







Global Solutions Elevate the safety and efficiency of your city

Precision decisions.

Image Sensing Systems

Image Sensing Systems, Inc. is a provider of software-based detection solutions for the Intelligent Transportion Systems (ITS) sector. We have sold more than 150,000 units of our industry leading Autoscope® video detection and RTMS® radar detection 60 countries worldwide. We give you the above-ground detection solutions you need to achive the safety, security and efficiency your city or highway requires.

Global Presence

As part of its global strategy, ISS has established a presence around the world.

With offices in Toronto, Canada, Image Sensing Systems Canada designs RTMS products and markets the product line throughout North America directly and through regional distributors.

In Europe, subsidiary Image Sensing Systems has offices in Germany, Romania and Spain and markets and supports Autoscope and RTMS systems directly and through regional distributors.



Autoscope® Video Detection

Autoscope video detection captures video images of traffic and analyzes the information using sophisticated algorithms for real-time traffic management. Whether for junction control, traffic data collection or advanced detection, Autoscope products are improving traffic information, systems performance and cost efficiencies - ultimately, helping traffic managers improve safety, reduce air pollution and mitigate traffic congestion.

RTMS[®] Radar Detection

The RTMS (Remote Traffic Microwave Sensor) is a broad-application radar technology which detects presence and measures traffic parameters across many lanes. Whether for vehicle detection, data collection or queue detection, RTMS solutions are improving traveler information and enhancing freeway traffic management systems.

Traffic Management Detection Solutions Improving the free flow of the road network

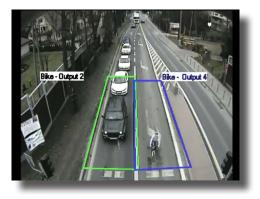


Urban Traffic Control

Urban traffic control is an ever-growing challenge with vehicle ownership and congestion growing worldwide. Autoscope video detection systems meet the challenge, providing highly accurate vehicle detection necessary to keep traffic running smoothly, maximizing the capacity of existing roadways, and saving the time and expense of adding lanes. Video sensors monitor traffic flow transmitting this information to the controller to adjust signal timing at the junction. Such information minimizes traffic congestion and improves roadway safety.

APPLICATIONS

- Travel time monitoring system
- Detection of moving violations
- Turning movements
- Stopline and approach detection
- Advance detection
- Queue detection
- Bicycle detection and differentiation



Bridges

Fast detection of vehicles is essential to maintain safe and smooth passage for all. With a significant number of installations worldwide, drivers benefit from our vast experience in detection and safety systems for bridges. Our aboveground detection sensors allow traffic professionals to keep careful watch over all traffic on bridges. This high attention to detail allows you to be aware of any issues so they can be cleared quickly and safely. Furthermore, the alarms can be customized based on the traffic patterns on your bridge.

APPLICATIONS

- Detection of moving violations
- Flow monitoring
- Vehicle class detection
- Bicycle detection and differentiation
- Stopped vehicles
- Level of service

Solutions



Highway

Highways play an ever increasing role in the transportation of people and goods all around the world. RTMS radar systems accurately measure information such as traffic speed and volumes to monitor current congestion levels and forecast journey times. Traffic management systems use this traffic data in real-time to supervise traffic flows and monitor road capacity usage for long-term planning. Traffic information is also displayed on variable message signs and on websites - thereby assisting motorist with current, accurate and helpful information.

APPLICATIONS

- Travel time monitoring system
- Congestion detection
- Flow monitoring
- Vehicle class detection
- Reporting
- Traffic data collection
- Road work safety





In today's world, you have to expect the unexpected. With an array of Autoscope systems available, we provide you the ability to enhance safety and security. Ensuring safety for roadways, bridges and junctions has been a guiding principle of Autoscope and RTMS for more than 20 years. And now more than ever, Autoscope technology is performing crucial functions at locations that require high levels of specialized detection.

APPLICATIONS

- Detecting stopped vehicles in prohibited areas
- Security at high-profile roadways
- Work zone safety
- Railroad crossings
- Bus lane enforcement





Autoscope Above-Ground Detection The global leader in video

detection



Autoscope® Pn-520

Idealy suited for roadways, bridges and junction applications, this Autoscope video detection solution delivers high performance vehicle detection for junction control and traffic data collection. With an array of capabilities, the Autoscope Pn-520 detector card is a cost-effective and versatile solution for transportation control and management.

