Taxi Onboard Application

IPSC

TAXI SECURITY-OVERVIEW

HIKVISION

Interior Mobile Analog Camera
Onboard video monitoring & ADAS reminder.

Interior Mobile Analog Camera
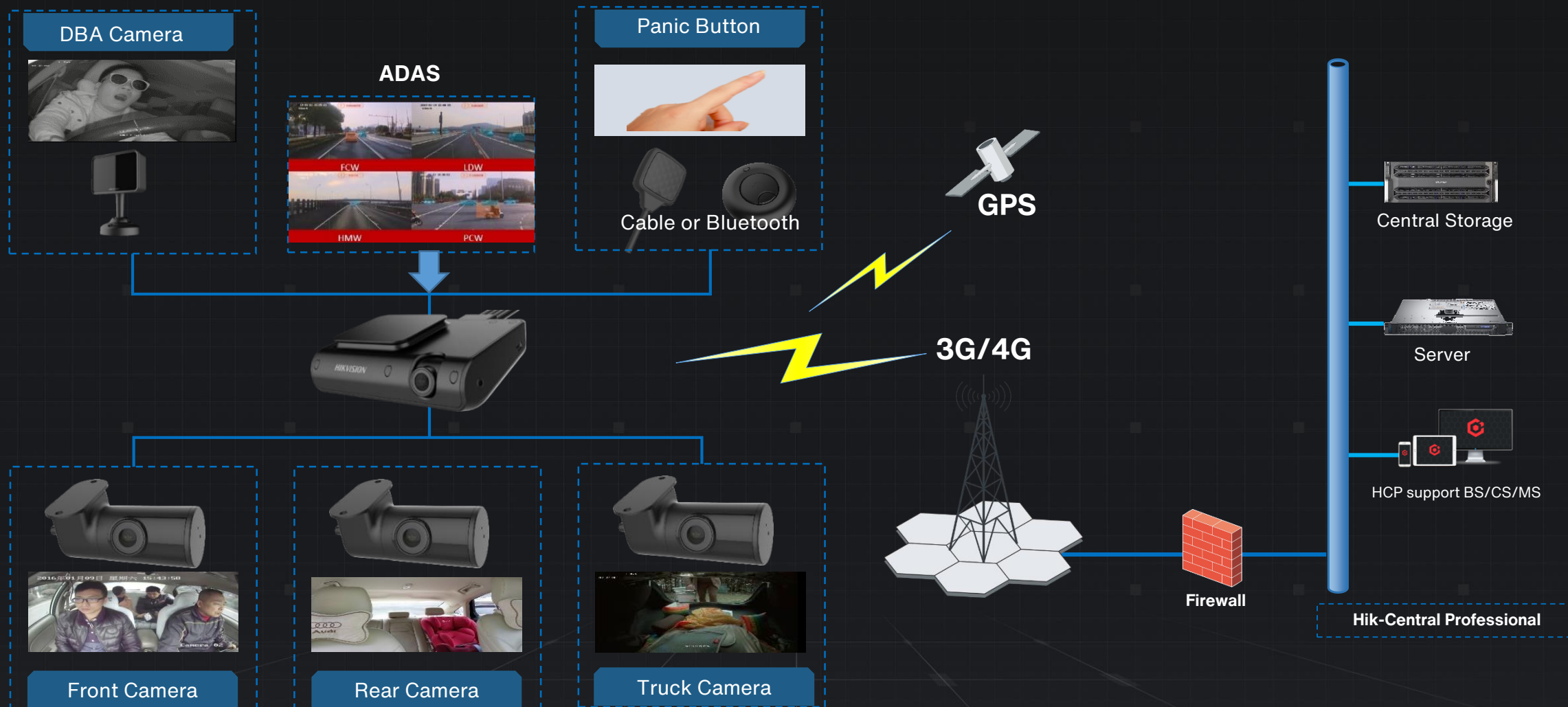Onboard video monitoring with the purpose to the passenger belongings loss monitoring.

