成都凡唐科技
Chengdu Firmtop Technology
https://www.firmtop.com

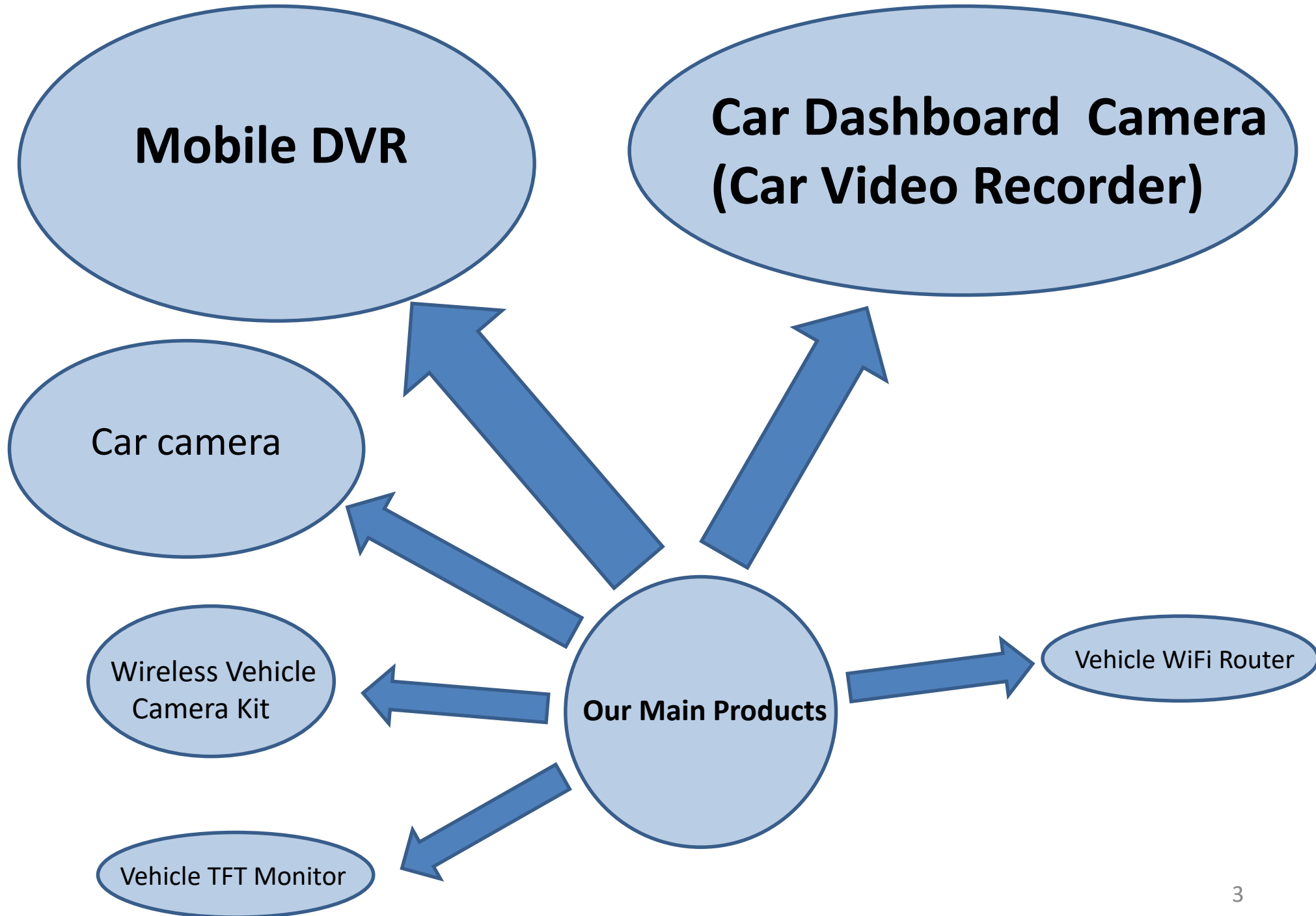**Professional Supplier of Vehicle Surveillance Products & Car Electronics**

About us

Chengdu Firmtop Technology Co., Ltd is a high-tech enterprise which specializes in inventing, designing, manufacturing, selling vehicle surveillance products and car electronics.
The main products cover 4G / 3G vehicle mobile dvr (including hard drive vehicle mobile dvr, sd card vehicle mobile dvr), car camera, wireless vehicle camera kit, vehicle TFT monitor, vehicle wireless router, car video recorder, car charger and sport & other camcorders, totally in eight categories and dozens of products.