KEY FEATURES

- Single (1) camera video processor
- Dual-core processor for advanced image processing
- MPEG-4 digital streaming video output
- Cyclescope bicycle detection and differentiation
- Detector card contains 32 open collector outputs
- IP addressable
- Field-proven accuracy and reliability

Autoscope® Pn-500

Traffic managers will benefit from this streamlined and costeffective solution. This Autoscope video detection system delivers a complete vehicle detection solution for junction control and traffic counting. The combination of the smartly designed Sn-500 camera and the robust Pn-500 detector card provides a high performance solution.

- Dual (2) camera video processor
- H.264 digital streaming video output
- Cyclescope bicycle detection and differentiation
- Detector card contains 16 open collector outputs
- Low power consumption
- Easy to install, configure and maintain



Products



Autoscope® Sn-510

The Autoscope Sn-510 video detection solution provides vehicle presence detection for junction control. The DIN rail processing card easily integrates into traffic cabinets to provide stopline and approach vehicle detection for up to four approaches. Traffic managers will benefit from this easy to install and configure system that offers high performance and couples well with the Sn-500 camera.

KEY FEATURES

- Vehicle presence detection
- Four (4) camera video processor
- Detector card contains 16 open collector outputs
- Low power consumption
- Easily integrates into controllers
- Easy to install, configure and maintain



Autoscope[®] Sn-500

The Autoscope Sn-500 video detection solution is easy to install, configure and maintain. The detector card slides easily into a rack to provide accurate, reliabile stopline and approach vehicle detection for three approaches. Traffic managers will benefit from this high performance technology that elevates the safety and efficiency of the city.

- Vehicle presence detection
- Three (3) camera video processor
- Detector card contains 16 open collector outputs
- Low power consumption
- Cost-effective solution for junction control
- Field proven accuracy and reliability





Autoscope Above-Ground Detection

The global leader in video detection



Autoscope® Pn-530

The Autoscope Pn-530 is a multi-camera video detection solution for various transportation applications. The system delivers field proven detection and traffic data collection to promote safe and efficient traffic flow on roadways worldwide. From stopped vehicle detection on roadways to counting vehicles for data collection, the Autoscope Pn-530 system is a comprehensive solution for transportation projects.

KEY FEATURES

- Vehicle detection and data collection
- Up to sixteen (16) modular video input channels
- Dual-core processor for advanced image processing
- MPEG-4 digital streaming video output
- EasyLink broadband communications
- Flexible desgin meets a variety of detection objectives



Autoscope[®] AIS-IV Camera

The AIS-IV Camera[™] is a high-resolution video traffic camera for the Autoscope machine vision processors. The AIS Camera has a built-in zoom lens and color imager with high sensitivity to ensure accurate vehicle detection at night. It minimizes streaking and blooming from bright light sources that could adversely affect detection performance.

- Designed for wide area machine vision vehicle detection
- 22x remote controlled zoom lens & color imager
- No streaking or blooming from bright light sources
- High sensitivity for accurate detection at low light levels
- Easy mounting, rugged, environmentally-sealed enclosure
- Advanced faceplate heater
- Low power consumption





Products

Autoscope[®] Pn-500 Camera

The Pn-500 Camera is a rugged, lightweight, compact camera, designed for the rigors of the traffic environment. The Pn-500 camera offers improved precision to short- and long-range applications by way of zoom/variable lens setting control. The Pn-500 has a color imager with high sensitivity to ensure accurate vehicle detection.

KEY FEATURES

- Designed for wide area machine vision vehicle detection
- CCD-chip based sensor
- Manually controlled zoom/variable lens
- Low power consumption
- Thermostatically controlled heated faceplate
- Rugged, environmentally-sealed enclosure



Autoscope[®] Sn-500 Camera

The Autoscope® Sn-500 Camera is a smartly designed and compact camera. The Sn-500 delivers value in a compact package to view traffic at the junction. This above-ground detection is a cost-effective solution that offers non-intrusive fast setup, minimal maintenance and high performance.

