



Pixel Video Fusion™ System

Wide-area surveillance for advanced threat detection
and emergency response systems





Finally a Source for Complete Situational Awareness! Pixel Video Fusion™

- Complete high-definition coverage of large critical areas so you are armed with the right information at all times.
- Easy to use tools allowing you to dynamically drill into video details, whether in real-time or at a later date.
- Ability to seamlessly track subjects across multiple cameras without delays or losing the context of where the subject is within the environment.
- Ability to scale your surveillance system over time and at your convenience, while interoperating with any other security system.
- Reliable detection, discrimination, digital pan and zoom, and the ability to route this critical information to responders.

What Makes Us Different

Pixel Velocity has leveraged decades of experience in the defense industry to create the world's first end-to-end system specifically *optimized to provide highly reliable automated threat detection* and multi-camera tracking over very large areas. The Pixel Video Fusion™ System utilizes a distributed processing methodology that provides contiguous coverage while allowing automated analysis of all high-definition cameras, resulting in complete situational awareness. Edge-based recording with HD on demand delivers high-definition video without overloading your network. The result: You are prepared with the right amount of detailed information at every moment. Our system is a proven solution for effective, proactive surveillance of critical assets at airports, seaports, critical infrastructures, and government facilities.

Pixel Video Fusion™ System

is constructed of multi-mega-pixel cameras, edge-based processing and recording, and a client-server-based management interface. Our system addresses today's need for more detailed images and better video management. At the same time it creates an evolutionary path to tomorrow's need for more reliable and advanced automation techniques. We believe that reliable video automation systems can best be created through the process of working with users and our integration partners to understand their operational environment. By first laying a foundation of higher quality video, Pixel continues its work of developing value-added software suites targeted to focused market applications.

5-mega-pixel digital cameras
(4, 8 or 12 per server)



Enterprise-class video servers
(HP)



CAT5e or CAT6
single cable interface
(power included)

ViewPorts™ management
software application



Solutions that evolve with your security needs

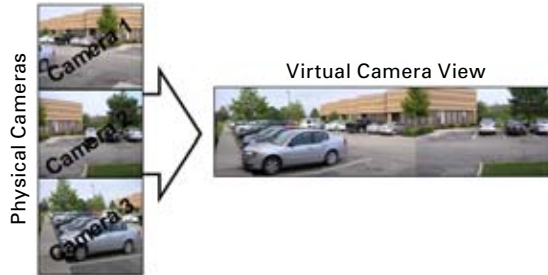
- Remotely upgradable software and hardware
- Advanced automation algorithms
- Multi-kilometer integration options
- Large deployment system scalability
- Modular design enables add-on software and hardware functionality

Pixel Video Fusion™ Benefits

Intuitive low-fatigue display



Single Pixel Camera Field-of-View



Seamless Panoramic Stitch

High-definition, quality video—day and night

- 15 times the detail per camera (compared to CCTV)

- Monitor multiple large areas with a single operator

Easy to use and efficient search and discovery tools

Confirm

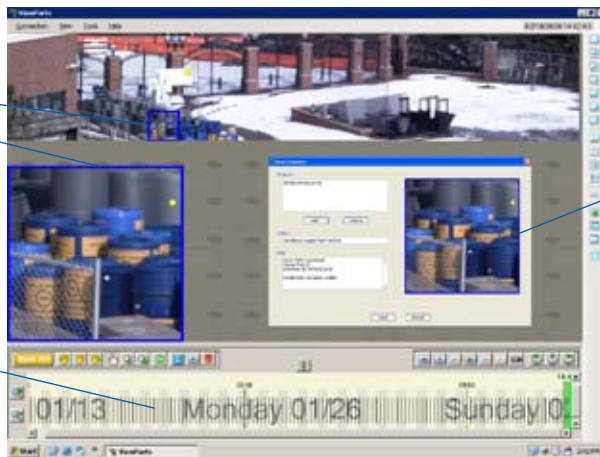
Zero-latency digital pan and zoom

- Drill into detail with HD on demand
- Pan and zoom across entire panorama

Find

Timeline scrub bar

- Quickly search synchronized video data from all cameras



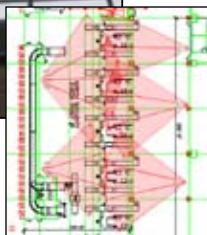
Alert

- Image and video email utility
- Push data to first responders

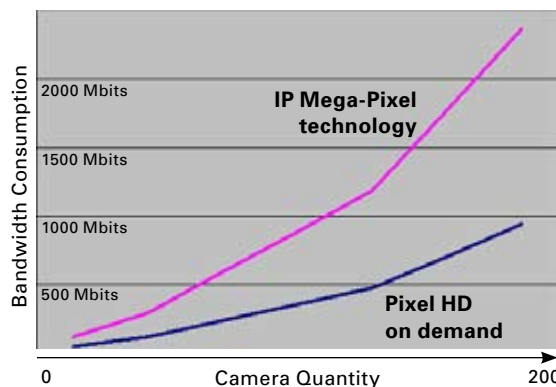
Low-cost, flexible installation and network scalability



Rooftop Cluster



Site Map



Scale camera count independent of network

Physical camera clustering

- Eliminate extensive wiring and trenching
- Highly reliable, low maintenance: all fixed cameras

- Drop-in solution to existing network

Customer Example

Impact at major U.S. airport security checkpoint

- Simultaneously monitor multiple checkpoints and lanes for traffic balancing
- Complete coverage for indisputable association of carry-on property to passenger

Rapid resolution of suspected breach

- Confirmation of breach
- Determination of suspect's location and direction
- Immediate notification via mobile device to first responders

- Less than a 10% increase in bandwidth consumption allowing shared network with city services

- Integrated with existing airport wide-area surveillance camera and operations system

Join these top critical-infrastructure sites:
 One of the largest Airports in the United States
 One of the busiest Seaports in the United States
 4th largest Stadium in the world

Personnel efficiencies, operational cost savings, increased accuracy, and reduced response time are essential to protecting assets at these sites. For more information on these case studies and many others, please visit our website: www.pixel-velocity.com



Pixel Velocity was formed in 2001 to capture the expertise derived from more than 30 years of solving leading edge image processing applications in the defense industry. We translate that expertise into the most advanced, cost-effective solutions for the video surveillance market.

Our technology grew out of work conducted at the Environmental Research Institute of Michigan (ERIM), successor to the University of Michigan's Willow Run Labs (1947) where synthetic aperture radar and the airborne 3-D laser scanner were invented. ERIM's advanced image processing hardware and software evolved from those legacies, resulting in solutions for the Department of Defense's complex imaging problems, including UAV navigation, automatic target recognition, reconnaissance, and surveillance.

Pixel Velocity has applied its experience and talents to develop an open architecture video surveillance product that easily incorporates advanced imaging hardware and software developments. With engineering expertise in the areas of video automation, sensor fusion and system integration, Pixel Velocity is continuously striving to deliver the world's most innovative and effective security solutions.

Please contact us to learn more about how our solutions can address your needs.