

# AutoSense 618



Like its predecessor, the AutoSense II, the **AS 618** is designed to be mounted overhead in order to provide tolling and traffic management agencies with vehicle detection, separation, speed, and classification information. In addition, the AS 618 can be configured to trigger enforcement cameras.

The AS 618 operates by emitting two laser fields beneath the sensor to scan both the roadway and the vehicles passing through the eye-safe laser. The system can be configured for open road or toll barrier applications and is sensitive enough to detect tow bars and motorcycles. Classification is determined by the vehicle's dimensional characteristics as well as detection of tow bars.

#### Single Lane / Multi Lane – Overhead Vehicle Detection, Separation and Classification

The AS 618 is an ideal replacement for both light curtains and magnetic loops in barrier lane applications. In addition, when deployed in open road applications, the AS 618 provides full vehicle classification information, either independently or in concert with other sensors, in order to ensure appropriate application of toll rates.

#### Accessories



**Mounting Kit<sup>1</sup>**  
19471022-9



**Power Cable<sup>2,3</sup>**  
9291011-9-XYZ  
(for AS615-UDH)



**Power Cable<sup>2,4</sup>**  
9291111-9-XYZ  
(for AS615-EDH)



**Comms. Cable<sup>2,5</sup>**  
9291010-9



**Surge Suppressor<sup>6</sup>**  
81000143-9



**Beam Finder**  
9301000-9

#### Notes:

1. The Mounting Kit consists of a Mounting Plate (19476022-1) and Mounting Hardware (19471023-9)
2. Cables are offered in lengths of 50 ft, 100 ft, 125 ft, 150 ft and 200 ft. Part no. for e.g. 150 ft Power Cable becomes: 9291011-9-150
3. This cable is equipped with the PW06P12-3S connector
4. This cable is equipped with the PW06P12-3SY connector
5. This cable is equipped with the PW06P12-10S connector
6. Replacement Sponge for the Surge Suppressor is part no. 22NX

## 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.

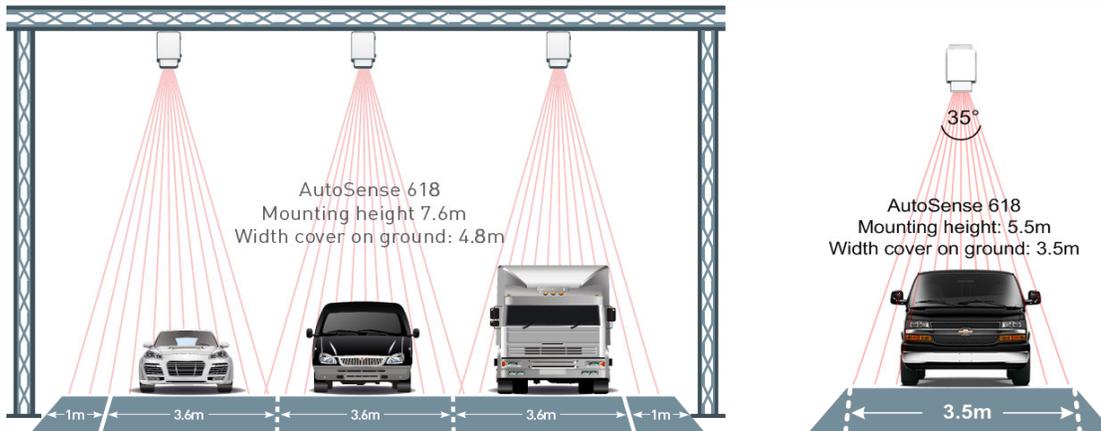
**AutoSense products** are developed to provide a highly sophisticated, noninvasive solution to track and analyze traffic across a wide range of applications, including toll collection, traffic flow analysis, bridge/tunnel clearance verification, weight-in motion, as well as traffic control and surveillance.

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 with advanced Multi-Pulse™ Logic.

**Today, more than 5000 units are in the field**, providing 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 measurement of vehicle volumetric dimensions, vehicle speed and direction of travel.



## Specifications

PERFORMANCE	AS618-UDH (120V)	AS618-EDH (240V)
Use, Single Lane	Single Lane - Open Road or Toll Barrier to achieve vehicle detection, separation, classification and camera trigger	
Use, MultiLane	MultiLane - Open Road to achieve vehicle detection, separation, classification and camera trigger when integrated with additional AS618's	
Typical mounting location	Overhead: 19.5 Ft - 25 Ft	Overhead: 5.9m - 7.6m
Field of View	35 degrees	35 degrees
Angular resolution	1 degree	1 degree
Scan rate	360 scans per second per beam	360 scans per second per beam
Vehicle Classification Categories	11 standard classes, plus 20 user-definable categories	11 standard classes, plus 20 user-definable categories
Vehicle Detection Accuracy	>99% [ORT]	>99% [ORT]
Vehicle Classification Accuracy	>95% (into 6 vehicle classes)	>95% (into 6 vehicle classes)
Vehicle Speed Accuracy	± 10%	± 10%
Vehicle Length Accuracy	± 10%	± 10%
Vehicle Height Accuracy	± 3 inches	± 76 mm
<b>PHYSICAL</b>		
Power Input	90-140 V, 50-60 Hz, 1.5 A	200-264 V, 50-60 Hz, 1.0 A
Power Consumption	35 W nominal, 157W maximum	35 W nominal, 157W maximum
Dimensions (L x W x H)	17.9 x 9.6 x 6.1 inches	455 x 244 x 155 mm
Weight	20.5 pounds	9.3 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	
<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	0 to 100% condensing
Rain	0.8 inches/hour operating, 4 inches/hour maximum	20 mm/hour operating, 100 mm/hour maximum
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)	>35,000 hours	>35,000 hours
Maintainability	15 minutes (Mean Time to Replace)	15 minutes (Mean Time to Replace)
<b>ACCESSORIES</b>		
Mounting Kit	19471022-9	19471022-9
Power Cable	9291011-9 (50, 100, 125, 150 or 200 ft)	9291111-9 (15, 30, 38, 45 or 60 m)
Communications Cable	9291010-9 (50, 100, 125, 150 or 200 ft)	9291010-9 (15, 30, 38, 45 or 60 m)
Surge Suppressor RS-422	81000143-9	81000143-9
Beam Finder	9301000-9	9301000-9

## 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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