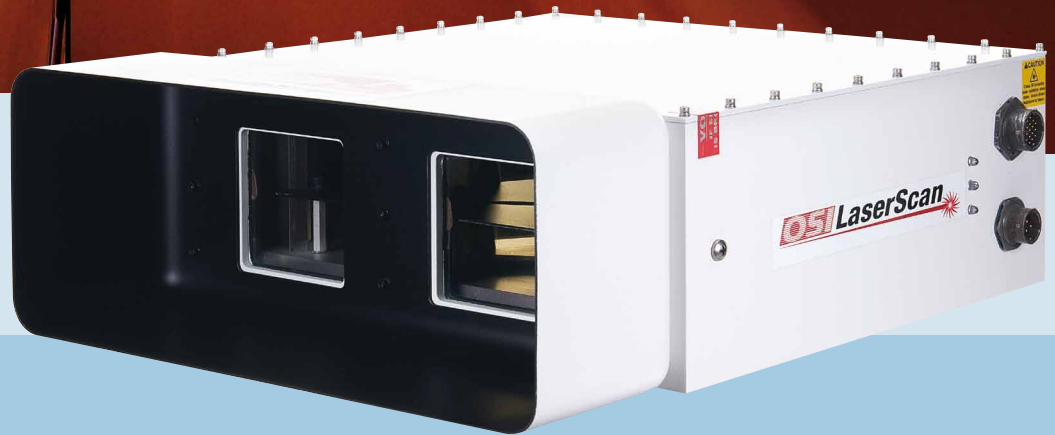


# AutoSense 825



The **AS 825** is designed to be mounted overhead in order to provide tolling and traffic management agencies with **vehicle detection, separation, speed, and classification** information over several lanes of traffic. In addition, the **AS 825** can be configured to **trigger enforcement cameras**.

The **AS 825** operates by emitting two laser fields beneath the sensor to scan both the roadway and the vehicles passing through the **eye-safe laser**. The **AS825 scan rate is 360 scans per second**. The **AS825** is normally used for **open road toll** 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.

#### Multi Lane – Overhead Vehicle Detection, Separation, Classification and Camera triggering

The **AS 825** provides comprehensive vehicle classification information, which ensures appropriate application of toll rates. The device is designed to identify background noise due to poor weather conditions and automatically change from its **normal operating mode** to a **bad weather mode** when conditions deteriorate.

#### Accessories



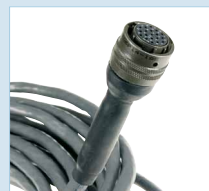
**Mounting Kit<sup>1</sup>**  
19471122-9



**Power Cable<sup>2,3</sup>**  
9291011-9-XYZ  
(for AS825-UDH)



**Power Cable<sup>2,4</sup>**  
9291111-9-XYZ  
(for AS825-EDH)



**Comms. Cable<sup>2,5</sup>**  
9291009-9



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



**Beam Finder**  
9301000-9

#### Notes:

1. The Mounting Kit consists of a Mounting Plate [19476122-1] 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 PT06P14-19S 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.

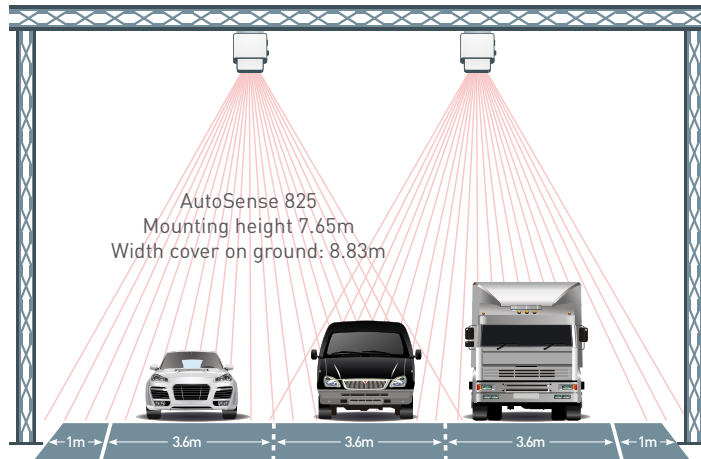
**AutoSense** products are developed to provide a highly sophisticated, noninvasive solution to track and analyze traffic across a wide range of applications, including toll collection, traffic flow analysis, bridge/tunnel clearance verification, as well as traffic control and surveillance.

