to be safe 24/7, without compromising the sense of freedom they enjoy on campus. Managing mechanical keys weighs facilities staff down, and they're expensive and laborious to replace. "Battery-powered electronic locks with inbuilt RFID readers are a cost-effective way to upgrade existing access control and bring it to more doors," says Lars Angelin, Business Development Manager for Wireless Locks at Assa Abloy Opening Solutions EMEA. "Our Aperio wireless locks integrate seamlessly with more than 100 different security systems with no need even to change the smart-cards. They fit all kinds of doors." www.assaabloyopeningsolutions.eu

Online Lock Customization Tool

Salto Systems has upgraded My Lock, the online lock configuration customization tool that allows users to choose and see potential door configurations prior to purchase. Users can select



a Salto electronic lock model, door type, select a color, finishes, handles, and functions. The new design has an improved user experience for web as well as mobile access and adds important new capabilities, including configuring accessory products such as wall readers. Salto Space access control management software and Salto KS Keys as a Service compatible product ranges are also included. Users can now make more than one configuration in a single My Lock session, which provides the capability to configure a variety of door models within a building. Once completed, the user can preview and download 3D and 2D files, including BIM files, in a variety of industry formats including Revit, STP, DWG, JPEG, PDF, and more.

www.saltosystems.com

Secure by Default Certification

Mobotix has been awarded 'Secure by Default' certification in the UK. The certification for the company's 7 platform includes the new M73 IP video system, launched at the Mobotix Global Partner Conference in October 2019, as well as the Mx6 product line. The approvals are based on the twelve guiding principles of the surveillance camera commissioner. The company is now globally enabled to use the official 'Secure by Default' logo. Self-certification allows manufacturers to demonstrate that their products meet the requirements to provide the best possible assurance for stakeholders that products aren't vulnerable to cyberattacks. Phillip Antoniou, Vice President Sales Europe South/West & MEAPAC of Mobotix underlines "We recognize the existing and increasing concerns and as such will be further developing our solutions and strategy to address this."

www.mobotix.com

LPR Technology



Grundig License plate capture cameras have built-in software to help identify and record license plates on still or moving vehicles. The

camera can be used as a standalone solution to open gates or barriers. Together with a Grundig NVR and VMS, the camera is perfectly integrated to manage car entrances and exits. Two models are available with different lens focal lengths: the GD-CI-AT2647T is a 2 Megapixel bullet IP camera with a 2.8–12mm motorized zoom lens, while the GD-CI-BT2647T has an 8–32mm motorized zoom lens.

www.grundig-security.com

Industrial Network Defense Solution



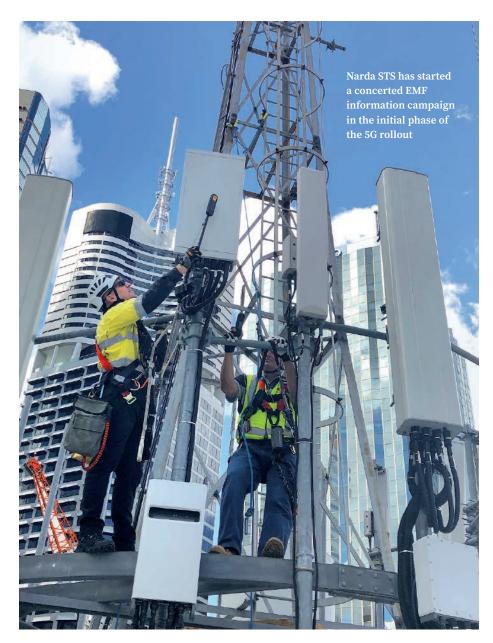
The industrial communications and networking specialist Moxa has introduced its Industrial Network Defense Solution that is specially designed to secure industrial networks from both an Operations Technology (OT) and Information

Technology (IT) perspective to better address the surging market demand for a comprehensive cybersecurity solution for industrial networks. The solution includes critical IT cybersecurity technolohgies such as an Intrusion Prevention System (IPS), a key component for defense-in-depth strategies, which has been specifically tailored to protect OT networks from cyber threats without disrupting industrial operations. It also includes an industrial IPS/IDS, Etherfire (industrial next-generation firewall), and MXsecurity (security management software), which provides protection of critical assets by blocking and containing Internet worms and minimizing the possibility of Trojan attacks through whitelisting and segmentation.

