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How VITRONIC solutions protect intersection users

REDLIGHT ENFORCEMENT

Building a better
pathway for
future mobility



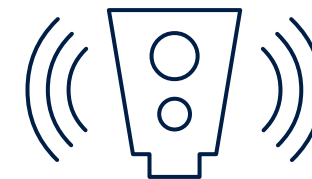
” How to save lives at red lights?

At VITRONIC, we work with our clients to assess individual intersections and transform them into safer places. We collaborate with each customer to implement smart, innovative solutions, custom-fit to each situation, creating seamless and secure environments suited to all road users.

The complexity of intersections makes them the most hazardous part of the road, but they can be made safer. VITRONIC's POLISCAN Redlight solutions cover a multitude of violations in any kind of crossing situation, monitoring several vehicle types across multiple lanes simultaneously.

POLISCAN Redlight offers a choice of technology, based on either video or scanning LiDAR (Light Detection and Ranging) to offer several different functions (see table). It provides precise, contact-free measurement without the need for additional road fixtures such as induction loops or Piezo sensors.

POLISCAN Redlight's scalable design means it can be integrated into even large and complex intersections. The position of stop lines, crosswalks and yellow boxes can be set in the system depending on the intersection's geometry.



VITRONIC LiDAR DETECTION APPLICATIONS

- Speeding

VITRONIC VIDEO DETECTION APPLICATIONS

- Block the box
- Pedestrian detection

VITRONIC DETECTION APPLICATIONS BY LiDAR OR VIDEO

- Right-hand turns
- Crossing stop line
- Driving into the intersection
- No-through roads
- Driver picture
- Photo and video documentation
- Optical traffic light detection
- Front and rear detection

” How can we prevent the behaviors that make intersections dangerous?”

Intersections are one of the most hazardous traffic-related areas. To keep their users safe, we are able to detect multiple violations simultaneously with the POLISCAN Redlight system. Solutions can be placed in our permanent roadside housings.

CITY DESIGN HOUSING

- Rotatable segments for bidirectional enforcement and two measuring systems
- Flexible monitoring from traffic medians and road shoulders

COMPACT CITY TOWER

- Slim design
- Can house a separate classification sensor

COMPACT CITY HOUSING

- Can be installed in tight spaces
- Up to three meters high, protecting against vandalism



The violations that POLISCAN Redlight system can detect are:



CROSSING THE STOP LINE

POLISCAN Redlight precisely detects and documents any violation of these limits.



DRIVING INTO THE INTERSECTION CENTER

POLISCAN Redlight documents if a vehicle ignores a traffic light and reaches the intersection center during a red light.



RIGHT-HAND TURNS ON RED PHASE

If they're permitted, POLISCAN Redlight can be configured to allow right turns at red lights while still detecting other red-light violations.



BLOCK THE BOX

POLISCAN Redlight can also detect drivers who block intersections after not being able to pass through completely.



SPEEDING

Many people speed as a traffic light turns red. POLISCAN Redlight detects vehicles' speeds at all traffic-light phases.



PEDESTRIAN SAFETY WITH VRU DETECTION

Our AI (Artificial Intelligence) based system can distinguish between pedestrians, cyclists (so called vulnerable road user VRU), and motorized road users at a pedestrian crossing, where many vehicles fail to give VRUs their right-of-way. POLISCAN Redlight documents this dangerous violation.

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How can VITRONIC solutions work for me?

We know not all roads are built the same. That's why VITRONIC works with clients to custom build a POLISCAN Redlight system that fits their unique regulatory requirements.

PHOTO AND VIDEO DOCUMENTATION

POLISCAN Redlight cameras can be configured to capture documentation depending on your local jurisdiction, including:

- Front detection, rear detection, or both
- Video, photo, or both
- Driver image
- Consolidation of all visual documentation into one case file

OPTICAL TRAFFIC LIGHT DETECTION

Optical traffic light detection technology allows you to detect light phases without a physical connection—giving you the freedom to set it up in any situation with available electric power.

SOFTWARE

Digital connected hardware and software solutions enable end-to-end traffic incident management for roadside traffic enforcement and incident data analysis in back-office environments. POLISCAN Office Pro software utilizes browser-based, high-quality incident data validation for efficient traffic adjudication processing.

- End-to-end incident management
- Efficient and secure incident processing
- Import of incident data
- Photos and measurements data validation
- Export of validated case data for infringement notice systems



**For more information,
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