

# YOUR SMART TOOL ASSURING TUNNEL SAFETY

## **MONITOR**

## **EVERY CAMERA 7/24**

Monitoring hundreds of CCTV cameras in tunnel and highway traffic control centers is a monumental task for human operators. With IntelliAID, using advanced artificial intelligence and video analysis algorithms we simplify this challenge by providing reliable, real-time incident detection to assist operators in making fast, informed decisions.

## **OBTAIN**

## PROACTIVE PERCEPTION

Empower your traffic control centers with real-time insights, enabling swift responses to critical incidents before they escalate. Our system's advanced detection capabilities transform passive monitoring into proactive decision-making, ensuring safety and efficiency on every road and tunnel.



#### **TRAFFIC INCIDENTS**

- Stopped Vehicle
- Reverse Direction
- Low Speed Vehicle
- High Speed Vehicle



#### **SAFETY ISSUES**

- Animal In Tunnel
- Pedestrian In Tunnel
- Foreign Object On Road



#### **FIRE INDICATORS**

- Fire/Flame Detection
- Smoke Detection
- Low Visibility Detection



#### **METRICS** FOR TRAFFIC

- Vehicle Count
- Vehicle Classification
- Traffic Volume
- Lane Accupancy
- Travel Time

## **MAJOR FEATURES**

#### **HIGH** ACCURACY

Our system ensures exceptional reliability with outstanding detection accuracy, enabling operators to detect incidents swiftly in real-time by effectively using state of the art artificial intelligence neural network models. With ultra-low false alarm rates, it provides the confidence needed for decisive and accurate responses.

## **INDOOR/OUTDOOR** OPERATION

Optimized for tunnel environments, our system provides seamless monitoring of both the interior and entry/exit points of tunnel tubes from outside, where accidents frequently occur. This ensures comprehensive coverage and rapid detection of critical incidents.

## PROGRAMMABLE AUTOMATIC ACTIONS\*

Customize automated responses to specific incidents, enabling the system to trigger predefined actions such as alerts, signage updates, or traffic control measures. This streamlines operations and ensures timely interventions.

#### **HIGH RESILIENCE**

Our system is designed to be highly resilient to changing lighting, weather, and traffic conditions, ensuring consistent performance in any environment. Thanks to advanced artificial intelligence powered video analysis algorithms, from sudden glare to heavy fog or fluctuating traffic flow, it maintains accuracy and reliability at all times.

## **GIS MAP / TUNNEL PLAN\***

Our system integrates GIS maps and vector graphics tunnel plans to pinpoint the exact location of incidents within tunnel networks. This enables operators to respond swiftly and accurately to critical situations.

### MULTI-LANGUAGE USER INTERFACE

Our user-friendly interface supports multiple languages, ensuring accessibility and ease of use for operators worldwide. Adapt the system to fit the linguistic needs of your team effortlessly.

## **SPECIFICATIONS**

| ACCURACY**  |      | Input Source          | Any IP Camera                |
|---|------|-----------------------|------------------------------|
| STOPPED CAR   | >%95 | Input Format          | TCP/IP RTSP                  |
| REVERSE DIRECTION   | >%95 | Cameras Per Server    | 16, 32, 48, 64               |
| ANIMAL IN TUNNEL  | >%90 | Operating System      | Linux                        |
| PEDESTRIAN IN TUNNEL  | >%95 | Processing Frame Rate | 10 fps                       |
| FOREIGN OBJECT >40cm  | >%90 | Detection Latency     | <10 secs                     |
| FIRE/FLAME  | >%85 | SCADA API             | ModbusTCP, OPC               |
| SMOKE   | >%85 | Power Consumption     | 5W per camera                |
| LOW VISIBILITY  | >%90 | Power Supply          | Dual Redundant SMPS          |
| *Optional features **On ideal and clear visibility operating conditions |      | Error Detection and   | Cam. Communication Loss,     |
|   |      | Diagnostics           | Visibility Loss, Low Quality |
|   |      |                       | Image, Device Errors         |

## **CONTACT US** TODAY!

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