Interior Mobile Analog Camera
The Anomaly Detection Camera detects dangerous driving behaviors, including tired, yawning, squinting, smoking and camera covered.
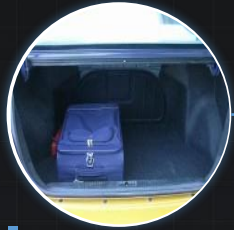
TAXI SECURITY-SOLUTION STRUCTURE

HIKVISION

DBA Camera

ADAS

FCW   LDW

HMW   PCW

Panic Button

Cable or Bluetooth

GPS

3G/4G

Central Storage

Server

HCP support BS/CS/MS

Front Camera

Rear Camera

Truck Camera

Firewall

Hik-Central Professional

TAXI SECURITY-SOLUTION FOCUS

HIKVISION

Passenger Luggage Record
It is difficult to trace the specific problem when the passenger's luggage is picked up by mistake or taken away by other passengers when a complaint occurs .

Alarming
When the driver or the passenger feels unset or be held as a hostage. Manually push alarm button to tag the video clip as incident and alert the operator for remotely assistant.
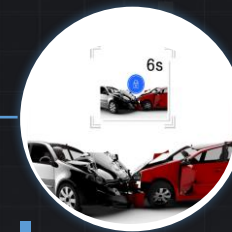
Post-investigation
All around the video surveillance shall to keep record to provide the evidence of incident such as lost luggage.

Driver Compliance Supervision
We need a method to awaken the driver from micro sleep to drive prudently with safety awareness.

Liability Identification
A single accident may lead to a long term of lawsuits due to lack of evidence. To record and protect the video of the accident is financially and legally crucial.

Speed Monitoring
Unusual behaviors of a vehicle such as speeding are usually warning signs that are hard to be spotted remotely in the first place
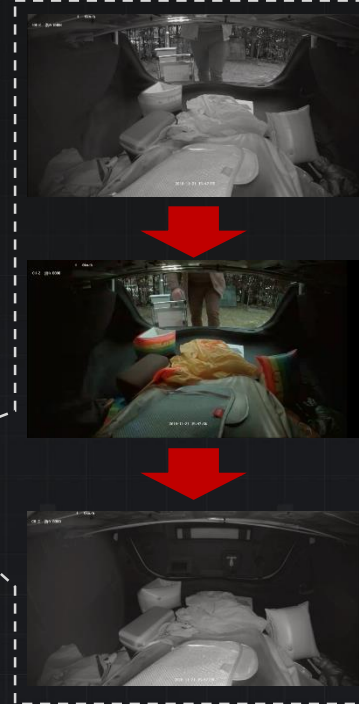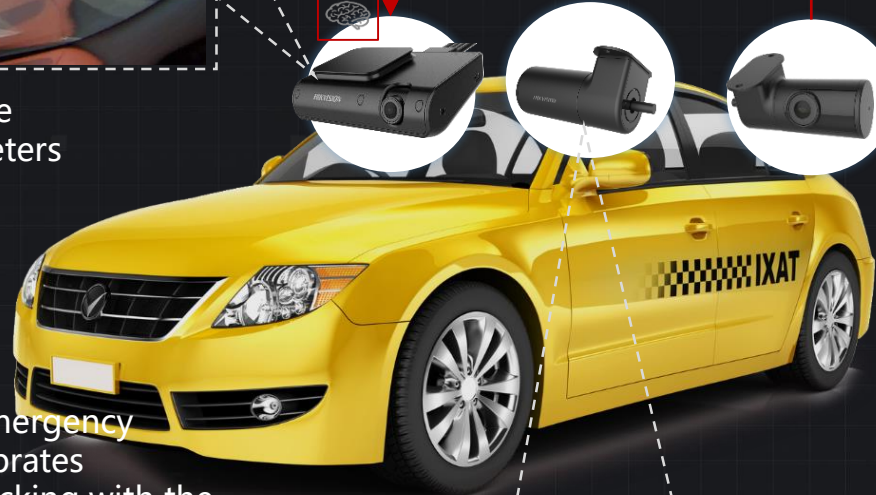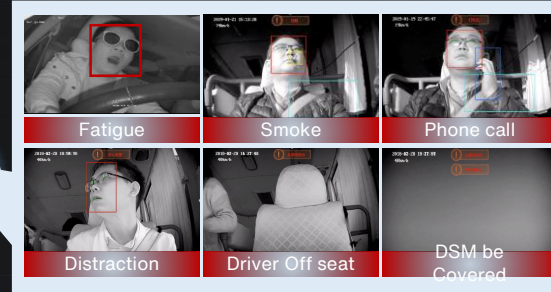
TAXI SECURITY-VIDEO SECURITY