For years, we have been upholding the theory of '**Technology Changes Life, Innovation Motivates Development**' in management. We not only have an experienced management team, high qualified work team, advanced production line and inspection equipment, but also have a set of complete administration mode. We have already been the brand supplier of vehicle surveillance products in this filed. Our products have been sold to more than 80 countries all over the world.

Mobile DVR

Car Dashboard Camera (Car Video Recorder)

Car camera

Wireless Vehicle Camera Kit

Our Main Products

Vehicle WiFi Router

Vehicle TFT Monitor

Mobile DVR

FT-950

On-Board Intelligent Terminal

✓ With H.265 high profile compression, save 50% space
✓ Using our FT dedicated filesystem
✓ Support 2pcs HDD / SSD with 7mm
✓ Support tri-working
(recording, playback, and remote monitoring at the same time)
✓ With good anti-vibration function
✓ With 3 RS232 + 2 RS485

NEW

▶ H.265

| GPS | 3G/4G | WIFI hot-spot | Dual HDD | Dual SIM card |

Front

Rear

Public bus intelligent dispatching terminal FT-950 series

Model

Basic model: FT-950
Optional function
+A : GPS/GLONASS
+B : 4G / 3G
+E : Rj45
+F : SD card slot
+W : Wifi
+K : Canbus
+ J：Fireproof box
+ L：Wifi hotspot
+ O：AMP

Specification

H.265 Video format .

4/8 video input, 1 video output, full real-time video (4/8 960H / 720P /) 960P / 1080P

4/8 audio input, 1 audio output, and video synchronous recording.

Support 1*VGA output, 1*CVBS video output.

Recording image quality support 1-8 levels adjustable.

Use a dedicated file system to improve the life of the hard disk; can not manually modify the hard disk storage video, audio data, can be more reliable evidence.

Pull-type hard disk box, support two 2.5-inch 7mm notebook hard drive.

eSATA*1, backup video data become more faster.

With dual SIM card slots

USB 3.0*1, make backup video data become more faster, software upgrades and maintenance more convenient.

Support 4/8 channel video, audio playback at the same time.

Support video, playback, network monitoring synchronization.

With user password management function.

12CH alarm input,3CH alarm output (2CH relay output,1CH 12V output), 2CH analog input.

1CH pulse signal speed sensor interface.

Support delay shutdown .

Real-time clock.

DC8-38V wide range voltage supply to adapt to vehicle voltage fluctuations.

Support two-way shared 12V, 1A power output, support for two-way sharing 5V, 1A power output.

Support super shock absorption and shockproof function.

RS232 *3, RS485 *2 (PTZ control).

Two-way voice intercom interface.

G-sensor function.

4CH 1080P Dual HDD & Dual SIM Mobile DVR / NVR
Model: FT-920-DVR / NVR series

4G/3G/GPS/WiFi/WiFi hot-spot/ G-sensor/RS485/RS232/RJ45
functional module or interface for option

Support 2 x 2TB (Max) SATA HDD, 2 x SIM cards
Canbus / Intercom / Overspeed Alarm / Oil Power
Control / SMS Alert / GEO functions for option

Solution for Public Bus / School Bus / Truck /
Long-distance Passenger Bus / Taxi / Ambulance
/ Police Car / Train / Private Car

Bus

Police car

Truck

Train

Private car

Front

Back

Model

Basic model: FT-920

Optional function
+A : GPS/GLONASS
+B : 3G/4G
+E : Rj45
+F : SD card slot
+W : Wifi
+K : Canbus
+ J : Fireproof box
+ L : Wifi hotspot
+ O : AMP

