

Made-in-Asia Network Cameras under the Spotlight

Companies in Korea and Taiwan possess strong IP-based knowledge, those in Japan advanced camera technologies, while players in China benefit from low-cost production. These three attributes are what has given Asian companies the edge when it comes to network cameras.

By JEAN HSU

Network cameras, also known as IP cameras, transmit live video images for remote view on computers and cell phones. While Axis is generally acknowledged as the market leader, Asian camera makers are not far behind.

Undoubtedly, cost-effective products are why users turn to Asian companies. "Compared with network cameras from Japan and the West," said Steve Kim at Seyeon, "Asian network cameras have better prices." This, however, does not mean that they suffer in performance or functionality. "We are proud to provide good image quality similar to that of Sony and Axis products," said Chenyu Liu, sales director of ACTi, "but at about 60 to 70 percent of the price."

The consumer segment generally requires smaller surveillance systems—16-channel or less—as well as lower cost models with user-friendly interfaces. They also want total solutions. Security customers, on the other hand, require large systems that can be extended from 16 cameras to 52 or more. They also seek solid, stable products with special features like anti-vibration.

Engineers Play a Starring Role

"Software expansion is critical for network-camera makers," said Alex Park, CEO of Probe, "because some system integrators prefer SDK for

feature development." At Probe, 70 percent of employees are engineers to provide precisely these needed functions.

This is also true at Vivotek where more than 50 percent of the employees are engineers engaged in research and development. "We can change the operating interface within a day as well as handling advanced image decoding and encoding all by ourselves." Quick turnaround time is crucial in winning customers whether for customization or customer service.

In addition, makers have comprehensive series of network cameras to cope with different requirements and network infrastructures. TeleEye, for example, has strong research-development capabilities from compression to integration. CEO Cliff Chan said: "We not only ensure smooth videostreams for every bandwidth but also deliver products that are compatible with different network transmissions, such as 3G and GPRS, for cash transit, fire fighters, police and emergency vehicles."

Technologies Auditioning for the Lead

Core competencies include compression, network transmission and knowledge of traditional analog cameras. Compression and network transmission are Asian camera makers' main focus.

Compression technologies include wavelet, JPEG, M-JPEG, MPEG-4 and H.264. Such technology is key to ensuring smooth transmission of videostreams. According to Liu at ACTi, MPEG-4 is the most effective; he expects it to become mainstream. ACTi offers a series of MPEG-4 products for a wide array of IP-surveillance applications.

Vivotek is another example. Six years ago, Vivotek started investing in audio and video codec technologies, launching the



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world's first MPEG-4 network camera with pan-tilt in 2004. President Eddy Lan explained that, "Based on our advanced codec technology and long experienced R&D teams, Vivotek will be able to continuously develop more cost-effective, cutting-edge products than our competitors' to meet customers' needs and dominate the markets.

While many IT-based camera makers are unfamiliar with analog cameras, they are experts in network transmission. One good example is TeleEye, a Hong Kong-based company with over 12 years of experience in IP surveillance. The company launched an innovative network camera with 3G mobile

functions in early 2005. Then there is iCanTek, a Korean network camera maker. The company released a wireless network camera with multiple network transmissions, including Ethernet (10Base-T), wireless LAN, ADSL modem and cable modem.

Ready for Your Closeup?

For Oscar Yoon, sales manager of the Overseas Marketing and Sales team at iCanTek, educating the customer is most difficult. Being accepted takes a long time as does integrating camera and IT-infrastructure knowledge. IT infrastructure, he added, involves



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Working together to Enlarge Market

The market for IP surveillance--especially IP cameras--is experiencing explosive growth. A recent forecast by research firm IMS found that IP cameras are expected to account for about 20 percent of the surveillance market in Europe, which will be worth an estimated US\$460 million by 2008. In Europe, revenue from IP-network cameras will expand by 28.4 percent (compound annual growth rate) over the next five years.