HIKVISION

Fatigue | Smoke | Phone call

Distraction | Driver Off seat | DSM be Covered

Open the trunk.

The Video shall to switch from black to color automatically.

Turn off the trunk. The Video shall to switch from color to black automatically.

10m   13m   6m

Towards outside： The front vehicle plate number can be seen clearly up to 13 meters distance. Meanwhile, G4 do the ADAS.

FCW   PCW

The built-in six-axis gyro sensor starts emergency recording when the vehicle crashes or vibrates violently. It supports emergency video locking with the purpose to prevent to be covered by circle, making it a key assistant for post-investigation.

6s

Towards inside ： Passenger Counting Safety Monitoring, Lost and found. Moreover. It shall to avoid the driver do not start the taxi meter and conceal the income.
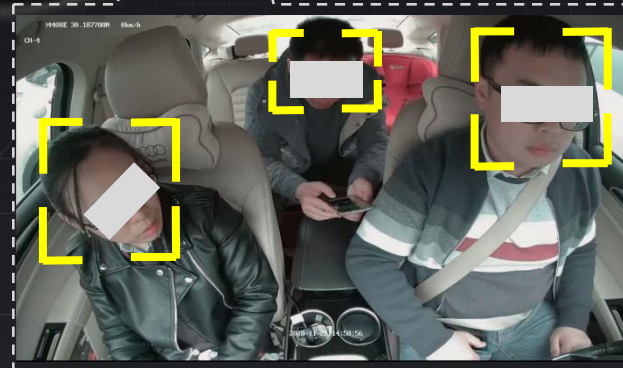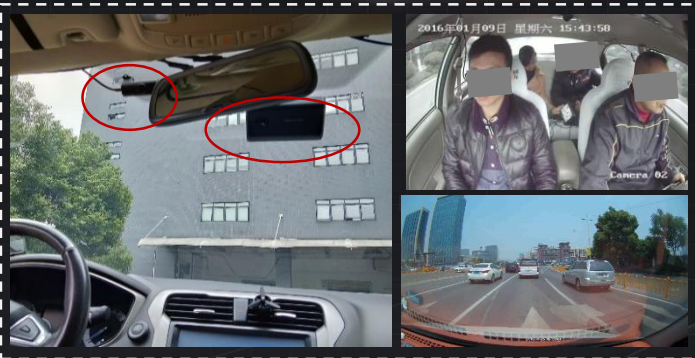
The built-in GPS module shall to provide the real-time trajectory for the map overview.

