

# AutoSense 9390



OSI LaserScan's new **AS9390** laser scanner is designed primarily for **vehicle detection** and **enforcement camera triggering**. The new scanner is developed taking into account the specific needs of the MultiLane toll system integrators and is based on OSI LaserScan's patented AutoSense scanning technology.

The **AS 9390** is designed to be mounted overhead in order to provide **vehicle detection**, and **enforcement camera triggering** over several lanes of traffic.

The **AS 9390** operates by emitting a laser field beneath the sensor to scan both the roadway and the vehicles passing below the laser field. The **AS9390 scan rate** is **120 scans per second**, higher than other competing products. The **AS9390** scanner is the ideal product for vehicle detection and enforcement camera triggering and features several unique features such as:

- Pixels that line up perfectly across the scan line,
- High scan rate (120 scans per second), and
- Built-in humidity sensor.

The product is designed to meet all current and known future regulatory requirements in main markets and meets formal requirements to **ROHS compliance**, **electromagnetic emission compliance**, **electrical safety compliance** and compliance to **class 1 eye safety** standards.

AS 9390



Front View



Perspective View



Rear View

## AutoSense technology

The highly dynamic toll operation environment continues to demand **very precise data collection** systems which are flexible, upgradable, and able to work in tandem with legacy elements as well. With millions in revenue on the line every day, **AutoSense** delivers the level of precision and functionality you require.

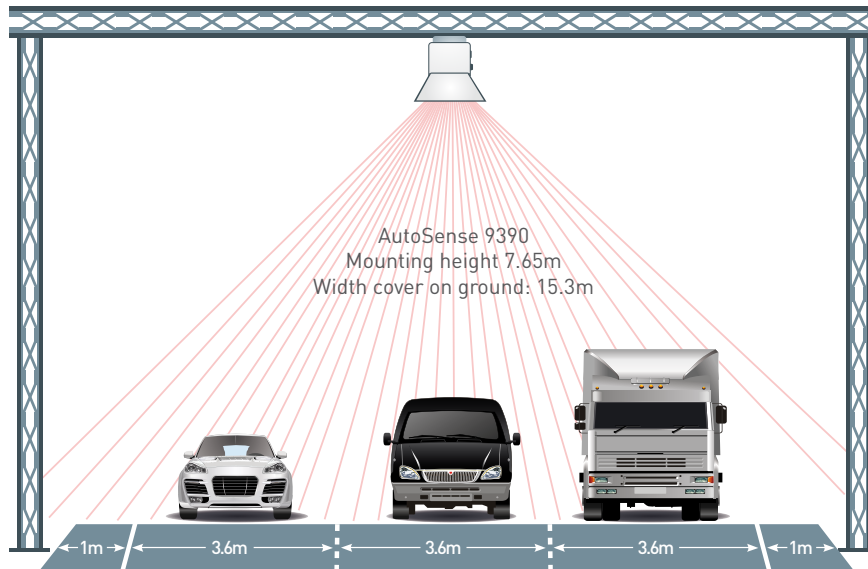
**AutoSense** products are developed to provide a highly sophisticated, noninvasive solution to track and analyze traffic across a wide range of applications, including toll collection, traffic flow analysis, bridge/tunnel clearance verification, as well as traffic control and surveillance.

**AutoSense** products are also commonly used as highly accurate trigger sensors for enforcement cameras.

Concessionaires that employ **AutoSense** have realized substantially lower life cycle costs when compared to other technologies, due to ease of maintenance, extreme reliability and all-weather performance. **AutoSense** products include transparent window heating technology to ensure reliable operation in environments down to **-40 degrees**.

**AutoSense** products provide extremely accurate information via patented, eye-safe laser scanning technology that continuously self-tests to feature **vehicle detection accuracy exceeding 99%**.

**AutoSense technology** features unique **continuous line pixel technology** that allows accurate separation of vehicles travelling side by side.



## Specifications

PERFORMANCE	AS9390	
Use, MultiLane	MultiLane – Open Road to achieve vehicle detection, separation and camera trigger alone or when integrated with additional AS9390s	
Typical mounting location	Overhead: 18 Ft – 30 Ft	Overhead: 5.5 m – 9.2 m
Field of View	90 degrees	
Angular resolution	1 degree	
Scan rate	120 scans per second	
Vehicle Detection Accuracy	>99% (ORT)	
Vehicle Height Accuracy	± 1 inch	± 25 mm
<b>Physical</b>		
Power Input	Clean, Regulated 24VDC	
Power Consumption	35 W nominal, 240 W maximum	
Dimensions (L x W x H)	11 x 9.5 x 4.5 inches	279 x 241 x 114 mm
Weight	12 pounds	5.4 kg
<b>DATA INTERFACE</b>		
RS-422	19.2, 38.4, 57.6 Kbaud (User selectable) 8 data bits, 1 start, 1 stop, no parity	
Ethernet	10/100base-T	
<b>ENVIRONMENTAL</b>		
Temperature (with sun loading)	-40 to +160 degrees F	-40 to +70 degrees C
Thermal Shock	60 degrees F/minute	15.5 degrees C/minute
Humidity	0 to 100% condensing	
Rain	0.8 inches/hour operating, 4 inches/hour maximum	20 mm/hour operating, 100 mm/hour maximum
Ingress Protection	IP 67	
Snow Loading	20 lb./ft <sup>2</sup>	98 kg/m <sup>2</sup>
Wind Loading	43 knots steady, 73 knots gusts	22 m/s steady, 37 m/s gusts
Reliability (MTBF)	>50,000 hours	
Maintainability	15 minutes (Mean Time to Replace)	

## Standards and Certifications

• IEC 60825-1 2007 (Class 1 Laser product) • UL 60950-1:2007 ED:2 • IEC 60950-1:2005 ED:2 • CAN/CSA C22.2 • 21 CFR 1040.10 & 1040.11

This product is manufactured in a facility certified to • AS9100B / ISO 9001:2008 • US Patent 5,546,188

### OSI LaserScan

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