



HIKVISION[®]

**EARLIER DETECTION,
BETTER PREVENTION**

Traffic Incident Detection System

HIKVISION'S TRAFFIC INCIDENT DETECTION SYSTEM

Excessive traffic is a growing issue on road networks around the world. Civil authorities are facing increasing pressure to keep traffic on the move safely and efficiently, as well as optimize traffic order with data analysis.

To this end, Hikvision has combined a deep-learning algorithm with front- and back-end products to offer multi-functional incident detection systems, providing earlier detection, achieving better prevention, and reducing potential risks. Ensure road safety and efficient traffic flow wherever it's implemented.

Why Choose

Hikvision's Incident Detection System?



The flexible product portfolio meets all kinds of needs

Hikvision dedicates its best-in-class deep-learning algorithms in front-end cameras and back-end servers, satisfying diverse needs in the market.

Remarkably, those back-end servers support various types of cameras, not only Hikvision cameras but other ONVIF or RTSP protocol-supported third-party cameras.



Multi-functional products extend application value

Hikvision's incident detection system was developed with practical functions, comprising incident detection and traffic flow data collection. These integrated functions boost traffic safety and promote more fluid traffic flow.



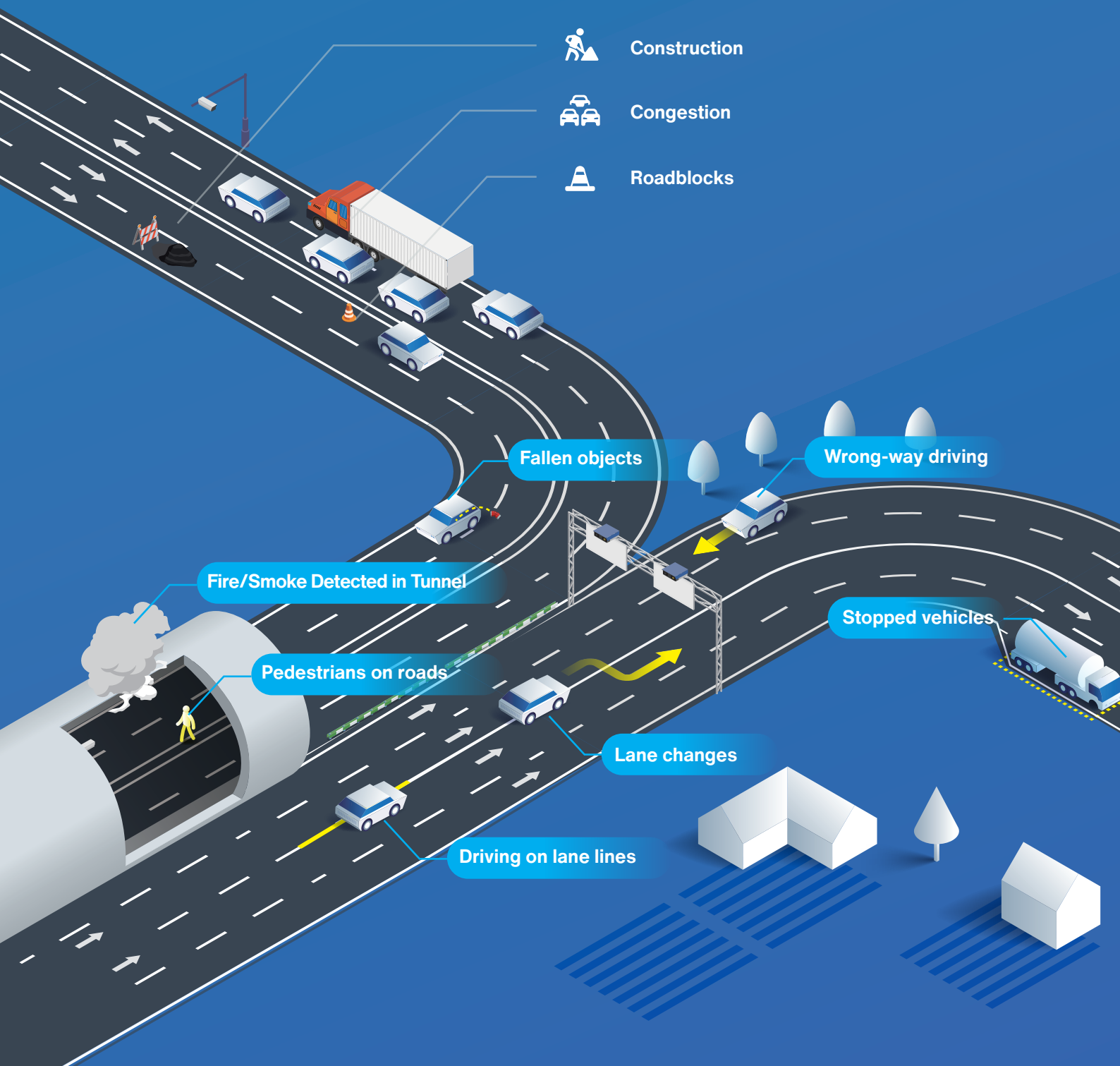
Traffic data gets managed on one intuitive platform

All Hikvision incident detection systems align with HikCentral to achieve holistic management. Powered by intelligent analysis, all traffic data collected can be transformed and presented by easy-to-understand reports, enabling flexible and efficient management.