IXAT

TAXI SECURITY- OPERATION DASHBOARD

HIKVISION

G4 is build-in the GPS module and provide the trajectory along with the video on the real-time for the remotely management.
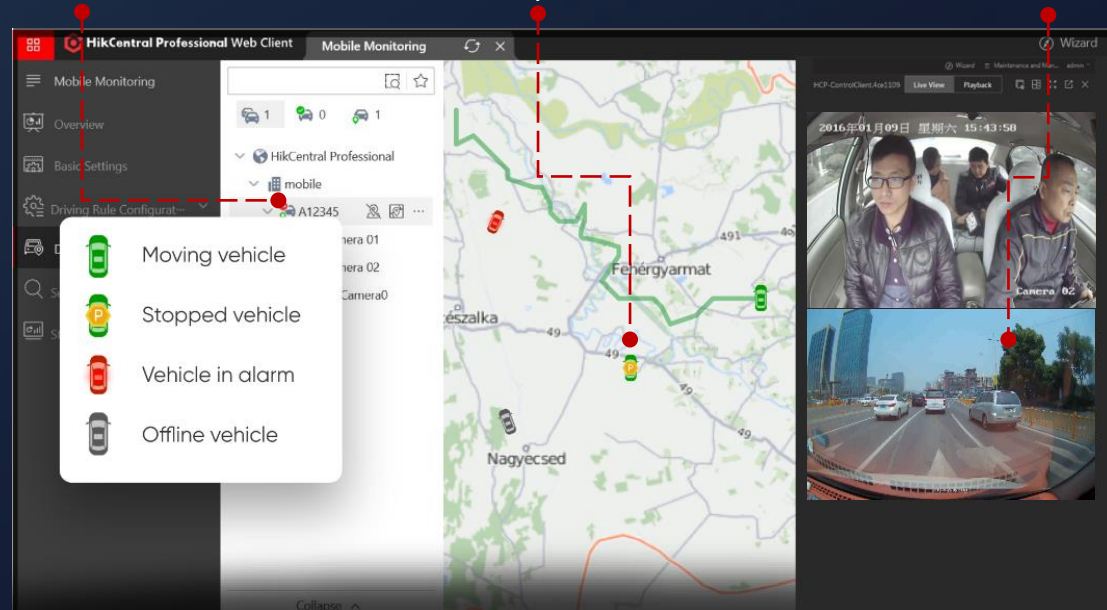
security

- **Centralized management**: Through the unified control panel, various Taxies can be centrally managed on the map.
- **Remotely check:** The security guys can remotely check and track every vehicle information: location, live video, alarming record etc.

HikCentral Professional Control Panel

- Easy to select vehicle from the list
- Quickly locate vehicles on GIS map.
- Remotely check vehicle inside/outside status via live view.

HikCentral Professional Web Client   Mobile Monitoring

Mobile Monitoring
Overview
Basic Settings
Driving Rule Configurat~

HikCentral Professional
mobile
A12345

Moving vehicle
Stopped vehicle
Vehicle in alarm
Offline vehicle

TAXI SECURITY-DATA INTEGRITY

HIKVISION

Important Video Storage

TF 256G x2

Video Storage Locally

4G

Event Video Transmission on real time

TAXI2000000

Manual / Vehicle Status / DBA & ADAS Event Video Backup （3/4G）

Central Storage

Center

GPS Storage （ANR）

GPS INFO. Storage

GPS INFO.

Lost Connectivity within 7 days （3/4G）

Center
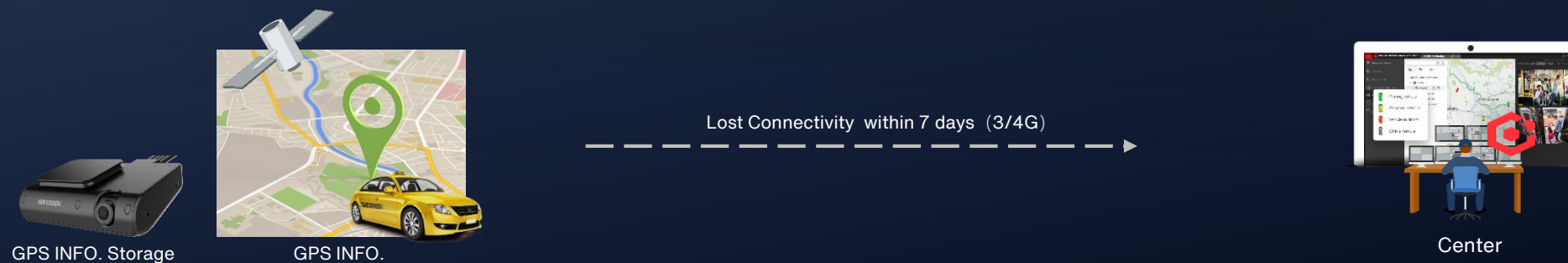
TAXI SECURITY- DRIVER STATUS MONITORING