As to U.S. market, a new IDC study reveals that network-camera share will be set to surpass analog in 2009. While network-camera shipments grow at a CAGR of 82.8 percent from 2004 to 2009, analog will decline an average of 4.4 percent. The situation in the Japanese market is also positive. The Yano Research Institute estimated that around 50,000 network cameras were shipped domestically in 2004; it sees this figure nearly tripling to 130,000 by 2006.

"While network-camera usage will grow within both existing infrastructures and new environments, most opportunity lies in new installations," explained Chris Chute, senior analyst at Worldwide Digital Imaging Solutions and Services. "Vendors are already penetrating new verticals."

Steve Kim, Overseas Sales Department at Seyeon Tech, pointed out that while the market is still relatively small, competition is already heating up.

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Because network knowledge and education to customers and end-users are so important, Vivotek is also very careful when selecting partners. "Our partners must have a thorough knowledge of network transmission, engineering and IP cameras as well as having been active in the security market for several years," said Lan.

Unlike Panasonic, Sony and Axis, Asian players have trouble expanding globally. Often, they must earn customer trust through product improvements and promotions. Kim indicated that IP is quite new to most end-users. That is why Seyeon is busy trying to develop ways to help its customers bridge the divide.

While Liu is delighted that the company's network cameras are becoming more widely accepted, the company continues its efforts with its distributors and system integrators to help them understand more about ACTi's products.

As Asian companies flex their wings, both in terms of OEM/ODM and branded products, Europe is their main target. Ivan Wang at Hunt Electronic attributes this to good network environments, well-educated users and willingness to try out new things; most important, though, they are willing to pay for novel features.

And the Oscar Goes to...

Growth in network cameras goes hand-in-hand with expansion of broadband infrastructure. Yoon pointed out that Taiwan's IT infrastructure is not as extensive as in Korea. "While customers in the latter are often dissatisfied with megabit transmission speeds, Taiwanese end-users suffer from kilobit transmission. Let's not even talk about Japan." These domestic strengths are what give Panasonic, Sony, Toshiba, JVC and Sanyo recognition not only at home but also abroad. According to Kim, Korean companies, such as Seyeon, Webgate, iCantek and Probe, lead in global markets because of the same home benefits.

While Taiwan is strong in the PC and IT industries, few companies focus on security. The resources, therefore, are simply not there. That leaves only ACTi, ATOP, Pixord and Vivotek. That said, these companies are more than capable of providing top-quality, state-of-the-art network cameras.



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Vendors List of Asian Network Cameras Manufacturers