Incident Detection

Hikvision's incident detection products provide early warnings and collect evidence around events and parameters that affect vehicles and traffic safety on the road. It's the best tool to ensure safety and promote fluid vehicle movement on the roadways.

Powered by tremendous amounts of video samples, multi-frame recognition, and deep-learning algorithms, Hikvision's detection system detects a range of incidents that effectively regulate driver activity, ensuring road safety and improving the conditions for law enforcement.

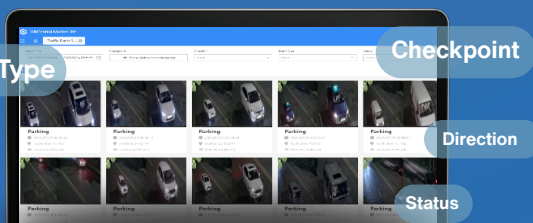


Traffic Data Management

Hikvision's incident detection system can collect real-time traffic information and align with HikCentral to provide a wide array of traffic data from multiple perspectives. This gives civil engineers and administrators what they need to manage best.

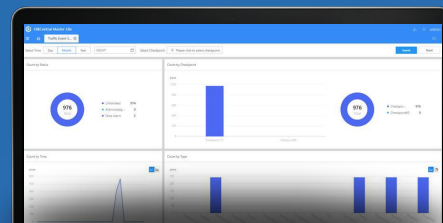
Traffic event searches

Traffic event searches can be completed by event type, time, checkpoint, direction, and status, to improve management efficiency.



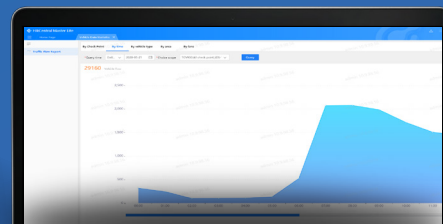
Traffic event statistics

Traffic event retrieval in terms of status, checkpoint, time, and type, can help optimize the traffic management with data analysis.



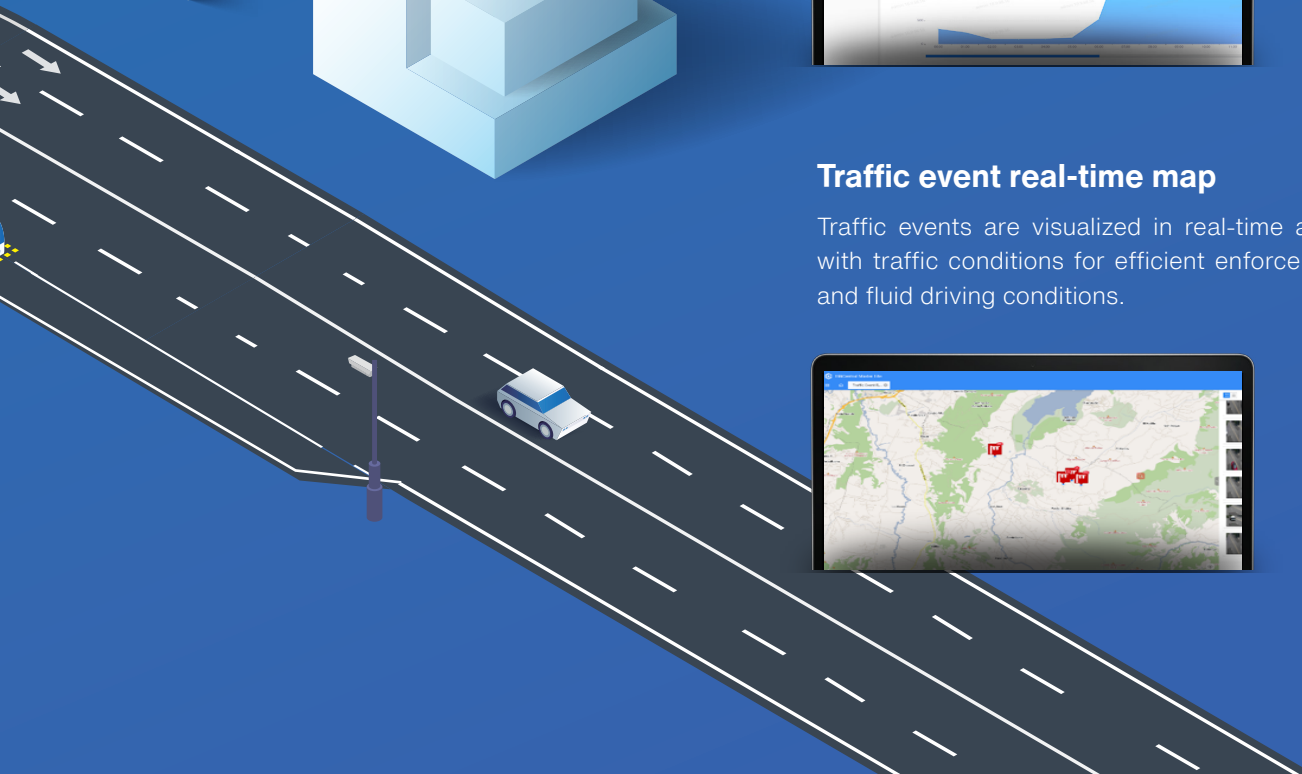
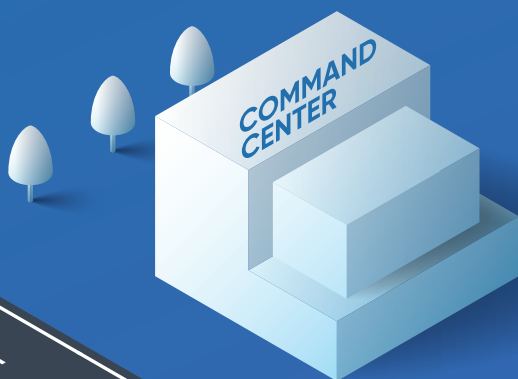
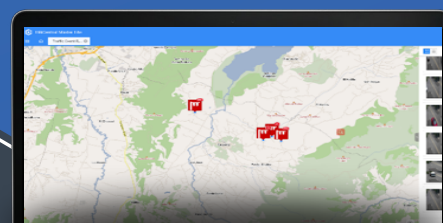
Traffic flow statistics

