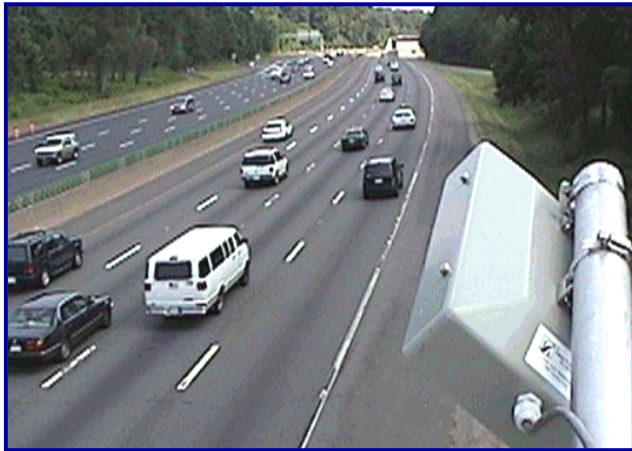




SAS-1 Acoustic Sensor



Small, Low power, Side Mount, Multi-lane Sensor

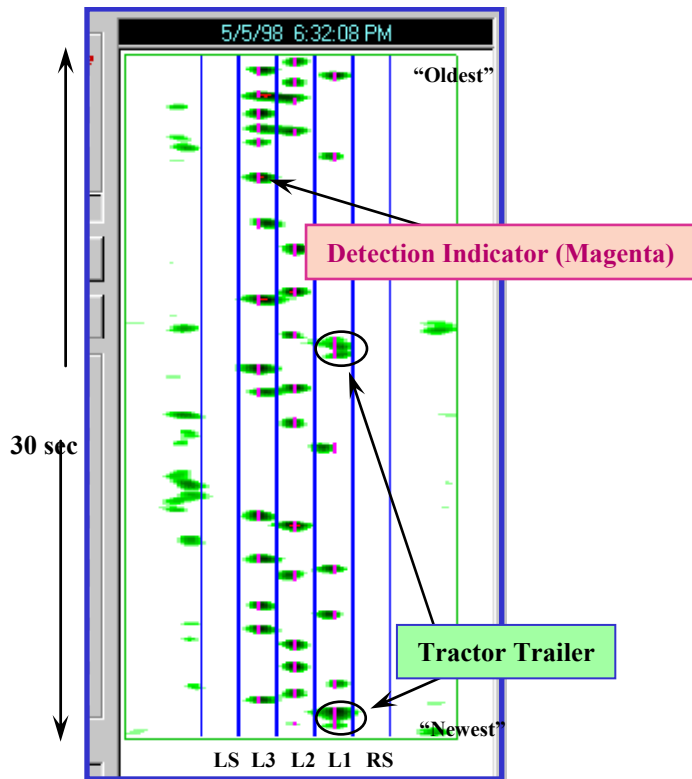
A SAS-1 Acoustic Highway “Image” as shown on SAS Monitor companion software, included with the sensor.

The SAS-1 operates in the adverse environments found on roadside structures. SAS-1 is an easy to use, programmable sensor ready to detect multiple lanes of traffic for real-time operations, or to collect traffic counts with 3 levels of classification.

- Low Power, Multi-Lane Sensor
- Wireless Option Eliminates Home Run Cables
- Easy Installation Eliminates Lane Closures
- Ideal Back-fit for Failed Loops
- Built in Upgrade Path for Vehicle Type Identification
- Wrong Way Detection for Off-Ramp Warning
- Addressable to Support Networking

Advanced signal and spatial processing provides the capability for high resolution multi-lane traffic flow monitoring with no loss of “lane switchers” at the detection zone.

The SAS-1 is quickly and easily installed, with no lane closures needed for the “side-fire” configuration. Low power consumption supports operating entirely from solar power.

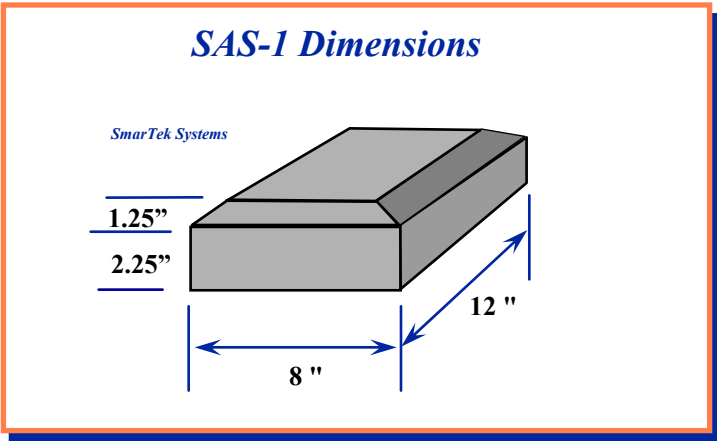


Each “Blob” Shows Position and Strength of Each Vehicle’s Acoustic Intensity:

- Light Green is Weakest
- Dark Green/Red is Strongest



Model SAS-1 Acoustic Sensor



Specifications

Number of Lanes and Message Formats

The SAS-1 can monitor 5 lanes and provides for several different interfaces depending on the communication link and the cabinet controller interface desired. The standard SAS-1 output message provides per lane traffic flow measurements of vehicle volume, lane occupancy, and average speed for a selectable update period (1 to 220 seconds). A bit serial vehicle presence relay message or opto-isolated dry contact vehicle presence relay signals (using the SAS Relay Interface) can be provided.

Measurement Archiving

Up to 60 days depending on size of installed Flash Memory (1, 2, or 4 Mbits).

Signal Interfaces

- 1) RS-422 (Standard) Hard Wired Home Run (up to 2000 feet)
- 2) RS-232 (Optional) Hard Wired Home Run (up to 100 feet)
- 3) Wireless (Optional) Wireless Link (2.4 GHz Spread Spectrum)
- 4) Relay via SAS-RLY cardType 170 Card, TS1, TS2, Terminal Block

Power

- 1) Supply Voltage at the Sensor 8 to 24 VDC
- 2) Required Power Less than 2 Watts

Physical

- 1) Dimensions12 in long x 8 in wide x 3.5 in deep
- 2) Weight (with Bracket) ..Less than 7 lb.
- 3) Material/FinishAluminum/Enamel/Stainless Steel Fasteners
- 4) Mounting Bracket2 inch Diameter Aluminum Tube/Stainless Steel Bands
- 5) Operating Temp.....-20 Deg C to 75 Deg C
- 6) Humidity.....5% to 100%
- 7) Shock.....NEMA TS2-2.1.10
- 8)Vibration.....NEMA TS2-2.1.9

Installation

Mount on roadside structure for coarse mechanical positioning so that the sensor face is pointing toward the center of the lanes to be monitored. After the SAS-1 is mechanically oriented and locked down, the position and size of each detection zone (up to 5) are electronically set using the SAS Monitor and Setup program. All SAS-1 setup parameters are stored in non-volatile memory.

- 1) Height Above Pavement 25 to 40 feet
- 2) Horizontal Distance to First Detection Zone 5 to 30 feet
- 3) Coarse SAS-1 OrientationMechanical
- 4) Precise Detection Zone Position and SizeElectronic