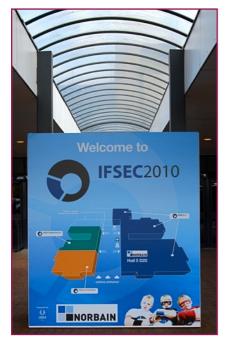
DOKTOR JON'S CCTV & IP VIDEO SURVEILLANCE - IFSEC 2010 REVIEW



IFSEC 2010 has closed it's doors for yet another year; so now is perhaps the ideal time to have a good look back at what happened when over 400 companies from around the globe, pitched up at Birmingham's National Exhibition Centre to exhibit their very latest offerings in CCTV and IP Video technology, designed to address a multitude of diverse security applications. Whilst I'll be quietly reflecting on the overall show in this report, you can also review some more detailed manufacturers Press Releases on my main site at <u>www.doktorjon.co.uk</u>



IFSEC 2010 Review

So how was it for you ... ?

For most people, security shows tend to be somewhat black and white affairs; you either love 'em or you hate them, but that said, IFSEC is so large and indeed unique in being very long established, that even those somewhat less than joyous at the prospect of visiting such an oversize experience, would have to admit that there really is something for everyone interested in keeping up to date with all the current trends, in a broad range of emerging security technology.

Whilst the event itself was apparently hosting in excess of 650 trade exhibitors, it was noticeable this year that some key players were very conspicuous by their absence, which I suppose given the huge cost of participation and ongoing financial uncertainties, is perhaps understandable under the circumstances.

For various reasons, the first day of the show which was billed as 'International Day', got off to a somewhat sluggish start, with many exhibitors expressing disappointment at the lack of visitors, but fortunately day two saw a return of the crowds, and this was pretty much sustained over the next few days.

Trends, old friends, and the shape of things to come ...

You never quite know what to expect in terms of new CCTV products being shown for the first time, but the surprise this year was not so much about imaging and algorithms, as good old fashioned metal bashing and engineering. Somewhat predictably Dome cameras could be found in practically every shape, size and colour scheme known to man, and that's without even considering their actual technical performance; but that aside, the stand up stat. for this year was the sheer number of new Pan, Tilt and Zoom cameras being shown in what has in recent times been, broadly speaking, a less than receptive market.

Let's face it, for some time now aesthetically pleasing fully functional dome cameras have significantly dominated the 'active' CCTV monitoring sector, with PTZ units really being reserved more for industrial site monitoring and traffic or highways applications; although to be fair, compact units such as our old friend, the Bosch "Metal Mickey", have increasingly been regarded by some as ideal for Public Space Surveillance applications. It's perhaps this singular growing sector that appears to have spawned a sudden rash of Mickey takers, with a variety of designs aimed at broadening the appeal of integrated camera positioning systems.



360 Vision Technology were showcasing their latest UK designed and built "Predator" camera

system (photo right) in a number of robust variants, and on my brief visit they certainly seemed to be attracting quite a large and enthusiastic crowd to their stand.

As it happens, there was also a significant number of far eastern manufactured PTZ units at the show, but the range being shown by LeadEx appeared both comprehensive and flexible, with both optical and thermal imaging units being offered, alongside some interesting variants constructed to explosion proof standards, long range maritime and border control configurations, and in some cases even with infra red laser illumination as standard, for some longer distance night time recognition applications.

Entering this sector for the first time, Dedicated Micros officially unveiled their new "Infiniti" integrated camera system, which will shortly be available in both analogue and IP Video options, with a thermal imaging variant also due out shortly cont. >>>



CCTV Image Quality Improvement Project www.doktorjon.co.uk/trusted%20campaign/trusted1.html



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VIPER CCTV Image Performance Reports www.doktorjon.co.uk/cctvimage.html



As part of the Britannia 2000 stand which had a very impressive array of military spec long range imaging technology, also on show was the rather neat and rugged Video & Optical Systems UV 90A series integrated camera unit.

The specialist italian ancillary hardware manufacturer Videotec were demonstrating their latest heavy weight explosion proof stainless steel MPX Integrated Positioning Unit, which is available with both visible, thermal imaging and infrared LED illuminator options as standard. Just to also quickly mention, their tidy and stylish new "Punto" hinged side opening weatherproof camera housing, was also being shown in the UK for the first time.



Video & Optical Systems (VOS) UV 90A Series - photo above

Videotec MPX unit - photo right



Dedicated Micros Infiniti PTZ unit photo below - reproduced by kind permission of DM.