Affordable H.265 Camera Series

The three new Wisenet Q cameras recently introduced by Hanwha Techwin offer cost-effective, real-life practical solutions for a diverse range of applications. The QNP-6230RH 2 megapixel IR PTZ camera is designed for city centers, large public areas and a broad range of other outdoor video surveillance applications and has an IR viewable length of 100 meters. It is also equipped with gyro sensors for accurate image stabilization when disturbed by wind or vibrations. The QNF-8010 6 megapixel mini fisheye camera is just 99mm wide and 40% smaller than its





Narda Safety Test Solutions has begun a concerted EMF information campaign centered on the hot topic of 5G. The RF test and measurement specialist will supply industry stakeholders such as mobile network providers, test and measurement service providers or authorities with all the information they need about safety and measurement aspects of this new mobile technology standard. Users only need to subscribe to the Narda YouTube channel (5G in a Nutshell parts 1-4), or the NewsTicker on the website to stay updated.

PERSONAL SAFETY

EMF 5G Info Campaign

Narda STS Informs About 5th Generation New Radio EMF Measurement Requirements

Narda Instruments Are 5G Ready

Narda STS is already well situated for this new standard with their product portfolio for electromagnetic radiation measurements. Even in the rarified domain up to 88 GHz, which will become relevant only in future phases of 5G, the technology company is the only manufacturer that can actually provide suitable measuring equipment. For example, in the field of personal safety in EMF (electric, magnetic, and electromagnetic fields), the RadMan 2 (up to 60 GHz) and Nardalert S3 (up to 100 GHz) already cover the complete spectrum. The broadband meters in the NBM range for analyzing EMF limit values (Narda Broadband Field Meter, up to 90 GHz) are also 5G ready.

When it comes to selective measurements, the Narda Selective Radiation Meter SRM-3006 from 9 kHz to 6 GHz has long

been the established international reference device for rapid, standard-compliant and reliable safety assessments. This instrument initially records the actual traffic signals transmitted by the various mobile network providers using frequency and code selective techniques. Development work on an additional antenna that will significantly increase the frequency range of the SRM beyond the current upper limit of 6 GHz is proceeding rapidly at Narda right now. However the first roll-outs of 5G will be in the frequency bands below 6 GHz. Using information about the signal source, i.e. parameters that are transmitted within the signaling, the SRM can automatically and precisely extrapolate results to give the EMF values at maximum traffic load for mobile phone systems up to 4G. This procedure is now being also demanded for 5G by many legislations.

Looking for a Method with all Advantages of Extrapolation

In fact, the demodulation of the broadband signals for 5G is not the real challenge from the measurement point of view. Practically all the questions regarding the new standard have been answered. Extrapolation is theoretically possible for 5G, but this does not in itself represent the answer to the problem. Beamforming is the name of the problem that is giving developers a real headache at an international level. To achieve higher efficiency, the radio signals are focused or beamed in the direction of the receiver. Beamforming is viewed as a key technology and will be rolled out over wide areas for the first time in connection with 5G. The technical achievement of this method is its great potential to greatly improve the signal quality and energy efficiency of the standard. When linked with the large bandwidths, this then enables extremely high data rates to be achieved. So far, it has not been possible to find a functioning measurement method for 5G with all the advantages of extrapolation, so this is still under development. This topic is the subject of much discussion. By subscribing to Narda's YouTube channel and the NewsTicker, you can be one of the first to know about new developments, straight out of Pfullingen where the work is being done.

Authority Is Key

Narda STS develops measurement solutions for electromagnetic fields in close cooperation with the industry, authorities, and higher education. As the leader in EMF Safety, technology company Narda is the ideal source of information that is reliable enough to be the basis for many important future decisions in industry and commerce, particularly in this phase of the 5G rollout, which is likely to set the future course of technology in many important ways. That is why Narda engineers regularly contribute their in-depth knowledge to the scientific work of international standardization bodies, including the IEC (International Electrotechnical Commission), CENELEC (Comité Européen de Normalisation Électrotechnique) and the ITU (International Telecommunication Union). A team of highly specialized engineers holds regular discussions on the current technological status with the main players in the industry, thus playing an active part in shaping the legally binding technical rules and standards.

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Narda SRM-3006

Ideal Locking Solution for Server and Meeting Rooms

Code Handle from Assa Abloy is a low-profile, zero-hassle solution to boost security at critical doors around their offices. One of the UK's 5.7 million SMBs, Thirst, offers a comprehensive digital marketing service to some of Europe's most forward-thinking brands. At their UK head office, managers identified two doors that required an easy, low-cost security solution. Staff and visitors come and go all day, but not everyone should have access to the Thirst servers or private meeting suite. Code Handle electronic door locks with integrated PIN pads now



secure these two important interior office doors. Senior managers and qualified staff can access the IT room, and the main meeting room is also protected by the handle with PIN protection. Staff quickly lock and unlock these rooms without anyone keeping track of mechanical keys. Two standard batteries slot inside each Code Handle and typically last for 30,000 lock/unlock cycles before needing replacement. **assaabloyopeningsolutions.eu**