HIKVISION

Mount Point B

Mount Point A　　**Mount Point C**

15° 15°

2 X 940nm IR

Look through the sunglasses to analysis
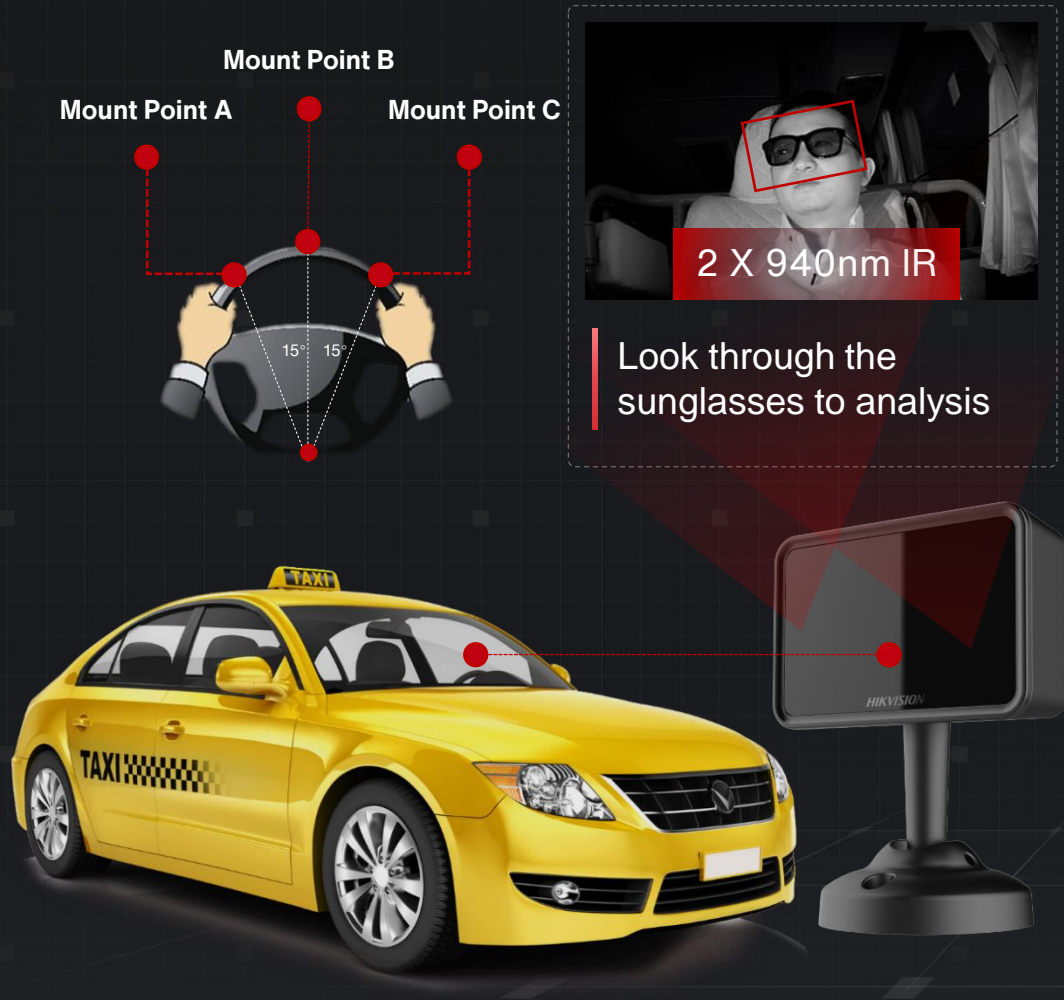
Real-time detect and remind the taxi driver
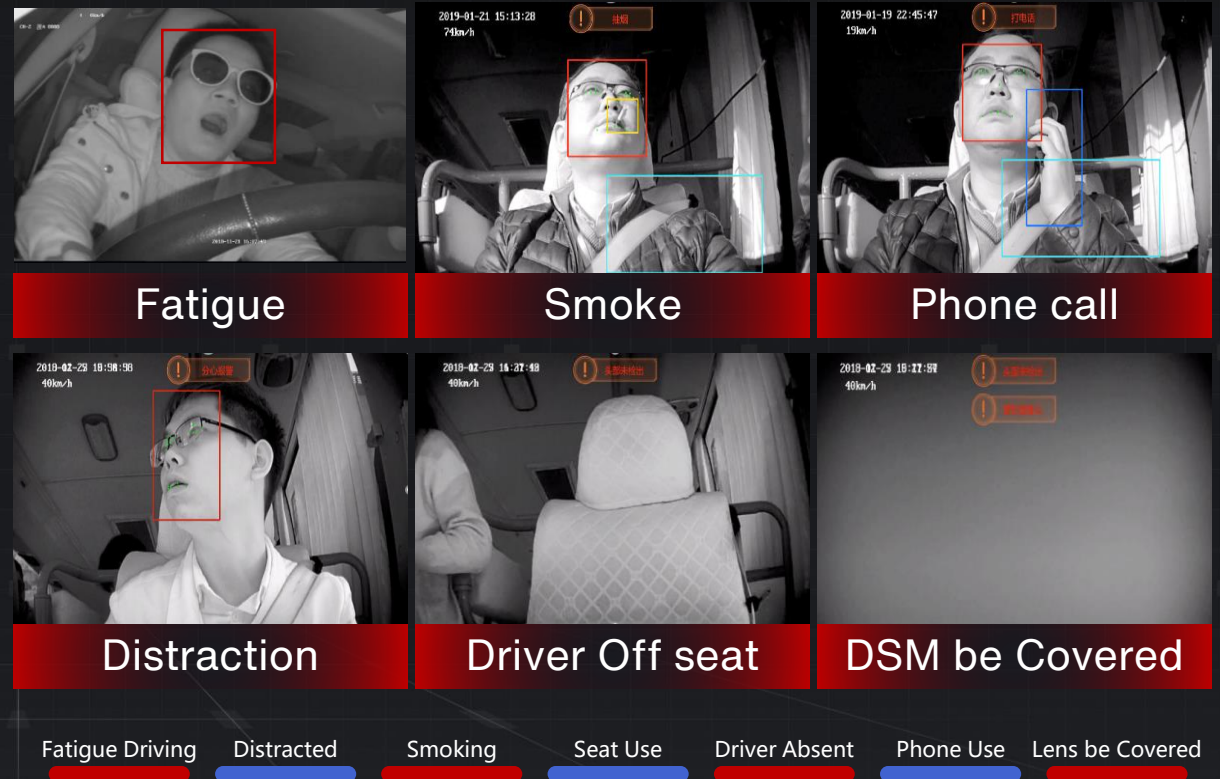
- Auto detects dangerous driving conditions.
- Auto warns the taxi driver in real-time voice.