**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** and automatic switching between normal operation and bad weather mode operation. 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 measurement of vehicle volumetric dimensions, vehicle speed and direction of travel.



## Specifications

PERFORMANCE	AS825-UDH (120V)	AS825-EDH (240V)
<b>Use, MultiLane</b>	MultiLane – Open Road to achieve vehicle detection, separation, classification and camera trigger alone or when integrated with additional AS825's	
<b>Typical mounting location</b>	Overhead: 25 Ft – 30 Ft	Overhead: 7.6m – 9.2m
<b>Field of View</b>	60 degrees	60 degrees
<b>Angular resolution</b>	0.67 degree	0.67 degree
<b>Scan rate</b>	360 scans per second per beam	360 scans per second per beam
<b>Vehicle Classification Categories</b>	11 standard classes, plus 20 user-definable categories	11 standard classes, plus 20 user-definable categories
<b>Vehicle Detection Accuracy</b>	>99% (ORT)	>99% (ORT)
<b>Vehicle Classification Accuracy</b>	>95% (into 6 vehicle classes)	>95% (into 6 vehicle classes)
<b>Vehicle Speed Accuracy</b>	± 10%	± 10%
<b>Vehicle Length Accuracy</b>	± 10%	± 10%
<b>Vehicle Height Accuracy</b>	± 3 inches	± 76 mm
<b>PHYSICAL</b>		
<b>Power Input</b>	90-140 V, 50-60 Hz, 1.5 A	200-264 V, 50-60 Hz, 1.0 A
<b>Power Consumption</b>	40 W nominal, 160 W maximum	40 W nominal, 160 W maximum
<b>Dimensions (L x W x H)</b>	16 x 13.5 x 5 inches	406 x 343 x 127 mm
<b>Weight</b>	29 pounds	13.1 kg
<b>DATA INTERFACE</b>		
<b>RS-422</b>	19.2, 38.4, 57.6 Kbaud (User selectable) 8 data bits, 1 start, 1 stop, no parity	
<b>ENVIRONMENTAL</b>		
<b>Temperature (with sun loading)</b>	-40 to +160 degrees F	-40 to +70 degrees C
<b>Thermal Shock</b>	60 degrees F/minute	15.5 degrees C/minute
<b>Humidity</b>	0 to 100% condensing	0 to 100% condensing
<b>Rain</b>	0.8 inches/hour operating, 4 inches/hour maximum	20 mm/hour operating, 100 mm/hour maximum
<b>Snow Loading</b>	20 lb./ft <sup>2</sup>	98 kg/m <sup>2</sup>
<b>Wind Loading</b>	43 knots steady, 73 knots gusts	22 m/s steady, 37 m/s gusts
<b>Reliability (MTBF)</b>	>35,000 hours	>35,000 hours
<b>Maintainability</b>	15 minutes (Mean Time to Replace)	15 minutes (Mean Time to Replace)
<b>ACCESSORIES</b>		
<b>Mounting Kit</b>	19476122-9	19476122-9
<b>Power Cable</b>	9291011-9 (50, 100, 125, 150 or 200 ft)	9291111-9 (15, 30, 38, 45 or 60 m)
<b>Communications Cable</b>	9291009-9 (50, 100, 125, 150 or 200 ft)	9291009-9 (15, 30, 38, 45 or 60 m)
<b>Surge Suppressor (RS-422)</b>	81000143-9	81000143-9
<b>Beam Finder</b>	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

12525 Chadron Avenue, Hawthorne, 90250, CA  
Tel : +310-978-0516 Fax : +310-644-1727

Sales : sales@osilaserscan.com  
Customer Service : customerservice@osilaserscan.com