Traffic flow statistics with time, checkpoint, and statistics mode assist traffic authorities in making well-informed traffic guidance decisions.







Traffic event real-time map

Traffic events are visualized in real-time along with traffic conditions for efficient enforcement and fluid driving conditions.



Product Specifications

Incident Detection Cameras						
		iDS-TCS800-C(I)	iDS-TCS807-C(I)R	iDS-TCS817-CR	iDS-TCS817-C	iDS-TCS907-CE(I)R
Visible Camera	Image Sensor	8 MP (1/1.2" CMOS)				9 MP (1" GMOS)
	Focal Length	15-50 mm (default) 5.7-21 mm				11 to 40 mm 25 mm
Thermal Imaging	Max. Image Dimensions	/	/	640 × 512	640 × 512	/
	Focal Length	/	/	25 mm (default), Optional: 10, 15, 50 mm		/
Measuring Temperature Range	/	/	0° - 550°C	0° - 550°C	/	
Radar	Central Frequency	/	77 GHz	77 GHz	/	77 GHz
	Measurement Accuracy	/	±2 km/h	±2 km/h	/	±2 km/h
	Tracking Target	/	128	128	/	128
Shell Material		Aluminum alloy	Aluminum alloy	Aluminum alloy	Stainless steel 316L	Aluminum alloy
Coverage		2-3 lanes	2-3 lanes	2-3 lanes	2-3 lanes	2-3 lanes
Incident Detection	Smart Functions	Driving on lane lines, lane changes, wrong-way driving, stopped vehicle, emergency lane occupation, roadblocks, construction, fallen objects, pedestrians, congestion, fire/smoke detected in tunnel				
	Sudden Speed Drop	-	✓	✓	-	✓
	Speeding	-	✓	✓	-	✓
	Under-speed Driving	-	✓	✓	-	✓
	Animal Detection <small>(needs customization)</small>	-	-	✓	✓	-
	Phone Calling	-	-	-	-	✓
	Seatbelt Violation <small>(with flash supplemental light)</small>	-	-	-	-	✓
Traffic - Flow		Vehicle type (big, small, motorcycle), lane flow, lane speed, space headway, time headway, lane time occupancy rate, lane space occupancy rate, queuing length, and traffic status (smooth, slow, congested)				

Incident Detection Servers



iDS-TSS300-C



iDS-TSS500-C

Operating System	Embedded Linux Operating System	Centos
Accessed Camera	Supports access to four channels of 4 MP conventional surveillance cameras, smart surveillance camera, or ONVIF protocol-supported third-party cameras to detect traffic incidents and collect traffic parameters simultaneously	Supports access to sixteen channels of 4 MP conventional surveillance cameras, smart surveillance cameras, or ONVIF protocol-supported third-party cameras to detect traffic - incidents and collect traffic - parameters simultaneously
USB Interface	1 × USB 3.0	4 × USB 3.0, 2 × USB 2.0
On-board Storage	1 × 4 TB 3.5-inch SATA HDD (Default) 4 × 6 TB (Scalable)	240 GB for image storage
Device Deployment	Front-end Intersection Cabinet	Back-end Platform Center
Incident Detection	Driving on lane lines, lane changes, wrong-way driving, stopped vehicle, emergency lane occupation, roadblocks, construction, fallen objects, pedestrians, congestion, fire/smoke detected in tunnel	
Traffic - Flow	Vehicle type (big, small, motorcycle), lane flow, lane speed, space headway, time headway, lane time occupancy rate, lane space occupancy rate, queuing length, and traffic status (smooth, slow, congested)	