| Fatigue | Smoke | Phone call |
| Distraction | Driver Off seat | DSM be Covered |

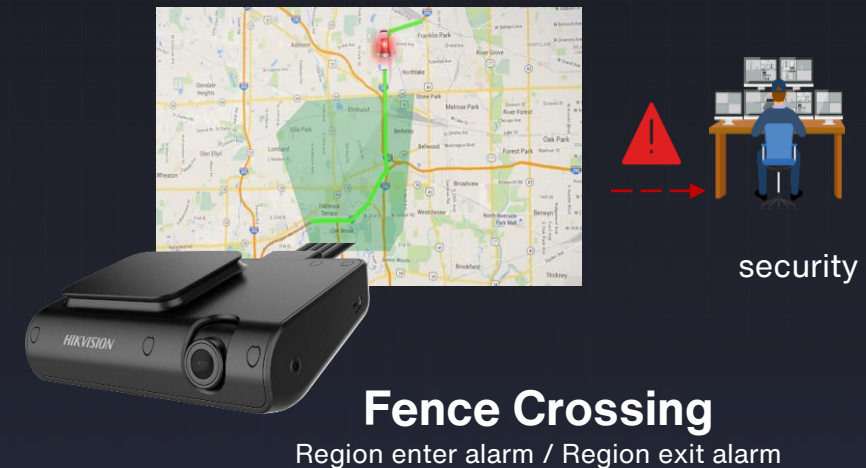Fatigue Driving　Distracted　Smoking　Seat Use　Driver Absent　Phone Use　Lens be Covered

TAXI SECURITY- ALARMING MONITORING

- **Within the safe speed protection:** Once vehicle running faster than the limited speed, the MVR shall to send the alarm information to the HCP to remind the security guys to handing.