EN 54-Part 13 Approvals Obtained

Kentec Electronics has completed EN54-13 approvals for the Taktis product line, the company's most powerful and sophisticated analogue addressable fire panel. The approvals were completed by the LPCB (Loss Prevention Certification Board). Kevin Swann, managing director, says: "All those working within the fire sector will be familiar with the requirement for fire protection to be EN54 certified to the relevant standard. Almost all the standards in this series are related to individual product types and define the requirements and related tests for each component. EN54-13 is a rigorous, complete system test procedure that proves the compatibility of all the individual components and that they work together as a system."

www.kentec.co.uk

Public Address and Voice Evacuation Solution



The solution for the Shenzhen World Exhibition & Convention Center consists of twenty-seven Bosch Paviro systems, 425 hemi-directional loudspeakers, and over 9,000 other loudspeaker types, such as ceiling-mounted and column loudspeakers. The flexible system architecture and use of IP technology enables selective music and audio playback in different exhibition hall areas, while the system facilitates both building-specific audio signals and system-wide announcements. Bosch equipped the facility with an intrusion detection system and 1,000 detectors as protection against potential intruders. They had to implement this all-encompassing solution within just two months. An integrated hard- and software with intelligent energy management reduces energy consumption and the building's CO₂ footprint.

www.boschbuildingtechnologies.com

GIT SECURITY 1/2020 **59**

STANDARDS

Every Smoke is Different

Key Changes to the UL268 Standard

Standards across the world are constantly updated and changed and new fire detection products are manufactured and developed in line with these revised standards. Underwriters Laboratories (UL), is one of the world's largest developers of safety standards, and on 30th June 2021, significant new smoke alarm and detector standards come into force. The new UL268 7th edition has been designed to reduce false alarms (or nuisance alarms) and detect different smoke characteristics.

he 2021 UL smoke detector standard for photoelectric and multi-criteria smoke detectors updates the 6th edition of UL268, which has been in effect for the last decade. There are more than 250 updates to the standard as part of the 7th edition, culminating in the addition of two new test fires. The new test fires are:

- UL268 Clause 41.1.5: Cooking Nuisance Smoke Test and
- UL268 41.1.5: Smouldering Polyurethane Foam Test and Flaming Polyurethane Foam Test.

This means, that in countries that require UL listed systems including the US, Middle East and Asia, the new smoke detectors manufactured and installed after 30th June 2021 will have to be able to tell the difference between smoke from cooking or burning your food from actual life-threatening smoke. The 2021 updates to the standard and the resulting new, smoke detectors are perhaps the most significant technological change the industry has seen in recent times.

Why has the UL Standard Changed?

The new flaming and smouldering polyurethane tests were added to ensure that newly manufactured smoke detectors perform quickly when installed in environments where modern, synthetic materials, such as polyurethane foam are used, for example in sofas, pillows and beds. The test addresses the concern that modern materials generally burn much hotter and faster and create more toxic fumes than the natural materials that they have replaced. Smoke detectors achieving the 7th edition of UL268 will be required to demonstrate greater sensitivity to the smoke produced by polyurethane fires, so that they respond more quickly and provide people with as much time as possible to evacuate a home or building in the event of a fire.

Cooking Smoke

Another issue has been the fact that many people get frustrated with false alarms



The Soteria UL range will be equipped with advanced sensing technology that can reduce smoke alarm activation during a cooking event

caused by excessive smoke from cooking appliances and unfortunately deactivate the smoke alarm, rendering it useless in the event of a real fire; these actions have caused a high number of fire-related deaths. The updated UL standard and new smart smoke detectors are designed to address this issue by determining what type of smoke they are sensing and then make a judgment call on if it is caused by a threat or not.

The speed and accuracy of these new smart smoke detectors is unlike anything the industry has seen before and will significantly increase public safety and save lives.

Apollo Fire Detectors Solution

Shipping an American cooker to the UK and finding the closest comparison to a US burger, are just some of the lengths Apollo Fire Detectors has gone to in the development of its new range of UL268 7th edition compliant detectors.

Significant investment in time and resources has resulted in the development of the new Soteria UL range which replaces the Apollo Discovery UL range. Soteria UL is compatible with Discovery and CoreProtocol. It comes with a built-in isolator in the head to assist with the detection and correction of faults in fire de-

What are the key changes to the UL268 standard 7th edition?