Specification

- H.264 Video format .
- 4/8 video input, 1 video output, full real-time video (4/8 960H / 720P / 960P / 1080P).
- 4/8 audio input, 1 audio output, and video synchronous recording.
- Support 1*VGA output, 1*CVBS video output.
- Recording image quality support 1-8 levels adjustable.
- Use a dedicated file system to improve the life of the hard disk; can not manually modify the hard disk storage video, audio data, can be more reliable evidence.
- Pull-type hard disk box, support two 2.5-inch 7mm notebook hard drive.
- eSATA*1, backup video data become more faster.
- USB 3.0*1, make backup video data become more faster, software upgrades and maintenance more convenient.
- Support 4/8 channel video, audio playback at the same time.
- Support video, playback, network monitoring synchronization.

- With user password management function.
- 12CH alarm input,3CH alarm output (2CH relay output,1CH 12V output), 2CH analog input.
- 1CH pulse signal speed sensor interface.
- Support delay shutdown .
- Real-time clock.
- DC8-38V wide range voltage supply to adapt to vehicle voltage fluctuations.
- Support two-way shared 12V, 1A power output, support for two-way sharing 5V, 1A power output.
- Support super shock absorption and shockproof function.
- RS232 *3, RS485 *2 (PTZ control).
- Two-way voice intercom interface.
- G-sensor function.

Model

Basic model: FT-910 Series

Optional function
+A : GPS/GLONASS
+B : 3G/4G
+E : Rj45
+F : SD card slot
+W : Wifi
+K : Canbus
+ J : Fireproof box
+ L : Wifi hotspot
+ Q : Advanced

Specification

4CH/8CH 1080P/720P/960H NVR/AHD real-time video recording, 4/8 channel audio synchronous recording.
2.5 inch HDD, max 2TB storage, SD card & HDD dual storage.
H.264 video format, Linux system, dual stream.
Support remote download and playback function according to the file or accurate to seconds, saving much time and data.
FTES correction encrypted file management system, no video loss and record data 2s before sudden power off.
Support pre-alarm record, motion detection and alarm linkage
1pc VGA output, maximum support 1080P.
Support 2pcs 3G/4G wireless modules, WIFI or WIFI hotspot, GPS/ Glonass, G-sensor optional .
RS-232 x 2, RS485 x 2, USB2.0 port x 1,CANBUS 2.0B x 2,
1CH 12V output control
Support extendable devices like LED screen, ID reader(support data of swiping card breakpoint resuming), bus station reporter, people counting camera etc.
Automobile black box function, can record speed, GPS position, acceleration of gravity, brake, back the car, swerve, alarm etc.
DC8-36V wide range voltage supply, industrial standard , embedded design, military level cushion technique.

4CH Mini AHD Dual SD Cards MDVR FT-830 series / FT-530Q series (1080P)

Specification

- 4CH video local recording and playback, support 1080P(1920*1080)/ 720 P (1280x720)
- Meet the ISO7637-2 Electrical Resistance Standard. Adopt high quality positioning and communication module with good stability
- Support speed, turn, brake, reversing, doors opening and closing
- Watermark prevents data from being tampered to ensure the veracity and the legal efficiency of the data
- Support break points GPS data transmitting after reconnecting, can realize remote video surveillance, video download, remote alarm, equipment time-correcting, network setting and remote updating etc.
- Support local and remote upgrading
- Adapt 3G network bandwidth dynamic changes automatically, improving video streaming consistency
- Mini size (132*137*40mm) breaks industrial extremity ,convenient for transportation and Installation

Model

Basic model: FT-830(AHD) / FT-530Q series

Optional function
+A : GPS
+B : 3G/4G
+E : RJ45
+D: Alarm,RS232/RS485,VGA
+W: Wifi
+K: Canbus
+L: WiFi hotspot