MegaPixel cameras are becoming almost passe´ as they increasingly become that much more widely accepted, but there were a few notable exceptions which I'll come back to shortly. This year it was far more obvious that "High Definition" CCTV was increasingly being recognised, with a number of stands attesting their membership of the HDcctv Alliance.

Of the larger far eastern manufacturers, Sanyo had a significantly expanded range of full 1080p performance HD standard cameras on display, with a highly impressive array of built in features including 4MP CMOS imagers, video analytics and on board recording, packaged in a variety of both 'box', 'dome' and 'block' configurations.

Panasonic announced their latest series of six new iPro "Smart HD" cameras based on 1.3MP MOS sensors delivering 720p HD resolution, and boasting VRS or "Variable Resolution at Specific Area" technology, which allows defined areas of an image to be streamed at a lower resolution, to help reduce bandwidth loadings on the network.

In underlining their commitment to future HD standard products, Sony Professional were also launching two new HD cameras into the european market, using IFSEC to showcase them alongside their existing high performance range.

JVC Professional Europe introduced four new Super LoLux cameras which were being showcased alongside their

demonstration vehicle; also on show was a rolling demonstration of 3D TV (photo right), which based on the enthusiastic response from many of those caught wearing the funny glasses, provided one of the more impressive examples of future imaging technology.

I should perhaps also mention that a little viewed JVC playback demonstration showing a section of UK roadworks, actually provided a very impressive example of daytime picture quality that can be achieved with a properly set up HD camera and record system, particularly when viewed on a top quality monitor.



Although HD was very much evident on a number of stands, ONVIF standard compliance was also widely highlighted by a variety of specialist camera manufacturers, throughout the show. Whilst Avigilon were pulling in the crowds with their broad offering of top end imaging products, Axis announced two new 720p HD PTZ Dome cameras for external applications, whilst Dallmeier were as usual successfully demonstrating how to combine technical quality with a flair for style, using their unique and distinctive 'designer' camera range.

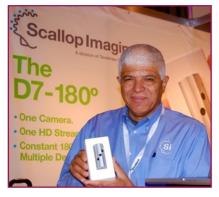
Still on the subject of cameras, would it surprise you to know that there were actually quite a few at IFSEC this year!

I was tempted to try and count them all, but having decided I'm not quite that sad ... yet, I eventually came to the conclusion that there were probably around 2,500 - 3,000 spread out throughout the halls. So how exactly do you spot the pearls hidden amongst the shell schemes? I suppose the answer is that without a large dose of good fortune, and a more than occasional serendipitous discovery, it's probably not going to happen, but as luck would have it there were a few interesting discoveries to be made, if you troubled to look hard enough.





Multiple sensor camera assemblies are to be honest not that new in concept, but there were some interesting and indeed quite diverse examples being exhibited this year. Arecont Vision were offering a "Surround Video" product incorporating four 2 MegaPixel cameras optimised to provide either 180 or 360 degree coverage, streaming all four channels at a shared 22 fps. STP Technical Developments were likewise demonstrating a working example of a 50 Megapixel array offering a full field coverage at very high resolution, and ClearView Communications were playing host to the unique Viseum IMC or Intelligent Moving Camera, combining multiple target locators with a PTZ tracker unit.



One of the more interesting offerings at the show, was the european launch for Scallop Imaging's 7MP 180 degree camera; I say camera as unlike various other multiple imager units, this device actually streams five stitched together images into a single coherent stream. The compact device is displayed in two formats on screen, the first providing a full 180 degree widescreen image of the complete field of view, and in addition within the same window on screen, up to four 'zoomed' areas of interest can be brought up for more detailed inspection.

In practice the wide view is virtually seamless between images, and any notion of possible parallex problems are quickly dispelled by a very impressive and tidy 15fps display image. Full resolution recording is currently rated at 1fps, which although low by many standards, is probably adequate in most situations given the length of time that targets will invariably persist within the field of view.

Photo left - Peter Jones, President of Scallop Imaging with the innovative D7-180 wideview camera.

Unlike previous events, this year there appeared to be far fewer re-deployable camera systems suitable for Public Space Surveillance, although having said that, possibly the fastest climber in the field put in a welcome appearance on the MEL Secure Systems stand.

The Excelerate Sherpa is somewhat unique in it's class, providing an extremely robust, rapidly re-deployable package that can be elevated into position on almost any streetlamp, using a self driven detachable tractor unit.

Installed in a matter of minutes without the need for any additional access equipment, the unit is available in a number of configurations providing a range of options both in terms of imaging, signal transmission and power supply options.