- UL268 is the most significant change for smoke detectors in the last 20 years
- It will come into force on 30th
 June 2021 (originally 29th May 2020)
- New UL-compliant products are being developed by fire detector manufacturers
- The new standard is designed to reduce false alarms and detect smoke from polyurethane foam
- The standard applies to countries that are governed by UL legislation including the USA, Middle East and Asia

tection systems. Apollo also has variants that are compatible with XP95A protocol.

Advanced Sensing

The next generation of smoke alarms and smoke detector systems that comply with the new UL268 7th edition will be equipped with advanced sensing technology that can reduce smoke alarm activation during a cooking event while allowing smoke alarms to have increased sensitivity and overall performance in modern buildings.

More about Apollo's solution to the UL268 7th edition standard requirements: www.apollo-fire.co.uk/news/december-2019/apollo-unveiling-ul-at-intersec



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FIRE PROTECTION

No False Alarm n Myanmar

Leading International School Secured **EN-54 Approved Fire System**

An addressable fire system from Advanced has been chosen to protect an international school in Myanmar, thanks to its EN-54 approval and integrated false alarm management solution.

The 2-loop Axis EN system was installed after the British International School Yangon specified an EN-54 approved system to protect facilities, including classrooms, music studios, laboratories, libraries, and its five-hundred seat theatre

Authorised Advanced distributor, Technology Enabled Solutions (TES) Myanmar, was responsible for the programming and configuration of the fire system as well as integrating it with over 300 devices. As part of the project, TES Myanmar also configured the comprehensive false alarm management software, AlarmCalm.

Aung Myo Han, General Manager at TES Myanmar Co., Ltd, said: "A key challenge for the school was to prevent false alarms that were a significant cause of disruption for staff and pupils. As a false alarm management solution, the flexibility of AlarmCalm made cause-and-effect programming easy to set up and configure to the specific requirements of the building.

"Advanced's quality, ease of installation and local technical support make it an obvious choice for installers, who specialise its solutions time and time again."

AlarmCalm software comes as standard with any Axis EN and Mx-Pro 5 fire system, taking advantage of Advanced's high-speed robust panels and networks to offer a best-in-class solution for managing verification and investigation delays to outputs. It allows the false alarm management

strategy for a site to be refined precisely and to take account of occupants' needs and area usage. It also includes the optional AlarmCalm button - a loop device that allows residents or trained staff to indicate whether they believe a signal in their area is due to a false alarm.

Le Thanh Tin, Regional Sales Manager for South East Asia, said: "Our Axis EN system has been certified by FM Approvals to the EN-54 standard and is relied upon across the world to deliver superior protection to a wide range of sites, including educational facilities. These include single-panel installations in schools, through to multi-panel networks, securing numerous academic departments spread across vast university campuses.

"The disruption and distress caused by false alarms has long been a major issue for the fire industry. AlarmCalm radically reduces these incidents and their impact and can be configured to all manner of sites."

Advanced, owned by FTSE 100 company Halma PLC, protects all manner of sites across South East Asia including the Hong Kong-Zhuhai-Macau Bridge, University of Macau and Hong Kong Central Library.

CONTACT

Advanced

Newcastle upon Tyne, UK Tel.: +44 (0)345 894 7000 marketing@advancedco.com www.advancedco.com **INSTALLERS AND INTEGRATORS**

Installation Companies Need Digitalized Processes

Heinrich Brandmeldetechnik Achieves a High Degree of Automation in Daily Business with es2000

Though living in the age of digitalization, many installation companies drown in paperwork. The main problem is to digitize all their service department paper forms. Most technicians in the field still fill out their work reports and maintenance forms with a pen and paper. Office staff in turn have to sort out and enter these forms into their administration and billing programs. In contrast, companies who rely on internet-ready mobile services can generate the required electronic forms on demand and are way ahead of the game.

Proceed

Course:

System:
Syst

einrich Brandmeldetechnik, based in Maxhütte-Haidhof, has been developing tailor-made security concepts for private and business customers from the Upper Palatinate region of Bavaria since 2012. Their business portfolio not only includes state-of-the-art fire detection and monitoring systems, but also an all-round service of consulting, installation and maintenance.

The installation business has earned a good reputation in the region, resulting in constant high order volumes and new customers on a daily basis. "We are committed to high service quality. Our philosophy is to keep our growing customer base satisfied", says managing director Alexander Heinrich. "The keys to our success are many years of experience and trained specialists. But due to the continuing shortage of skilled workers here, these are not always easy to find. So to remain competitive in the long run, a high degree of automation

is very important. Time consuming and daily recurring routine tasks have to be fully automated" Heinrich emphasizes. Those tasks include fast and continuous processes, which start with the customer inquiry, continue on with offers and quotations, through to the final invoicing. "But for our technicians to focus on their main business, we also have to rely on the use of efficient software on site."

can then be filled out on mobile terminals

One Software for All Processes

It is often difficult to find suitable products due to the breadth of the industry. Many solutions were not practical and did not make a lot of sense in practice. "Our goal is to have one software solution to control operational processes in detail" explains Heinrich. He looked for a solution that was specifically developed and tailored to meet the installing industry's specific needs and processes, and established which software his competitors and other BHE colleagues were using.