Front

Back

Items	parameters	Performance standard
Name	Product name	4CH Mini AHD Dual SD Card Mobile DVR
System	Operation system	LINUX
	Operation interface	Graphical menu operation interface (OSD Menu)
	File system	FTES error correction encryption file management system
Video	Video input	4 channels
	Video output	3 channels (2 channels 1.0Vp-p, 75Ω,1 channel 1080P)
	Video display	1 or 4 channels
	Signal system	PAL:25FPS;NTSC:30FPS
	Total resources	PAL:100FPS;NTSC:120FPS
Audio	Audio input	4 channels
	Audio output	2 channels
	Record format	Synchronized video & audio recording
	Audio compression	ADPCM
Digital processing and storage	Video compression	H.264
	Image resolution	PAL: 4*1080P(1920*1080) ; NTSC: 4*1080P(1920*1080)
	Image quality	1-8 levels adjustable (1 is the best)
	Video bit-rate	1080P: 192K~4M bps(each channel)
	Video storage	1080P: 84M~1.75GB Byte/hour(each channel)
	Playback resolution	PAL:1*1080P/2*1080P; NTSC: 1*1080P/2*1080P
	Storage	Support 2 SD cards ,max 128GB each
Alarm	Alarm input	4 channels (activated by high voltage)
	Alarm output	1 channel
	Motion detection	High/middle/low sensitivity adjustable
LAN	RJ45	Optional (Used for video monitoring)
	Wifi	Optional
	3G/4G	HSPDA/EVDO/CDMA2000/FDD-LTE/TDD-LTE Module optional
GPS	GPS	GPS/ Glonass module optional
Extension interface	RS232	RS232 interface X1
	RS485	RS485 interface x1
	Intercom	Available
	G-Sensor	Available
	Canbus	Optional
Others	Power supply and consumption	DC8-36V 5%≤8W
	Operating temperature/humidity	-40℃~ +70℃/≤80%
	Dimension	132 (L) *137 (W) *40 (H) mm
	Package	L178*W120*H178mm/unit
	Net weight	0.6KG/set
	Gross weight	0.9KG/set

System platform management software

(for MDVR / MNVR: FT-950/958/920/910/918/9112/530Q/830 series)

System Management Software

## 1 B/S Intelligent Dispaching System for Bus

Features

- Adopted advanced B/S program structure design, good reliability and easy to maintenance
- Specially designed for public bus dispaching system, inlcuding bus running diagram, stantions and routes managing, automatical schedual, intelligent dispaching and etc.
- Bus real-time GPS tracking and monitoring, GPS route playback and electronic fence
- Real-time remote audio and video monitoring, remote video playback and download
- Bus schedule statistics, mileage calculation, driver attedence, overspeed, abnormal open and close door statistics, providing a very good data support for supervisors
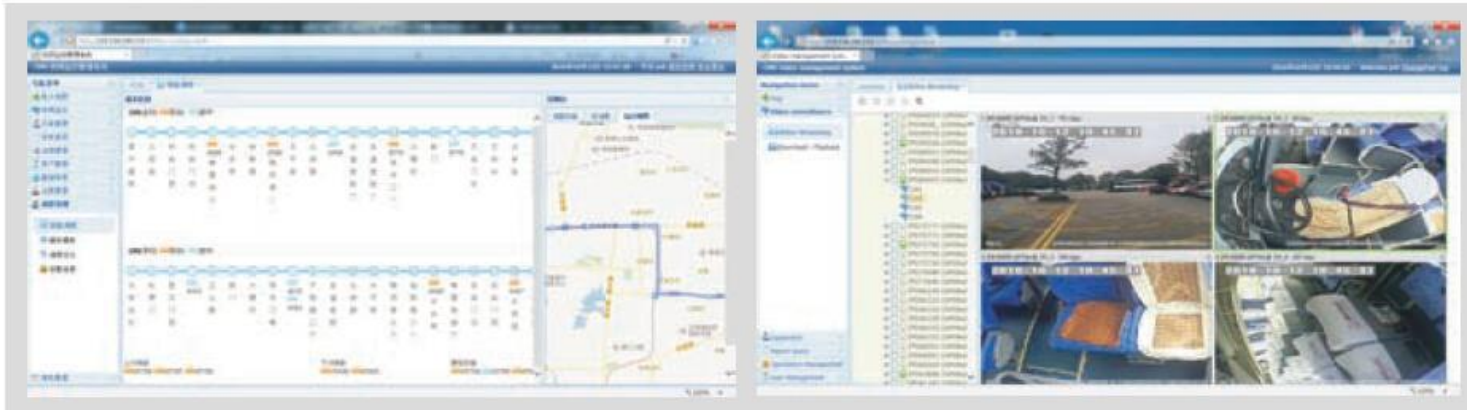
2 B/S Intelligent City Video Alarm Network Platform

