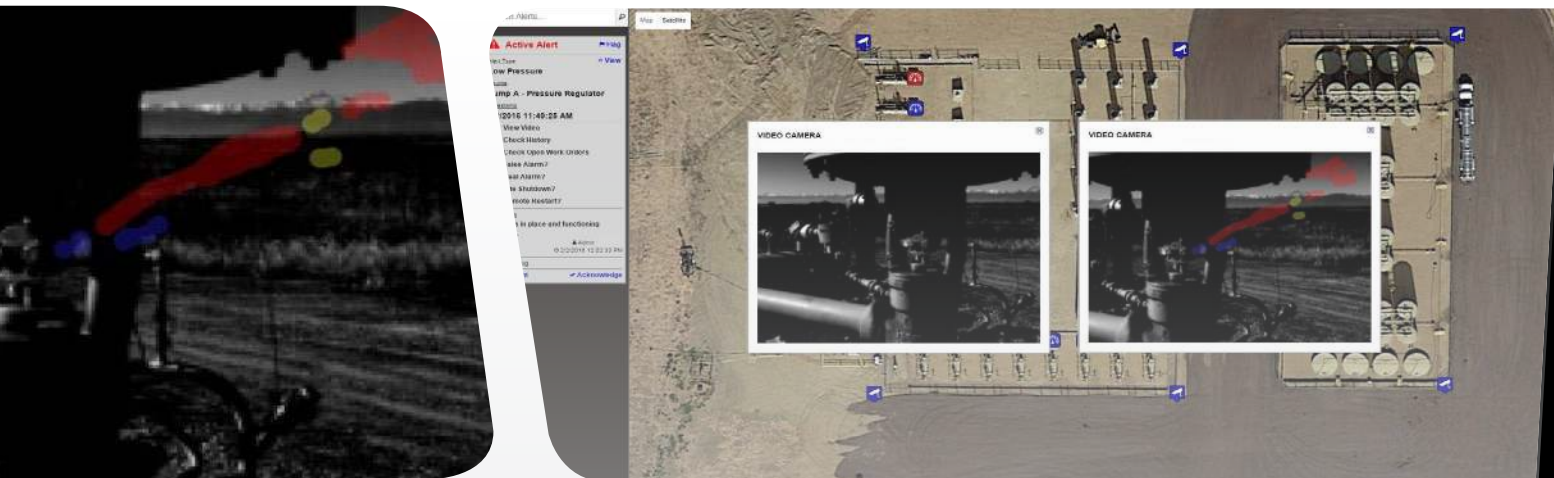


Automated Hydrocarbon Leak Detection

Insight Accelerated - Pixel Velocity's Continuous Gas Leak Detection System



Maintaining continuous business operations is vital to productivity and profitability. Pixel Velocity's **Leak Detection System** combines an optical gas imaging sensor with leak detection algorithms to automatically detect, visualize, and pinpoint gas leaks that are invisible to the naked eye. With our leak detection system, it is easy to continuously scan installations that are in remote areas or in zones that are difficult to access.

Pixel Velocity's gas leak detection sensors are available in both a fixed and a PTZ solution and can operate in hazardous areas when enclosed in the optional Class 1 Division 2 housing.

Pixel Velocity's versatile software solutions integrated with intelligent edge sensors and industrial control systems (i.e., SCADA) automatically and continuously monitor complex operations and operating environments. Our smart systems alert to potential issues before they become costly events.

Our Leak Detection System monitors asset performance in real time to detect event precursors and reduce costly manpower-based operations. This provides an attractive ROI while enhancing operational efficiency. This technologically advanced, automated sensor system creates these important benefits:

- **Safety and Compliance** - Marked improvement in safety with the end of reliance on manual leak detection as operators can remotely view a site or alert before dispatching personnel in potentially unsafe conditions
- **Shorten Response cycles:** Leaks and emergency shut-downs will be reduced via early alerting and visual awareness of incidents as they arise
- **Cost Effective** - We provide a cost effective monthly services model

Ensure Business Continuity by Minimizing Disruptions

To deliver operational continuity, our leak detection system automatically pinpoints potentially dangerous hydrocarbon leaks. Integrated with our Event Velocity platform, anomalous events, operational malfunctions, and automated gas leak detection alert personnel automatically and immediately. The speed of detection supports rapid and accurate analysis resulting in proactive leak repair that can avoid disruption and costly shutdowns. Key personnel are immediately contacted about intentional, accidental, and natural events. Coordinated system alerts improve mitigation response time.

Detect Gases Quickly and Accurately with Pixel Velocity

Pixel Velocity's real-time, multi-site intelligent monitoring system helps manage and safeguard against operational disruptions caused by undetected gas leaks.

Ben Benzene	But Butane	Eth Ethane	Etha Ethanol	Ethy Ethy-benzene	Ethl Ethylene	Hpe Heptane	Hex Hexane	Iso Isoprene	Met Methane
Meth Methanol	MEK Methyl Ethyl Ketone	Mib MIBK	M-xy M-xylene	Oct Octane	Pen Pentane	1-pe 1-pentene	Pro Propane	Prop Propylene	Tou Toulene

Improve Operations through Continuous Leak Detection

With automated analytics and continuous coverage of assets, leaks are detected as they occur, not hours or days later. Benefits of continuous monitoring include:

- Leaks can be corrected immediately
- Response personnel do not face unknown health and safety risks
- Enhanced safety at local, regional and enterprise levels
- Mitigate public, regulatory and safety concerns
- Safer operating conditions across new and aging infrastructure
- Correlation of detection events into patterns to help operators and response teams prevent disruption in operations

TECHNICAL SPECIFICATIONS

Imaging and Optical Data

- IR Resolution - 320 x 240 pixels
- Thermal Sensitivity/NETD - <15 mK @ +30°C (+86°F)
- Field of View (FOV) - 24° x 18° (23 mm); 14.5° x 10.8° (38 mm)
- Minimum Focus Distance - 0.3 m (1.0 ft.) for 23 mm lens; 0.5 m (1.64 ft.) for 38 mm lens
- F-number - 1.5
- Focus - Automatic using SDK, or manual
- Zoom - 1-8x continuous, digital zoom
- Digital Image Enhancement - Noise reduction filter, High Sensitivity Mode (HSM)

Detector Data

- Detector Type - Focal Plane Array, Cooled InSb
- Spectral Range - 3.2-3.4 µm

Power system

- DC operation -10-28 V DC, polarity protected
- Start-up time -Typically 7 min. @ 25°C (+77°F)

Environmental data

- Operating temperature range -20°C to +50°C (-4°F to +122°F)
- Storage temperature range -30°C to +60°C (-22°F to +140°F)
- Humidity (operating and storage) -IEC 68-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) (2 cycl)
- Directives -Low voltage directive: 2006/95/EC, EMC: 2004/108/EC, RoHS: 2002/95/EC, WEEE: 2002/96/EC
- EMC - EN61000-6-4 (Emission)/EN61000-6-2 (Immunity) / FCC 47 CFR Part 15 class A (Emission)/ EN 61 000-4-8, L5
- Shock - 25 g (IEC 60068-2-27)
- Vibration - 2 g (IEC 60068-2-6)

Physical data

- Weight -1.4 kg (3.1 lb.), incl. 14.5° lens
- Cameras size, incl. lens (L x W x H) 242x80x105mm



Contact Sales at **734-369-5048** or visit us at www.pixel-velocity.com to learn more.