Company Name	Country-based	Telephone	E-mail Address	URL
3JTECH CO., Ltd	Taiwan	886-2-25006916	info@3jtech.com.tw	www.3jtech.com.tw
ACTI Corp	Taiwan	886-2-26562588	sales@acti.com.tw	www.acti.com
Acutvista Innovation Co., Ltd	Taiwan	886-2-26981870	scjan@acutvista.com.tw	www.acutvista.com.tw
A-Linking Co., Ltd	Taiwan	886-2-82262710	sales@a-linking.com	www.a-linking.com
AME Optimedia Technology Co., Ltd	Taiwan	886-2-26981966	ame@ame-group.com	www.ame-group.com
AV TECH Corp	Taiwan	886-2-26553866	sales3@avtech.com.tw	www.avtech.com.tw
Aviosys International Inc	Taiwan	886-2-29592092	cathy@aviosys.com	www.aviosys.com
Cellvision Systems Inc	Taiwan	886-2-26982562	tiffany_kuo@cellvision.com.tw	www.cellvision.net
Crypto Telecom Co Ltd	Korea	82-2-596-1331	crypto@cryptotelecom.com	www.cryptotelecom.com
Dentec Corp	Taiwan	886-2-28806676	sales@dentec.com.tw	www.dentec.com.tw
D-Link Taiwan Inc	Taiwan	886-2-66000123	---	www.dlinktw.com.tw
Dynacolor Inc	Taiwan	886-2-26598898	info@dynacolor.com.tw	www.dynacolor.com.tw
Finest Security System Co., Ltd	Taiwan	886-2-25066799	finectv@ms10.hinet.net	www.finectv.com
General Electric International Kampro Branch	Taiwan	886-2-22999499	service.kampro@ge.com	www.kampro.com.tw
Grandtec Electronic Corp	Taiwan	886-2-82273588	grand@grand.com.tw	www.grand.com.tw
Hitachi Kokusai Electric Inc	Japan	81-3-5337-8650	kiyose.hisashi@h-kokusai.com	www.h-kokusai.tv
Hunt Electronic Co., Ltd	Taiwan	886-2-24551809	market_as@huntelec.com.tw	www.hunt.com.tw
iCanTek	Korea	82-31-711-7575	sglee@icantek.com	www.icantek.com
Ikegami Tsushinki Co Ltd	Japan	81-3-5748-2281	info@ikegami.co.jp	www.ikegami.co.jp
IPAC Technology CO., Ltd	Taiwan	886-2-27931588	jessica.liu@mail.ipactech.com	www.ipactech.com
Kingwave Technology Co., Ltd	Taiwan	886-2-82271868	security@kingwave.com.tw	www.kingwave.com.tw
Leadtek Research Inc	Taiwan	886-2-82265800	derek_lee@leadtek.com.tw	www.leadtek.com.tw
Litz Technologies Co., Ltd	Taiwan	886-2-27396008	evyeyin@litz.com.tw	www.litz.com.tw
Orite Technology Co., Ltd	Taiwan	886-2-82278292	sharon@orite.com.tw	www.orite.com.tw
Panasonic System Solutions Company	Japan	81-45-540-5786	suzuki.naoki@jp.panasonic.com	panasonic.biz/security
Petline Technology Co., Ltd	Taiwan	886-2-66263389	danny@petline.com	www.gps.petline.com.tw
Pixord Corp	Taiwan	886-3-3166102	marketing-as@pixord.com	www.pixord.com
Planet Communication	Taiwan	886-2-22199518	gladysw@planet.com.tw	www.planet.com.tw
Plustek Inc	Taiwan	886-2-26557866	jackchuang@plustek.com.tw	www.plustek.com.tw
Probe Network CCTV Professional	Korea	82-31-777-3461	alex@probedigital.com	www.probedigital.com
Provided Multimedia Co., Ltd	Taiwan	886-2-86672008	sales@provideo.com.tw	www.provideo.com.tw
Sanyo Sales & Marketing Corp	Japan	81-6-6992-0667	setsBA39041003@sanyo.co.jp	www.sanyo-ssm.com
Seyeon Tech Co Ltd	Korea	82-2-3017-0855	kjh@seyeon.co.kr	www.seyeon.co.kr
Shany Electronic Co., Ltd	Taiwan	886-2-26590071	shany@shany.com	www.shany.com
Softwell Technology Co., Ltd	Taiwan	886-2-86601023	marketing@softwell.com.tw	www.softwell.com.tw
Sony	Japan	81-46-230-5594	psnc-ispj-faq@jp.sony.com	www.sony.jp
Toa Corp	Japan	81-797-71-9057	ntakemura@toa.co.jp	www.toa.co.jp
Victor Company of Japan Ltd	Japan	81-426-60-7256	chou-kokuyou@jvc-victor.jp	www.jvc-victor.co.jp
Vivotek Inc	Taiwan	886-2-82455282	sales@vivotek.com	www.vivotek.com
Webgate Inc	Korea	82-31-428-9334	juny@webgateinc.com	www.webgateinc.com

* The above company information collected is correct as of press time. Any replenishment will be listed at A&S website: www.asmag.com. A&S welcomes further submission.
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