

Technological Advances Enhance Video Surveillance Equipment Progress

July 21 2004

Intense competition and a flood of inexpensive closed circuit television systems from Asia are making it challenging to turn profits in the security equipment market. Manufacturers can try to buck this trend with the help of the evolving innovative technology, by providing value-added services and unique applications.

With larger multinational security companies entering the fray after recognizing the potential of the industry, smaller self-installing firms are battling to stay profitable.

“Mergers and acquisitions, strategic alliances, and partnerships are being formed to increase technological capabilities and expand video surveillance applications,” says Technical Insights Analyst Dr. James Smith.

The availability of inexpensive image sensors – the basic prerequisite for video surveillance – and ample computing power has enabled the development of embedded, real-time video analysis systems that can provide compressed data or meta event information directly.

Real time video and Internet radio require quick and uninterrupted media streaming through the network. Surveillance of vehicles moving at significantly high speeds – or surveillance from a moving vehicle – also requires fast processing and is distinctly different from indoor surveillance. Manufacturers will have to devise systems with algorithms that are much more computationally intensive and yet faster than those

used for indoor surveillance.

These applications involve many information processes (transmission, compression, encryption, reconstruction, presentation, and storage) that cannot be delayed in order to provide continuous sound or image.

This requirement is a challenge for cable and network equipment manufacturers and network designers. Companies are focusing on the development of integrated, end-to-end solutions for applications requiring object detection, tracking, action classification, and event analysis from video images.

“Manufacturers are also improving the effectiveness of their products by adding new software and an inexpensive infrared imager to an existing video surveillance, creating a synergy that far outperforms the old system,” notes Smith.

These systems are useful in a variety of application sectors such as industrial automation, transportation, automotive, security and surveillance, and communications.

Designers have also developed equipment for use in subway, highway, indoor/quasi-outdoor, tunnel monitoring, and intelligent video communication.

Security Technology: Advances in Video Surveillance, is part of the Homeland Security and Defense Vertical Subscription Service, and showcases some exciting and influential developments in video surveillance besides providing wide-ranging information on equipment, components, software schemes, and system design strategies. While the principal focus of the research is on technological advances in development laboratories, it also identifies key companies and developers, and provides estimates of timelines for commercializing of

the technology. Executive summaries and interviews are available to the press.

If you are interested in an analysis overview which provide manufacturers, end-users and other industry participants an overview, summary, challenges and latest coverage of Security Technology: Advances in Video Surveillance - then send an email to Julia Paulson – North American Corporate Communications at jpaulson@frost.com with the following information: Full name, Company Name, Title, Contact Tel Number, Contact Fax Number, Email. Upon receipt of the above information, an overview will be emailed to you.

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The original press release can be found [here](#).

Citation: Technological Advances Enhance Video Surveillance Equipment Progress (2004, July 21) retrieved 10 April 2024 from <https://phys.org/news/2004-07-technological-advances-video->

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