Features

- Support remote real-time audio and video monitoring with single or multi channel playing, support remote video playback and download
- Vehicle real-time tracking and mornitoring, vehicle area searching, historical route playback
- Lots of logs for check: vehicle alarm, overspeed, border crossing, fuel sensor, people counting...
- Real-time monitoring HDD condition, GPS condition and video loss...
- Support remote mdvr configuration, realize vehicle fuel and power cut off remotely, SMS and LED advertisment content delivery...
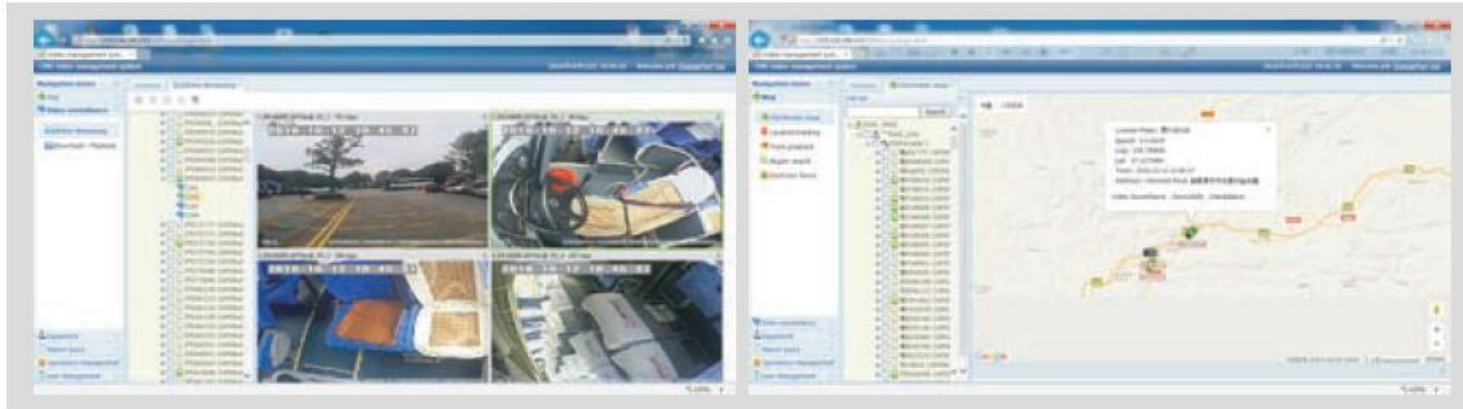
3 Mobile phone monitoring client software

Features

- Achieve vehicle real-time video & audio recording and GPS positioning
- Achieve vehicle intercom, broadcasting function, supports snapshot and storage
- Supports PTZ remote control, and remote control the cut-off of vehicle power & oil
- Real-time monitoring vehicles alarm status ,supports vehicle tracking and remote video playback