Since 2016, Heinrich Brandmeldetechnik has been using esoffice, software developed by es2000 that is tailored specifically to installation companies. The ERP solution supports continuous processes in daily business and has, among other things, fine-grained order control and detailed customer management. "Before we started the project, we discussed which areas were particularly in need of automation. Service and maintenance on site turned out to be the most important. So to create a digital workflow, we employed esmobile which uses a mobile tablet solution for on-site work."

Mobile Tablet Solution On-Site

The introduction of the on-site service solution took just two days. "When we had questions, we could get in touch with es2000. The rest we could figure out on our own", Alexander Heinrich recounts. "Sure it was an adjustment, but now nobody wants to go back to the old way of doing things".



Alexander Heinrich, managing director at Heinrich Brandmeldetechnik GmbH: "Our declared goal is to control all our business processes via software. We generate digital maintenance forms for our service engineers using the E-Forms module."

Improvements in daily business were immediately recognized. Every service technician today records his daily reports, working hours and material consumption on his own tablet. This not only saves time and paper, but the service orders now enter the system directly, which means that invoicing takes place much more promptly. "In the past, reports had to be filled out with a pen and paper, then scanned and saved in specific folders", Alexander Heinrich remembers. "Today the documents are simply uploaded and automatically land in the designated folders. This way, the office team knows immediately when a technician has completed his task and can directly start invoicing. Of course, this has not only increased our internal transparency, but also the transparency to the customer."

The Next Challenge: Maintenance Forms

Once the work reports were fully integrated into the digital process, the maintenance logs were to have the same procedure. There are precisely defined standards and guidelines for the installation and maintenance of fire alarm systems. Any action carried out at the customer's site must be logged accurately. The signed maintenance forms are then handed over to the customer. "We used blank PDF forms for a while, but in the long run this was too complicated for us",

says managing director Alexander Henry. "Especially in this area, which is so important to us, we wanted to have a consistently controllable workflow and not jump from one program to another.

At the beginning of 2018, the company therefore also introduced e-forms from es2000. The solution creates digital protocols and other forms that can be accessed directly via the app and can be filled out on mobile devices. To edit forms independently, the application includes a ,Formbuilder' and an integrated ,Report Designer'. The Form Builder contains a design interface with an empty form on which elements can be added or removed as required using drag and drop. The module also has a list of readymade templates for service, inspection and project orders. The individual fields on the form, when defined in the Form Builder, are then transferred to the ,Report Designer' to create the print docu-

The form templates as well as the finished reports can then be imported or exported as files. If further optimizations are required, the exported files can conveniently be forwarded to the es2000 experts. "We have selected one of the standard forms and then adapted it to our specific requirements," Alexander Heinrich explains. Before that, he had worked with the technicians and discussed exactly which text and/or field needed to be inserted or removed. Today, the company uses three different e-forms and two are currently being adjusted.

The Right Partner

Alexander Heinrich would choose es2000 as his solution provider again at any time. "One simply senses that the solutions are real industry products. We discuss matters eye-to-eye and we have also submitted some suggestions for improvement that were promptly introduced. It truly helps if someone is really listening." Heinrich Brandmeldetechnik will keep pursuing the path of digitalization. "We are planning to continue to automate consistently and to determine exactly which areas to improve on. And if necessary, it will of course be together with es2000 as a reliable partner".

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Name: Martin Harvey Position, Company: President of Euralarm and

self-employed consultant

Date of Birth: Febuary 1957

Hometown: London

Favorite homemade dish:

Fish pie

- **Right now:** I am preparing for a round-the-world travel.
- When I'm stressed I don't get enough sleep I like a full 8 hours.
- My biggest struggle on a workday is taking on too many tasks.
- My biggest motivation is winning.
- The natural talent I would like to be gifted with is singing or playing a musical instrument.
- The things that I am most grateful for in life are health and family.
- At the most horrible/best job I ever had I was stacking shelves at the supermarket as a Saturday job.
- The language I would most like to speak is any European language and I pretend to know how to speak English.
- The last gadget I bought was a flexible nut driver.
- 10. My first car was a Morris Marina, a dreadful car.



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