- Designed for machine vision vehicle detection
- CMOS-chip based sensor
- Short- or Long-range fixed lenses
- Low power consumption
- Cost-effective solution for presence detection and junction control
- Rugged, environmentally-sealed enclosure





RTMS Above-Ground Detection The global leader in radar detection



RTMS[®] Sx-300

The non-intrusive radar-based RTMS® Sx-300 is an advanced sensor for the detection and measurement of traffic on roadways. It is all-weather accurate and virtually maintenance-free. Best of all, Sx-300 is renowned for long-term, worry-free reliability.

The RTMS Sx-300 is a small, roadside pole-mounted radar operating in the microwave band. Simultaneously, the sensor provides per-lane presence as well as volume, occupancy, speed and classification information in up to 12 user-defined detection zones. The Sx-300 combines high-resolution radar and a variety of communications options including wireless solutions all in a single enclosure. This sleek, cabinet-free detection station is simple to integrate into any urban signal control or highway traffic management system.



- Zero Setback capability means most poles will be suitable for installation
- Low power requirement allow continuous operation with a cost-effective solar system
- True-presence: detects stationary and fast moving vehicles; single or dual loop emulation
- Reliable all-weather performance
- Automatic calibration and all-in-one design to minimize setup efforts
- Available with HD camera option providing the user with visual setup confirmation, data capture and verification over a TCP/IP connection
- Internal memory for recording at each station
- Maintains accurate detection on any road surface type (including gravel) as well as on steel bridges during heavy snow, driving rain, strong winds and scorching desert sunlight
- Installation does not require road closures

Products



Metro

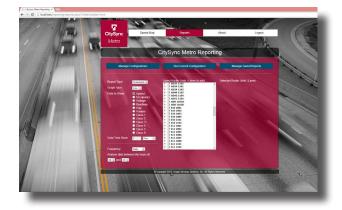
Metro provides real-time traffic measurement and data collection over a wide area. An enterprise-level system capable of monitoring traffic in hundreds of locations.

Metro supports multiple devices providing an all in one solution for traffic management. These sensors feed real-time data into the system and provide transportation professionals with more precise and accurate information. Metro's reporting feature generates useful analytics, graphs and tables to give traffic management professionals a clear precise picture of their transportation infrastructure.

The affordable Metro system is not only unparalleled for reliability and accuracy in all weather conditions and for large scale projects, it is also quick to install with no lane closures and no ongoing maintenance required. Suitable for both highway and urban traffic management applications.

- Data collection/storage for accurate measurements of volume, occupancy, classification and speed on 12 separate lanes per station
- A scalable and movable system that expands by adding sensors
- Real-time SQL database stores data and network sensor configuration from hundreds of stations
- TCP/IP communications means a simplified, affordable network
- Simple software for SQL database interface, configuration and diagnosis as well as speed map and travel time information
- Supports multiple sensor types
- Report generation includes data rich analytics









CONTACTS

World Headquarte

500 Spruce Tree Centre 1600 University Avenue West St. Paul, MN 55104 USA Phone: +1.651.603.7700 Fax: +1.651.305.6402 info@imagesensing.com imagesensing.com

Image Sensing Systems

150 Bridgeland Avenue Suite 204 Toronto, ON M6A 1Z5 Canada Phone +1.416.785.9248 Fax +1.416.785.9332

Image Sensing Systems

Unnauer Weg 7a

D-50767 Köln (Cologne) Germany Phone +49.221.30229.141 Fax +49.221.30229.142 koeln@imagesensing.com imagesensing.com

lmage Sensing Systems Romania

Dobrogeanu Gherea Constantin Street 10 – 12, et1, ap1 Sector 1, 013764, Bucharest Romania Phone +4.021.794.55.60 Fax +44.021.794.55.66 issro@imagesensing.com imagesensing.com

Image Sensing Systems Spain

Calle Manila 39 3.3 Barcelona Spain 08034 sales@imagesensing.com



Precision decisions.

imagesensing.com

©2015 Image Sensing Systems, Inc. Part Number 2175 Rev 151109