

# TRAFIRADAR



## SAFETY & EFFICIENCY FOR YOUR INTERSECTION

- High detection performance from two proven technologies: video & radar
- Detects at distances up to 600ft, on multiple lanes
- Easy to install and configure
- Compact & cost-effective, above-ground solution
- Real-time visualization of radar objects on the video image
- Remote monitoring
- Low maintenance
- High Mean Time Between Failure (MTBF)

## APPLICATION AREAS

- Stop bar and advance detection
- Traffic adaptive systems
- Dilemma zone protection

THE PERFECT BLEND OF  
VIDEO AND RADAR VEHICLE DETECTION



**TRAFICON** USA  
TRAFFIC VIDEO DETECTION

# One single product for safe and efficient traffic on signalized intersections



## VIDEO AND RADAR IN ONE

The new TRAFIRADAR vehicle presence sensor from detection specialist Traficon is a combination of a video sensor with a Doppler radar, offering the most accurate detection for a wide range of applications. TRAFIRADAR has been designed to improve traffic safety and efficiency at signalized intersections. The system provides vehicle detection information to the traffic light controller for stop bar and advance detection, for traffic adaptive applications and for dilemma zone protection.

## COMPACT SOLUTION

TRAFIRADAR is a compact sensor that can be installed on a vertical pole or horizontal mast arm at the intersection. Video detection is used for vehicle presence detection at the stop bar, while radar detection is used for vehicle data up to 600 ft from the stop bar.

## VISUALIZE THE INVISIBLE

The TRAFIRADAR user interface allows you to visually check your camera images, while at the same time consult radar information as an overlay on the video image. What is normally invisible in traditional radar solutions, now becomes visible with TRAFIRADAR.

## ACCURATE STOP BAR AND ADVANCE DETECTION

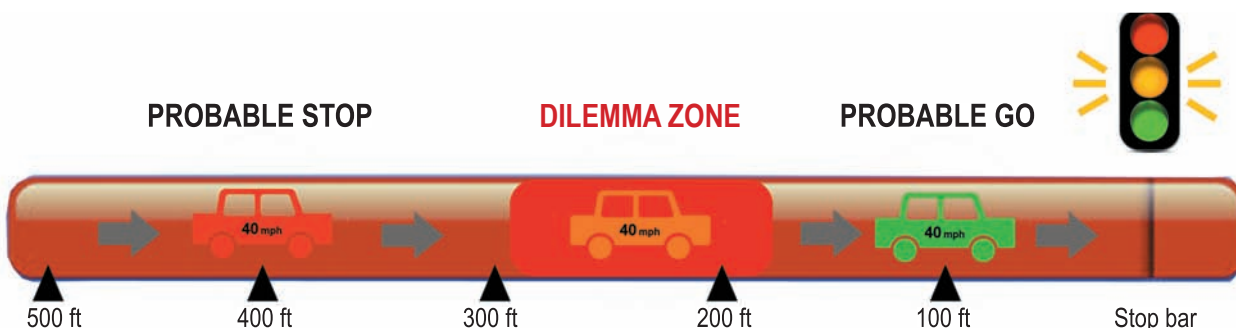
TRAFIRADAR will provide traffic data and information on the presence of vehicles approaching or waiting at an intersection. The detection algorithms are based on Traficon's renowned VIP platform of video image processors, which has been installed at thousands of intersections around the world.

## MAKING TRAFFIC FLOWS EFFICIENT

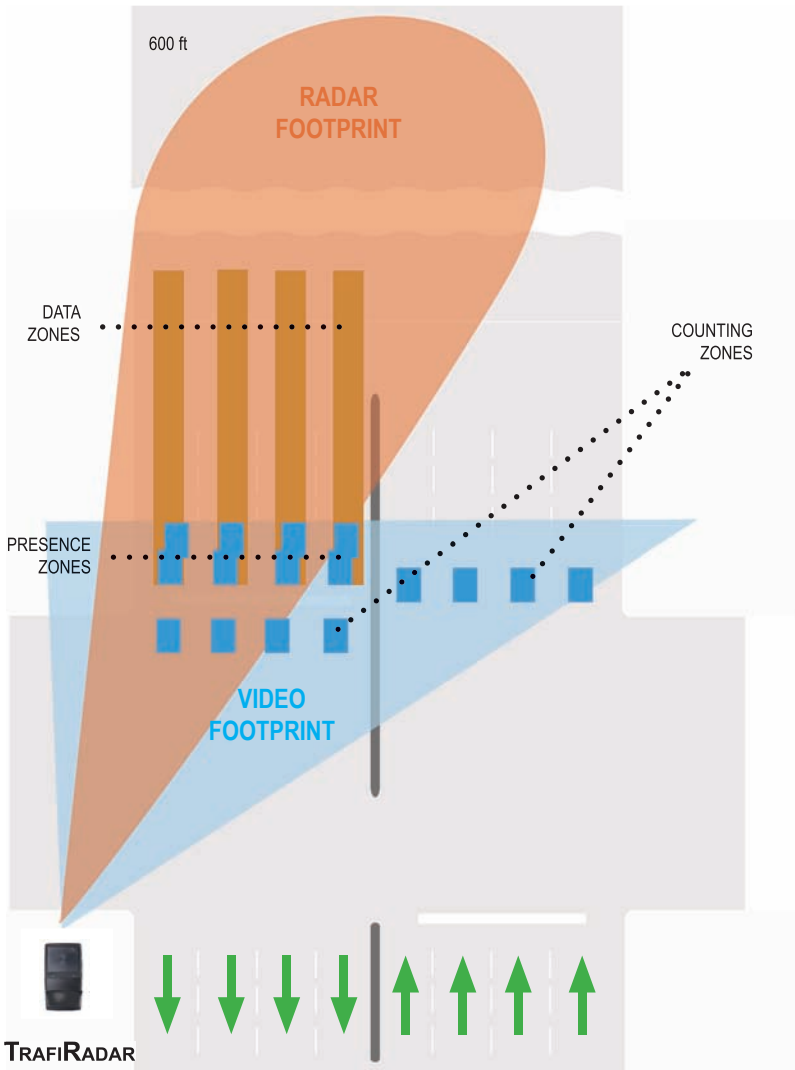
TRAFIRADAR will pass over its information to the traffic light controller. As a result, better decisions can be made to control the traffic lights in a more optimal way. TRAFIRADAR is therefore an ideal solution to support traffic adaptive systems.