- **Forbidden area protection:** Once vehicle intruders the preset area, an alarm will be triggered immediately.
- **Permitted area monitoring:** Once vehicle drives out of the permitted area, an alarm will be triggered immediately.

security

Over-speed
Speed alarm

security

Fence Crossing
Region enter alarm / Region exit alarm

TAXI SECURITY- ALARM PANEL OPERATION

HIKVISION

Precaution Alarm	Alarm Detection	Alarm checking & handling	Archiving

Precaution Alarm

Driver

- Eliminate potential risks.
- Real-time warning for safe driving.
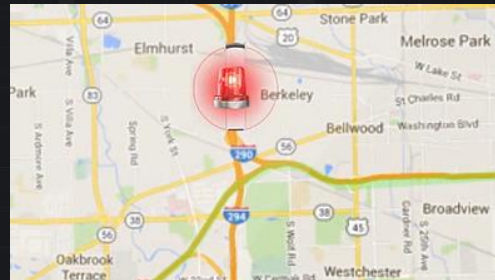- Ask for the help from the center.

Alarm Detection

security

- Auto & intelligent detection on various dangerous.
- SOS alert.

Alarm checking & handling

security

- Quick & accurate alarm response.

Archiving

security → **Manager**

- Classify fragmented evidence.
- Evaluate drivers performance.

Related functions

DBA Alarm   **ADAS Alarm**

Related functions

Vehicle Status Alarm

DBA Alarm   **ADAS Alarm**

Fence Crossing   **Deviation Alarm**

Panic Button
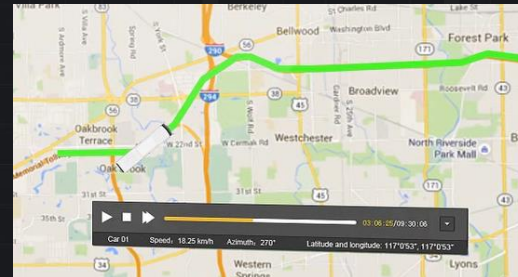
Related functions

Alarm notification   Remotely check live view

Two-way audio
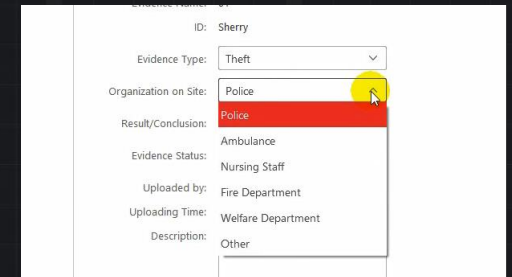
Related functions

Remotely Download   Upload to evidence center

Alarm statistical report

TAXI SECURITY- EVIDENCE CLLECTION

Afterward checking & archiving

Manual check & backup

3G/4G Network

Video/picture/audio/files

Evidence Center

SFTP/server

TAXI SECURITY- CORE DEVICES

Main technical specifications	AE-DI5042-G4 (Lite) (GPS+4G)	AE-DI5042-G4 (/AI) (GPS+4G)
Figures		
image	4 MP Sensor, up to 1440P resolution	
video	1440P（customization）/1080P/720P	
audio	MIC voice input、speaker output	
Satellite positioning	GPS、GLONASS	
wireless communications	4G	
Wi-Fi＆Bluetooth	Wi-Fi smart phone connectivity、Hotspot and Bluetooth	
Video storage	Double TF card recording，256GB max each，Loop recording, seamless connection without seconds missing	
Gyro sensor	The built-in gyroscope sensor can start emergency recording when the vehicle is in a collision or severe vibration. Support emergency recording backup lock, delayed shutdown when suffering abnormal power-off.	
Emergency alarm	Support 2 wired emergency alarms, 1 Bluetooth wireless emergency alarm (optional), capture alarm pictures and upload to the platform	
Face Recognition comparison	Dynamic face verification / Long driving warning	
Driving behavior analysis	Not supported	Supports the identification, analysis and voice prompts of the driver's drowsy driving, answering and making phones, smoking, distracted while driving, blocking the camera, and uploading alarm information to the platform