Photo right - Martin Saunders shows off the latest version of the Sherpa rapid deployment camera system.



Video Motion Detection has been a recognised technique for integrating visual target location into an perimeter security system, for some forty or so years now, but the latest "MoviWall" product from Hymatom IP-Security, not only brings the concept firmly into the 21st century, but also secured the company a prestigious ISEC 2010 award for best in class product design.

The fully weatherproofed system provides a combination of active infra red beams combined with video verification, to permit operation over distances up to 200 metres between the columns.

Photo left - The Hymatom IP-Security team, (I/r) Nicolas Joanoff - Sales Director, Bernard Taillade - CEO, and Steeve Rauch - Export Sales Manager

It's often easy to be so overwhelmed by the highest of high tech exhibits, that some of the simpler and more usable real world solutions invariably become overlooked.

The GSM Security Camera is an interesting product that could very readily offer a low cost solution for a whole range of applications, although providing protection for vulnerable "void" properties is one obvious use that immediately springs to mind.

The 1.3 MegaPlxel camera unit is equipped with short range Infra Red illumination, on board SD card based recording, GSM picture transmission offering either SMS, MMS, e-mail or FTP image transfer, using either an internal or external movement sensor to trigger recording and alarmed image forwarding. With built in two way audio and battery operation as standard, the unit provides a very affordable approach for helping to secure many remote unattended properties.



Photo left - Thomas Kwan, Sales Manager - Media City Ltd.

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It's perhaps to be expected that alongside various refinements for mid and 'enterprise' class Video Management Systems, from the likes of Codestuff, DVTel, IndigoVision, March Networks, Milestone Systems, Mirasys (who incidentally have just launched an iPhone and iPad utility to allow remote monitoring using Apple products), Vigilant, and more recently iOmniscient, the range and scope of integrated Video Analytics offerings was also likely to increase at this years event, and thus it proved to be. Whilst it's increasingly difficult to become overly excited by the latest colour options for operator defined 'tripwires', there are nevertheless some very robust analytics packages out there, which can offer significant advantages when used appropriately and in the correct context.

Consider for example a basic less than challenging function like automated people counting; you would have thought that the packed halls of the NEC would possibly provide almost the perfect location for a practical demonstration or maybe not!

Too often, products fail to perform on a trade stand for a variety of reasons, and whilst it can be acutely embarrassing for the demonstrator to try and re-boot or retrigger a sticky system, the visitor could perhaps be forgiven for thinking that if it isn't proving reliable at an event, then will it really be any better when deployed in the big bad world outside. To be fair, some worked very well and some didn't, but after days of looking at freezing networks, dodgy camera set ups and latency to the max, it does somewhat reinforce the old adage about how first impressions really do count.

Alongside existing Video Analytics offerings from specialists such as Aimetis with their "Symphony" management and analytics integration solutions, BRS Labs, iOmniscient's detection and identification portfolio, Keeneo's patented "4D" analytics technology, Verint and Wavestore's optimised retail analysis packages, and Videotec's interoperable "Albert" stand alone units, all offer various customisable levels of event detection, and each are really best suited to deployment in a specific or defined range of applications.



Taking a slightly different approach, scientists from Staffordshire University were on hand to discuss their "Adaptive Video Analytics (AVA)" technique which uses their Spectral-360 technology to develop solutions that can operate reliably under the most challenging of imaging situations. In the near future, the developers are looking towards integrating their unique processing algorithms, into other manufacturers existing systems.



With quite literally dozens of different Automatic Number Plate Recognition software packages and camera capture systems on display, the average visitor could be forgiven for thinking there were more vehicles on the loose inside the halls, than there were in the car parks. As conventional ANPR technologies have now pretty much matured to a point where consistent success is quite literally served up on a plate, perhaps the most unusual new offering on show was CitySync's "JetMate" handheld image capture ANPR device. Designed for single operator applications, such as parking control or traffic enforcement, the unit is capable of capturing up to 5,000 plates and vehicle images, which can then immediately be compared against a hit list of up to 10,000,000 databased vehicles.

(photo left) the JetMate handheld ANPR capture device - image reproduced by kind permission of CitySync

Black light and dark arts

Thermal imaging cameras were again very much evident around the halls, although perhaps not quite in the numbers seen in some previous years. FLIR as expected put on a very good show demonstrating a range of cameras from basic microbolometer modules right up to long range high magnification tracking systems suitable for marine and border control applications. Their latest introduction is a highly compact 640 x 480 resolution module, providing very crisp image detail from what is effectively an absolutely tiny package.

