

Instantaneous Actionable Intelligence: Protecting our Nation's Infrastructure

pixelvelocity™
Insight Accelerated



Pixel Velocity: Solutions for Protecting Our Nation's Critical Infrastructure

At Pixel Velocity®, we understand how important our country's infrastructure is, so we deliver versatile software solutions that protect our most valuable assets.

Our signature product, **Site Protection System (SPS)**, is the most comprehensive solution on the market for providing instantaneous, actionable intelligence for critical infrastructure and force protection applications. We offer software solutions and sensor systems that deliver real-time imagery and data analytics management tools for multi-site monitoring that will automatically detect, discriminate, tag, and track multiple threats.

SPS synchronized image sensors are the backbone of an integrated threat detection system that generates metadata while continuously monitoring a 360° area of interest. SPS automates threat detection while enhancing the protection of high value assets with real-time imagery and data analytics. Combining improved response times, operational continuity, and increased reliability, you will see our cost effective systems create a significant return on investment.

Protecting Infrastructure by Addressing Security Vulnerabilities

Our nation has a complex infrastructure—communications, transportation, energy, defense and other federal agencies—each made up of networks, equipment, and people. Continuous, real-time monitoring of facilities, structures, and surrounding perimeters helps detect, track, and assess potential threats and provide rapid response options. System features include:

- **Remote visual assessment** including 3D model-based analytics of the environment.
- **Searchable and actionable alerts.**
- **Geospatial zone rule creation.**
- **Map view** to provide instant context and animated map view feature.
- **Multi-location common operating picture.**
- **Physical measurements** for more reliable analytics.
- **State-of-the-art image** processing architecture.
- Generation of detailed image metadata streams for **deep, real-time analytics.**



Protecting America's Critical Infrastructure

Types of clients who benefit from Pixel Velocity's sophisticated monitoring software include:

- Airports/Air Fields
- Bridges
- Cell Towers
- Chemical Plants
- Military Bases
- Nuclear Power Plants
- Mega-event Venues
- Transportation Infrastructure
- Stadiums
- Waterside Perimeters/Ports/
Cargo Storage Areas
- Water Treatment Facilities/Dams

Site Protection Services—Offering a Unique Approach for High Value Assets

- **Synchronized image sensors** providing analytics across multiple areas of interest.
- **Real-time processing and dissemination** of high-resolution video.
- **Detect objects** based on foreground/background comparison (vs. frame differencing).
- **Near-field automated detection** and tracking at low cost.
- **Synchronized data architecture** (patented) and hybrid hardware and software.
- **Global system approach** to ingesting visual data into track processing engine (vs. single sensor alarming).
- **3D model-based analytics**
- Adaptable template-based discrimination analytics.
- **Large Aperture Array** (panoramic view offers superior common operating picture).
- **Legacy and new third-party sensor integration.**
- **Metadata engine** provides real-time response/post-event intelligence.
- **Field upgradable** and long product life cycle (FPGA architecture).
- **High probability of detection** low nuisance | and false alarm rates.

Maximizing Operational Performance by Increasing Effectiveness

To deliver operational continuity, the SPS platform enhances asset protection by:

- Capturing real-time site activity and asset performance through integrated, intelligent sensor platforms.
- Presenting actionable data to assist in decision making.
- Reallocating manpower and workloads to increase efficiencies.
- Integrating real-time imagery and data analytics into advanced event management and response protocols that shorten response cycles and provide enterprise-wide intelligence.
- Enhancing post-event forensics.
- Ensuring reliability and continuity.
- Offering high-value data streams that scale to support asset integrity and enhanced revenue continuity.

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Call Jason Slocum, Vice President of Business Development, at 734-904-8577 to discuss your specific needs or visit us at www.pixel-velocity.com to learn more.