Andriod   IOS

System Management Software

4 T8 Mobile Video Monitoring Platform

Features

- 5000pcs vehicles real time monitoring
- Real-time Video & Audio monitoring
- Single & multiple and full screen images monitoring,max to 32 images
- Real-time vehicle status showing: vechile on line quantity, speed, position, brake and Parking sensor.
- Support Vehicles Steering, brakes, door alarm information
- Support time correction, software upgrades,parameters configuration,oil and electrolic break,video download and playback
- JPEG image real-time capture
- Local real-time video and audio recording
- Voice intercome, broadcasting, test to speech
- Vehicle trace playback
- Electric fences, route offset function
- Alarm linkage (speed alarm, emergency alarm, video signal loss alarm ,hdd error alarm and E-map alarm mark)
- Support google, baidu, police geographic information system map etc
- Support multiple client log-in at the same time, different permissions can be set
- Wifi download automaticlly
- Alarm log, HDD damage log, equipment log, user log etc
- Data transmission, LED advertising
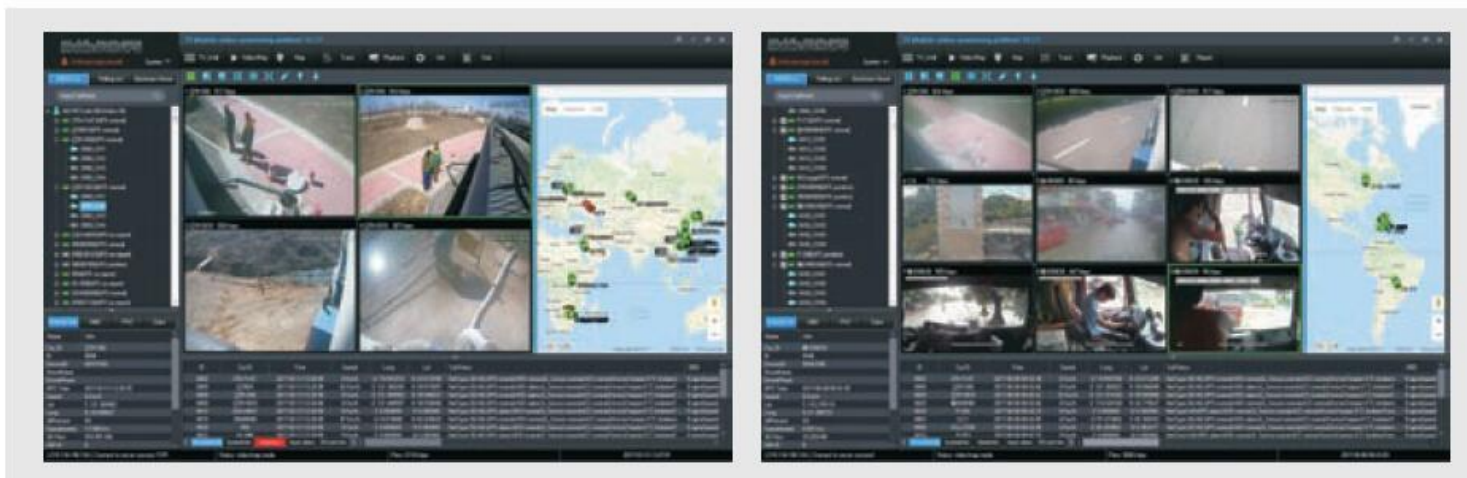
5 **Video Playback Software**

Features

- 4/8CH video real-time playback
- BMP image capture
- Fast forward & Reverse, single-frame playback
- No loss at conversion to AVI file and original video clips
- Data backup in HDD and SD card
- Special area Video hidden
- Video data and GPS /Beidou trace information synchronours analyzation
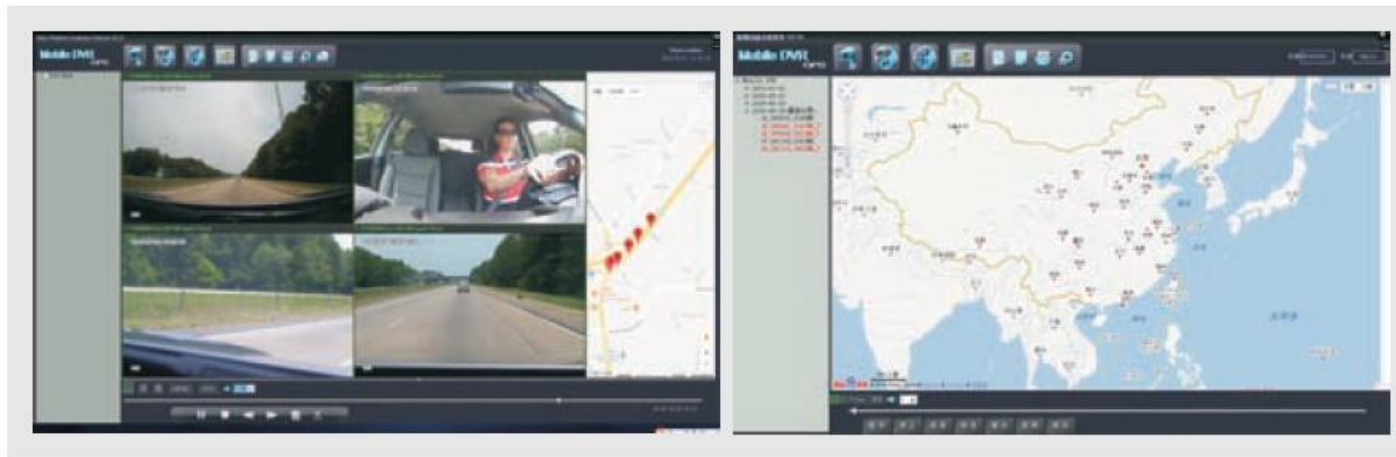
FIRMTOP TECHNOLOGY [R]

