Sensors for Traffic Detection

What, exactly, is Autoscope Vision?

Autoscope Vision is an integrated high-definition (HD) camera-processor sensor solution that delivers the highest levels of accuracy and performance for stop bar vehicle detection, bicycle detection and differentiation, advance vehicle detection, traffic data collection, and HD video surveillance.

Why do agencies use Vision?

Autoscope Vision builds on more than two decades of proven above-ground video detection expertise. Its built-in local WiFi provides quick and simple set up – using the new Supervisor Software - an entire intersection can be programmed in just minutes. Installation and integration is also simple with 3-wires-only.

How does Vision benefit the driving public?

Autoscope Vision provides high performance vehicle detection and bicycle differentiation using state-of-the-art algorithms and a high definition video sensor. It delivers full ITS capabilities for traffic engineers to use in strategically managing their traffic infrastructure. Autoscope Vision helps improve safety, reduce vehicle emissions, and mitigate traffic congestion.
Description

Autoscope Vision is an integrated camera-processor sensor solution that provides high performance stop bar vehicle detection, bicycle detection and differentiation, advance vehicle detection, traffic data collection, and HD video surveillance. It also supports local WiFi and streaming video to mobile computing devices.

Autoscope Vision utilizes an ITO faceplate heater and hydrophilic coated lens to maintain optimal performance during inclement weather while reducing the frequency of cleaning.

Power and communication to Vision sensors is conducted via the Vision Comm Manager™. Vision Comm Manager supports SDLC and wired I/O interface.

Application

Autoscope Vision is capable of simultaneously satisfying multiple transportation management objectives:

- Stop bar vehicle detection
- Bicycle detection and differentiation
- Advance vehicle detection up to 600 feet from Vision sensor
- Traffic data collection
- HD video surveillance

Vision Sensor Specifications

- **Video**
  - HD streaming video, H.264 720p (1280 x 720)
  - 10x optical zoom, 16:9 wide screen aspect ratio

- **Communications**
  - Local view wired 10/100 MB Ethernet Port or WiFi
  - System/WAN via separate wired 1/100 MB Ethernet Port

- **Temperature**
  - -34° C to +60° C (-29° F to 165°F)
  - Meets TS2 standards
  - Relative humidity of 0 to 95%, non-condensing

- **Power**
  - 16W typical, 18W maximum
  - 89 to 265 VAC
  - 60/50 Hz
  - Indium Titanium Oxide (ITO) and hydrophilic faceplate

- **Dimensions**
  - H x W x L (with sunshield and bracket): 7” x 5.5” x 22.5” (177.8 mm x 140 mm x 571.5mm)
  - 6.5 lbs (2.95 kg)

- **Regulatory**
  - FCC Part 15, Class A
  - ICES
  - NEMA TS2-2003

- **Warranty**
  - Three-year warranty
  - Extended warranty packages available to six years