## MORE SAFETY IN THE DILEMMA ZONE

TRAFIRADAR will warn the traffic light controller whenever a vehicle is present in the dilemma zone. In that area, motorists might hesitate whether to continue driving or stop in case the traffic light switches from green to amber. In the first case, motorists might choose to accelerate with a risk of overspeed and collision at the intersection. In the latter case, an emergency stop might cause a head-tail collision. The traffic light controller can take the vehicle presence info into account to extend green time or to extend all red, so as to avoid dangerous situations at the intersection.

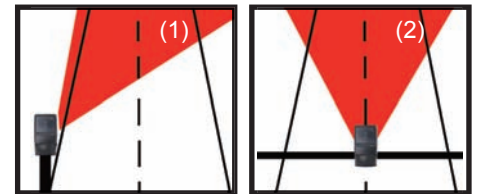


## BROADEN YOUR VIEW, WITH VIDEO AND RADAR



**1** TRAFIRADAR's **radar** provides accurate information on the vehicle's lane position and speed in a specific area of interest.

**2** TRAFIRADAR's **camera** provides accurate detection information on vehicle presence per lane at the stop bar. In addition, it provides vehicle counting information per lane.



TRAFIRADAR can be installed in a **side-fire/near-road** (1) or **overhead/above-road** (2) position.

## EASY TO INSTALL, EASY TO CONFIGURE



➤➤ The compact unit has a handy **bracket** for easy attachment to existing infrastructures, such as traffic lights or poles.



➤➤ The built-in **leveler** allows you to position the unit very accurately. The unit is compact and solid, **without loose or moving parts**, making it a durable, cost-effective solution.



➤➤ Use the video image with radar overlay to **calibrate** your radar and visualize radar information.

# TECHNICAL SPECIFICATIONS



## TRAFIRADAR SENSOR

- Color camera & Doppler radar
- Presence detection per lane (outputs, events via TCP/IP or serial)
- Data per lane and per vehicle (location, count, speed)
- Dilemma zone warning per lane and per vehicle (outputs, events via TCP/IP or serial)
- IP-addressable
- BPL (broadband over power line) for power supply and communication
- Video compression: H.264/MPEG-4/MJPEG (dual stream)
- Waterproof IP68
- Power consumption: 7W
- MTBF: more than 100,000 hours
- Operational temperature range: -29°F to 165°F (-34°C to +74°C)
- Shock & vibration: NEMA TS2
- EMI / EMC: FCC Part 15 Class A



## TI X-STREAM EDGE INTERFACE

- Dimensions: **H** 4.5 in x **L** 1.1 in x **W** 7.0 in (**H** 114 mm x **L** 28 mm x **W** 178 mm)
- For type 170, 2070, NEMA TS1 & TS2 and ATC controllers
- 4 outputs (output expansion board(s) possible), serial, TCP/IP
- IP-addressable
- Power supply: 24VDC
- Power consumption: 4W
- MTBF: more than 100,000 hours
- Operational temperature range: -29°F to 165°F (-34°C to +74°C)
- 0 - 95% relative humidity, non-condensing
- Shock & vibration: NEMA TS2
- EMI / EMC: FCC Part 15 Class A



**CALIFORNIA:** CT-West Inc. - 43391 Business Park Dr. Suite C-8 – Temecula, CA 92090 – Phone: 951-691-1385  
**NORTHWESTERN USA:** Kar-Gor Inc – 2769 19th Street, S.E. – Salem, OR 970302 – Phone: 503 315-9899 – E-mail: kargor@aol.com  
**TRAFICON USA:** 10161 Park Run Drive, Suite 150 – Las Vegas, NV 89145 – Phone: 702 851-5880 – E-mail: traficon@traficonusa.com  
**EASTERN USA:** Control Technologies Inc – 2776 South Financial Court – Sanford, FL 32773 – Phone: 407 330-2800 – E-mail: cttraffic@aol.com

[www.traficonusa.com](http://www.traficonusa.com)



*Data subject to alteration without notice or obligation.*



**TRAFICON USA**  
TRAFFIC VIDEO DETECTION