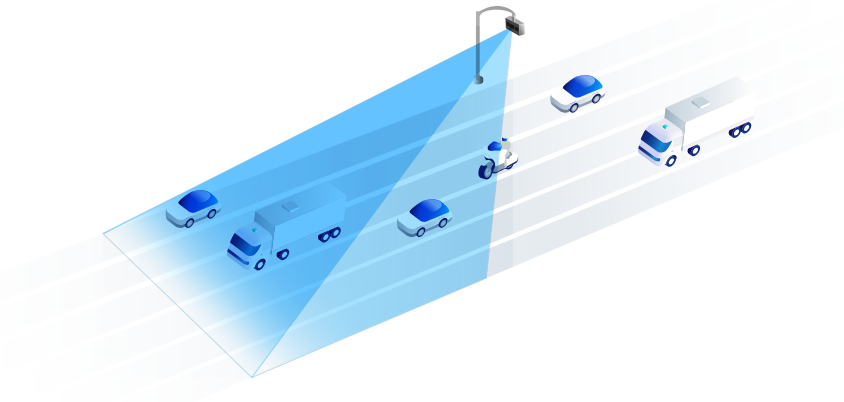




Software-Defined Lidar Solution for Automated Incident Detection

Automated Incident Detection (AID) systems for highway, bridge and tunnel monitoring considerably reduces response and clearing times, as well as road congestion - improving overall safety and efficiency. However, current technologies, such as cameras, radars, and loops, have significant limitations. Cameras and radars do not have the versatility to adapt to changing traffic and environmental conditions. Therefore, they are not equipped to provide the highly accurate data needed to detect traffic disruptions or incidents in real time. To put it simply: successful operation of AID applications cannot rely on legacy sensors.











AEye's 4Sight™ M Addresses Perception Sensor Challenges

4Sight™ M is a software-defined lidar sensor that leverages AEye's Intelligent Sensing Platform to enable perception to better locate, identify and track objects over time. It is specifically designed to complement cameras, radars, and loops in existing AID applications, dramatically improving data collection speed and quality.

- ✓ **Enables** faster, more accurate and reliable perception up to 350m
- ✓ **Performs** in all lighting, weather, and environmental conditions
- ✓ **Extends** sensing capabilities of existing AID applications - improving overall safety
- ✓ **Provides** better, more accurate data to drive decisions for highway, bridge, and tunnel monitoring

AEye's 4Sight™ for Automated Incident Detection

The 4Sight™ perception engine provides accurate, high-quality road and traffic data in real time to support a diverse range of Automated Incident Detection (AID) applications.

 Wrong way detection	 Objects on roadway	 Road congestion and occupancy level	 Vehicle type classification
 Stopped vehicles	 Pedestrians/bicycles on roadway	 Vehicles under speed and overspeed	 Up to 350m per sensor

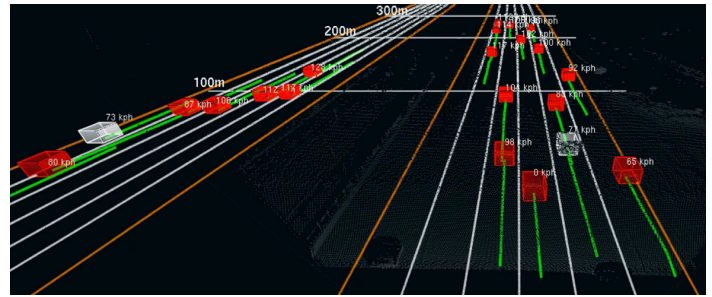
Unique Features

- ✓ Library of unique performance modes specifically designed and optimized for any AID application
- ✓ Up to four returns to greatly improve data collection in adverse weather and all environmental conditions
- ✓ Highest depth information data quality to improve perception speed and accuracy
- ✓ Ultra-long-range detection optimized for highway, bridge, and tunnel monitoring