TAXI SECURITY- CORE DEVICES

HIKVISION

AE-DI5042-G4

AE-VC143T-ITS

Normal Video Monitoring

AE-VC154T-IT

Driver Status Monitoring

- ☐ All-round monitoring with the extended three channel camera to provide the most comprehensive evidence. Meanwhile. The remaining one channel do the driver status monitoring for driving safe.
- ☐ Easy and convenient to install on the glass via the electrostatic sticker
- ☐ Alarm is manual or automatic trigger and uploaded to the center could do two-way audio communication
- ☐ Super-capacitor guarantees the most complete footage when switch off in case of sudden system power down
- ☐ ADAS: Forward Collision Warning(FCW), Lane Departure Warning(LDW), Headway Monitoring Warning(HMW), Pedestrian Collision Warning(PCW)
- ☐ DBA: Fatigue driving, distracted, smoking, seatbelt use, driver absent, phone use, lens be covered

| Fatigue Driving | Distracted | Smoking | Seatbelt Use | Driver Absent | Phone Use | Lens be Covered |

TAXI SECURITY- CORE DEVICES

AE-DI5042-G4

- The build-in lens with the resolution up to 1440P for picture taking and 1080P for recording
- FOV:153°(D),127°(H)
- Extend to 4-ch TVI camera
- Built-in Mic & speaker
- Build-in Wi-Fi, Bluetooth, 4G Module
- Build-in 6axis G-sensor
- Dual TF Card(up to 128GB for each)
- Consumption: ≤ 10 W
- CE, FCC, RoHS, WEEE

AE-VC143T-ITS

- Progressive Scan CMOS
- 720P@25fps
- 0.1Lux@(F1.2,AGCON),0LuxwithIR
- 2.1 mm, horizontal: 125°, vertical: 80°, diagonal: 148°
- 5m IR
- Built-in Mic
- Supports passenger people counting (working with AE-DI5042-G4)
- Consumption: ≤ 2.5 W
- CE,FCC, E-Mark

AE-VC154T-IT

- 6 mm lens
- 720p @30fps
- Min. illumination: 0.1 Lux@(F1.2,AGC ON),0 Lux with IR
- Supports DBA (working with AE-DI5042-G4)
- Horizontal: 52° ; Vertical: 28° ; Diagonal: 60°
- 2*940nm IR
- 3 m IR distance
- SNR: 42dB
- Consumption: ≤ 2.5W
- Plastic Case
- CE,FCC, E-Mark
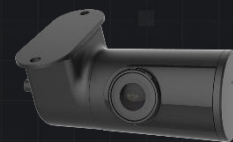
TAXI SECURITY- CORE DEVICES

HIKVISION

Dash Camera	DBA camera	Extend Camera	Panic Button
AE-DI5042-G4	AE-VC154T-IT	AE-VC143T-ITS	AE-IFC00

Software HCP

HikCentral Professional hardware performance

	Entry level	Middle level	High level
CPU	Intel® Core™ i5-8500 @ 3.00 GHz	Intel® Xeon® E-2124 @ 3.30 GHz	Intel® Xeon® Silver 4110 @ 2.10 GHz
RAM	8 GB	16 GB	16 GB
Number of Devices	300	500	1000
Speed of Handling Driving Events	300 events per second	500 events per second	1000 events per second
Storage	GPS Data	6 Month		
	Statistics Data	3 Years		
	Driving Events	3 Years		

HikCentral Professional license quotation

10 Devices FREE

>10 Devices:

Name	Code	Description
HikCentral-P-MS-Base	401000428	Base package
HikCentral-P-MS-1Unit	401000429	1 device management

THANKS