Another long established specialist manufacturer, Opgal Optronics were also demonstrating their current extensive portfolio of thermal imaging solutions, covering a wide range of security and safety related applications, both in operational and OEM ready formats. Also announcing a new product at the show, Irisys Integrated Systems were showcasing their new IRI 5300 mid range TI camera module suitable for a broad range of general imaging applications.

Whilst not quite creeping into the thermal spectrum, there were also a number of manufacturers showing their current Infra Red illuminators. Raytec as one of the key players, were exhibiting their latest Warrior II ATEX rated explosion proof unit available in either IR or white light output, alongside their comprehensive range of solid state lamps.



... and more of the best from the rest.

It's never easy trying to make sense of so much jaw dropping technology in such a short space of time, but even so there were a few other notable miscellaneous products well worthy of being flagged.

Unique amongst moving cameras, the TUB evolution 7, is the latest offering from TEB, having travelled across the channel from france but apparently not under it's own steam, with what is described by the manufacturer as an optional 'unlimited' length track. Although primarily intended for use in large open plan buildings, the system is now also available for outdoor use.



Looking at the subject of signal transmission, at a basic level NVT were exhibiting their very latest multi channel powered hubs, suitable for using low cost balanced cable transmission on larger installs. Veracity UK were again able to showcase a comprehensive line up of signal conversion and transmission equipment, with a number of products particularly suitable for end users and installers intending to migrate over to IP, using existing legacy cable infrastructure.

Borne from academic research at Lancaster University, Rinicom were exhibiting a range of innovative COFDM wireless transmission systems ideal for rapid and re-deployable camera systems, particularly those being used for Public Space Surveillance Applications. Meanwhile specialist wireless video transmission experts Ogier Electronics, were reporting strong visitor interest in their new "Track to Train" CCTV System.

If short hops or hard wires don't really ring your bell, how about the latest innovation from Vidium; with practically everything electronic now migrating into the clouds, Vidium are providing a hosted web based surveillance service, allowing installers and end users to own brand their remote server based recording.

It's sad to reflect that for many visitors to IFSEC, the only obvious useful purpose for glass is to hold a half decent pint, but fortunately there were a number of highly respected lens manufacturers in attendance, doing what they can to get the message across about quality lenses producing quality images. Whilst at one end of the scale, Pyser SGI were exhibiting some seriously heavyweight long range optics, Tamron meanwhile were launching a new range of infra red corrected MegaPixel optics, that are ideally suited to a whole range of everyday applications requiring crisp bright images.

On a more specialised level, H.264 Limited were demonstrating their latest "Revader" 360 Totem system, using a panamorph lens to provide a full 360 degree coverage image, that can be processed and unwrapped to produce a full HD standard flat field display. Perhaps the most useless lens on display was the slightly spongy example hanging from the front of the giant inflatable camera on the IQinVision stand; whilst the camera may have been a bit plastic, their newly launched IQeye online eStore is proving to be rock solid, with their range of Basic Line Standard and MegaPixel cameras now available to purchase online, but only by approved qualified resellers.

The more eagle eyed amongst you may have noticed a certain lack of content relating to video recording; well having seen more DVR's, NVR's and ooh ahh's than is really good for any individuals sanity, if the truth be told the only really interesting new examples were generally hidden around the back of the stands, and therefore not yet ready for wider public review.

Last but most certainly not least, congratulations to BriefCam on receiving the prestigious IFSEC "CCTV System of the Year" award for their Video Synopsis software. Designed to speed up Forensic Surveillance analysis of recorded material, the system is capable of allowing hours of CCTV product to be summarised, in little more than a few minutes.



Well that's another one done and dusted, so how was it for you? Well the walking certainly doesn't get any easier, although there did appear to be more places to grab a seat this year; it's just a shame that the Media Village was so far out there, that it was practically in another show. Had it been more accessible, I'd probably have saved an awful lot of time, and no doubt managed to see a lot more

exhibitors. Having lost my voice when the show started, huge apologies from me to everyone that had to put up with my barely audible croaking, and big thanks to all those sterling souls that kept me going with endless supplies of drinking water. Well that's more than enough from me for now; until we meet again great good fortune to you in the year ahead! DJ

If you have any comments or suggestions leading on from this IFSEC 2010 Show Review, or if you'd like to register to receive future copies of my regular CCTV / IP Video Newsletter, please drop a line to:- newsdesk@doktorjon.co.uk

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