Optimized for Automated Incident Detection

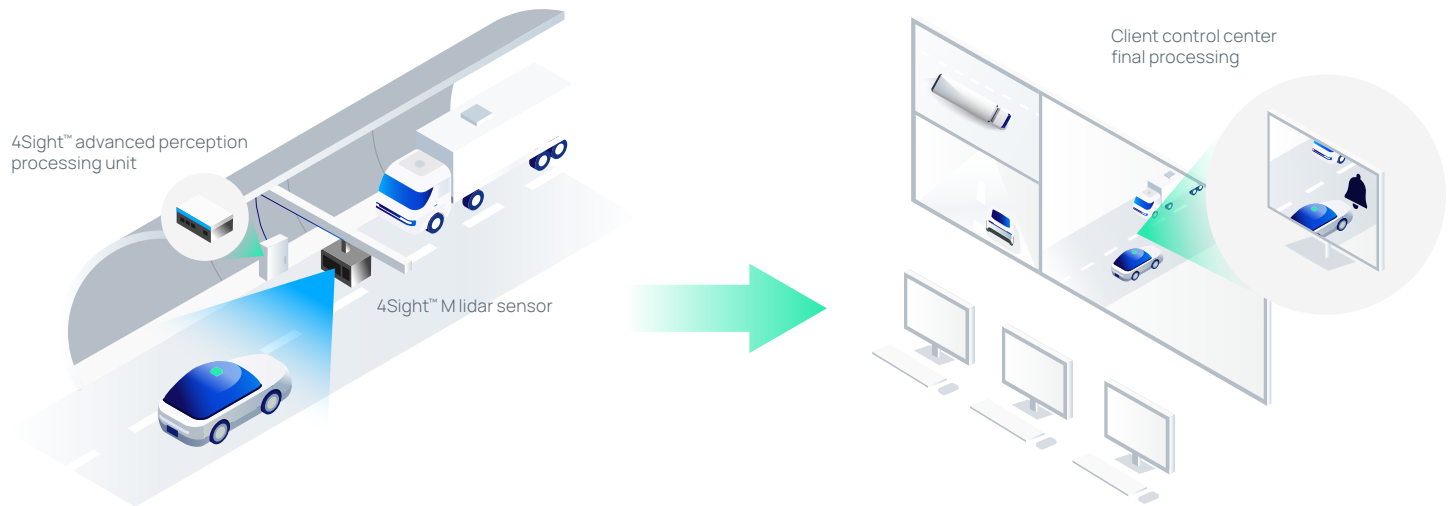
AEye's 4Sight™ perception solution defines the future of Automated Incident Detection performance.

- ✓ **Easy to use and deploy** – Easy to operate, low maintenance cost, simple installation, and commissioning.
- ✓ **Avoid development uncertainty** – Software-defined lidar sensor optimized for AID application needs.
- ✓ **Ultra-long-range performance** – The most advanced sensor technology to scale down existing sensing solutions.
- ✓ **Flexible integration** – High versatility regarding sensor height, pitch angle, number of lanes, traffic density and type of data to extract.



4Sight™ M + perception monitoring 12 lanes of highway up to 300m

System Architecture



4Sight™ M Key Specifications (AID)

- Detection range: 20m – 350m
- Angular resolution: 0.1° x 0.1° (H&V)
- Field of view: 60° x 30° (H&V)
- Pre-configured frame rate: 10 / 20 FPS
- Certification: IP66K + IP67, IEC 60825-1
- Operating Temperature: -20°C to 65°C

Note: Specifications are configuration dependent. The AEye 4Sight™ M performance mode specifications shown here are for AID applications only. For different applications, the sensor will have different specifications. For more information, please see the 4Sight™ M sensor datasheet.

Interfaces

- 4Sight™ M Lidar:**
Ethernet connection utilizing UDP packets.
- 4Sight™ Perception Unit:**
Serial connection utilizing SDLC protocol and RJ45
Ethernet connection utilizing NTCIP protocol.

Mechanical and Electrical Specifications

- Power consumption: 40W (60W with perception unit) @25°C
- Operating voltage: 12V-34V
- Storing temperature: -40°C to 85°C
- Dimension: 7.5cm x 17.4cm x 34.5cm
- Weight: 3.4Kg

*Deployed separately from 4Sight™ M