

Security technology to the rescue in trying economic times

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Samsung is perhaps best known for its consumer products such as mobile phones, digital cameras and TVs but the company is in fact extremely diverse with businesses and operations in many markets. One such business is Samsung Techwin, with a history of providing industrial and high-precision products Samsung Techwin has invested heavily into the European professional security marketplace over the past 18 months and as such is one of the fastest growing security brands operating within Europe.

We asked James Smith, European Marketing Manager of Samsung Techwin to provide an overview on how recent advances in CCTV technology can help security managers at ports and terminals to combat the ongoing threat of criminal and terrorist activity.

Introduction

Despite security being high on the agenda at ports and terminals, in today's tough economic climate, budgets for new electronic security systems may be overstretched. Fortunately technology has come to the rescue in the form of increased value to the end-user and what we have seen is the price of CCTV reduce significantly over the last two years, whilst at the same time performance and functionality has improved beyond all recognition.

Thermal imaging cameras

There was a time when thermal imaging cameras had to be used sparingly as they were too expensive to use in large numbers and yet they can be an extremely valuable surveillance tool. Unlike traditional cameras which rely on light to see images, thermal imaging cameras pick up heat signatures of objects and so are unaffected by extreme conditions such as complete darkness, harsh weather, bright lights, fog and smoke. This makes thermal imaging cameras suitable for use in a wide range of high security environments such as coastlines and ports where effective detection is critical.

Fortunately, advances in technology have resulted in competitively priced thermal imaging cameras becoming available and clients now have a wide choice to choose from. Our own STC-14 camera can, for example, detect up to a distance of 360 metres, weighs a mere 2kg and is supplied in an IP66 rated weatherproof housing.

Reduced installation and operational costs

Technology such as Super Noise Reduction (SSNR) is now available which eliminates image noise in low light conditions without creating ghosting or smear. By doing so, SSNR can reduce the costs of CCTV by saving up to 70 per cent of hard disk recording space whilst maximising bandwidth when viewing or recording over a network.

Investment in R&D has also resulted in the recent introduction of cameras and fixed domes, which provide a cost-effective solution to the challenge of transmitting high quality video over unshielded twisted pair wiring.

Unshielded twisted pair wiring is less expensive and easier to work with than standard cabling especially as all video, data and power can be sent down a single cable. Other manufacturers are



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offering a similar solution but in the case of Samsung Techwin we have two fixed cameras and three fixed dome cameras which all have built-in UTP transmitters to deliver high-resolution video over distances of up to 1.5 km. Power can also be sent up to one kilometre when used with an SUJ-800 power and video distribution unit.

Coaxial control offering convenience as well as cost savings

There is also now the potential of further real cost savings by utilising control of CCTV cameras via coaxial cables. A variety of our cameras, speed domes and digital video recorders are now compatible with the industry standard Pelco C coaxial control protocol. As a result, both video and telemetry control can be transmitted via coaxial cables. This gives users full control of camera functions as well as access to set-up menus via a digital video recorder from the convenience of a control room. As well as a reduction in cabling costs there is also the opportunity for existing equipment to be upgraded quickly and easily.

The Robot

Despite pressure on budgets there will be some locations that are extremely security sensitive and where the priority is for an all-embracing solution. It is at just such situations that the technology built into the SGR-1 Security Guard Robot comes into its own.

Developed initially for use in the Korean Demilitarised Zone, the SGR-1 is equipped with a low light high resolution camera, capable in almost total darkness of producing quality images of objects up to four km away, and a thermal imaging camera. Together they are able to provide automated detection and tracking of subjects and vehicles.

The SGR-1 is able to provide an extremely comprehensive solution for critical applications. It allows comprehensive detection, tracking and even suppression of subjects and can integrate with other equipment, such as radar systems, to cover a very large area 24/7 in any weather conditions. The benefit



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is that security teams can be directed extremely quickly to the exact place where a threat occurs. What is particularly impressive is the software that drives the SGR-1. The software ensures that operators can take full advantage of the SGR-1's extensive range of functions. The unit can autonomously work with radar systems, providing video and tracking of the 'blips'. A 'point & click' function allows the operator to take control at any time. This functionality is essential in order to separate normal traffic from potential threats.

The SGR-1 uses state of the art surveillance technology and an optional 'suppression' module to provide the ultimate in surveillance for ports and coastlines. 'Suppression' options include a non-lethal acoustic device which emits a sound over a narrow angle to allow accurate suppression of targets.

High performance

In recent months security managers have had access to high speed dome cameras incorporating the world's first 37x zoom lens



The SPD-3750T boasts 128x wide dynamic range, digital image stabilisation, SSNR II 3D noise reduction technology and Auto Tracking.

and which, as a result, deliver high quality colour images of far away objects in the most demanding of lighting conditions. The SPD-3750T is particularly impressive. Utilising SV-IV, Samsung Techwin's latest generation Digital Signal Processing (DSP) chipset, the SPD-3750T boasts 128x wide dynamic range, digital image stabilisation, SSNR II 3D noise reduction technology and Auto Tracking, which is able to track subjects without operator intervention. To take advantage of the superb quality of the images captured by the latest generation of cameras and domes, a range of DVR's has also been launched which can record at high quality D1 resolution. In the case of sixteen channel DVRs this can remarkably be achieved across all channels in real time.

Technology back-up

To demonstrate confidence in the reliability of its products and to give users complete peace of mind, Samsung Techwin provides free system design, free technical support and a full three-year warranty on its entire range.

ABOUT THE COMPANY

Although Samsung Techwin has operated in the security market for many years, the company set up a dedicated professional security division in March 2008 to service Europe. This has led to Samsung Techwin quickly becoming one of Europe's fastest growing professional security brands with offices in a number of territories offering local support and services to clients. This commitment ensures that the company has the flexibility and know-how to develop technology, services and products to meet the specific needs of the professional security market, while at the same time benefitting from

the backing of one of the world's largest and best-known corporations. With an excellent reputation for technology, reliability and quality, highlighted by recent industry awards and accolades, Samsung Techwin has a wide range of professional security products available to offer solutions for virtually any application.

ENQUIRIES

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