*Face recognition in
mobile vehicle security solution*

The face recognition is mainly used in driver identity authentication, driver attendance by face comparison, facial picture capture and blacklist alarm in the mobile vehicle monitoring system. This enables the effective combination of artificial intelligence and smart vehicle operation&management, greatly helped transportation companies to achieve a safer, more efficient and smarter vehicle management system.

Functions

Driver identification authentication

Driver attendance by face comparison

Facial picture capture

Blacklist alarm

Solution Features

Widely used in public bus, coaches, urban taxi / on call vehicles, armored car, logistics, law enforcement and etc.

Public Bus

Coaches

Urban Taxi/On call vehicle

Armored Car

Logistics

Law Enforcement

Model

Basic model: FT-329A7-RS

Specification

- High performance: advanced tracking algorithm, low rate of false positives
- Easy operation: intuitive web browsing debug interface
- Three-dimensional calibration technique: the lens correction filter size and speed
- Detection area diversification: support area, in-line, polylines and polygons
- Screen Display: the number of information can be in the video display and intuitive to understand
- Eliminate camera shake: for camera shake is likely to improve the performance of intelligence analysis
- Multi behavior detection: available for direction, stop, hover, enter, leave, appearance, disappear filtration, derelict / move items detection, detection dog
- Intelligence: built-in intelligent video analysis module, accuracy rate can up to 95%
- Trigger: flexible RS-485 mode, after opening statistics, closing stop system. reduce errors.

Product parameters

Items	Performance standard
Model	FT-329 A7-RS
Name	People counting camera
Sensor type	SONY 1/3 CCD
Pixel	976(horizontal)×582(vertical)
Horizontal resolution	700TVL
Minimum illumination	Color 0.1Lux @(F1.2,AGC ON),0 LUX with IR
	Black 0.01 Lux @ (F1.2,AGC ON),0 LUX with IR
Characters overlap	Support (DSP)
Signal system	PAL/NTSC optional
Shutter	1/50 s -1/100000 s
Lens	1.8mm @ F2.0
Adjusting angle	horizontal:0°~180°;vertical:0°~90°
Day and night	Electronic auto color turn to black
Synchronization system	Inter-sync
Video output	1Vp-p Composite Output(75Ω/BNC or aviation)
SN	> 62dB
Audio	Can not built-in
Trigger way	RS-485
color	white
Working temperature & humidity	-10℃~60℃, humidity < 90%(no condensation)
Power	DC12V±10%
consumption	< 5W
Video cable length	40cm
IP grade	Ip64
IR distance	10 m
Size(mm)	Product size: diameter 102.5mm* height 87mm , packing size: 120*120*100mm
Net/gross weight	421g /507g

Product composition

The driving safety auxiliary terminal consists of four parts: the main unit, the DSM anti-fatigue acquisition camera, the ADAS camera, the speaker, and the GPS & 4G antenna (optional).
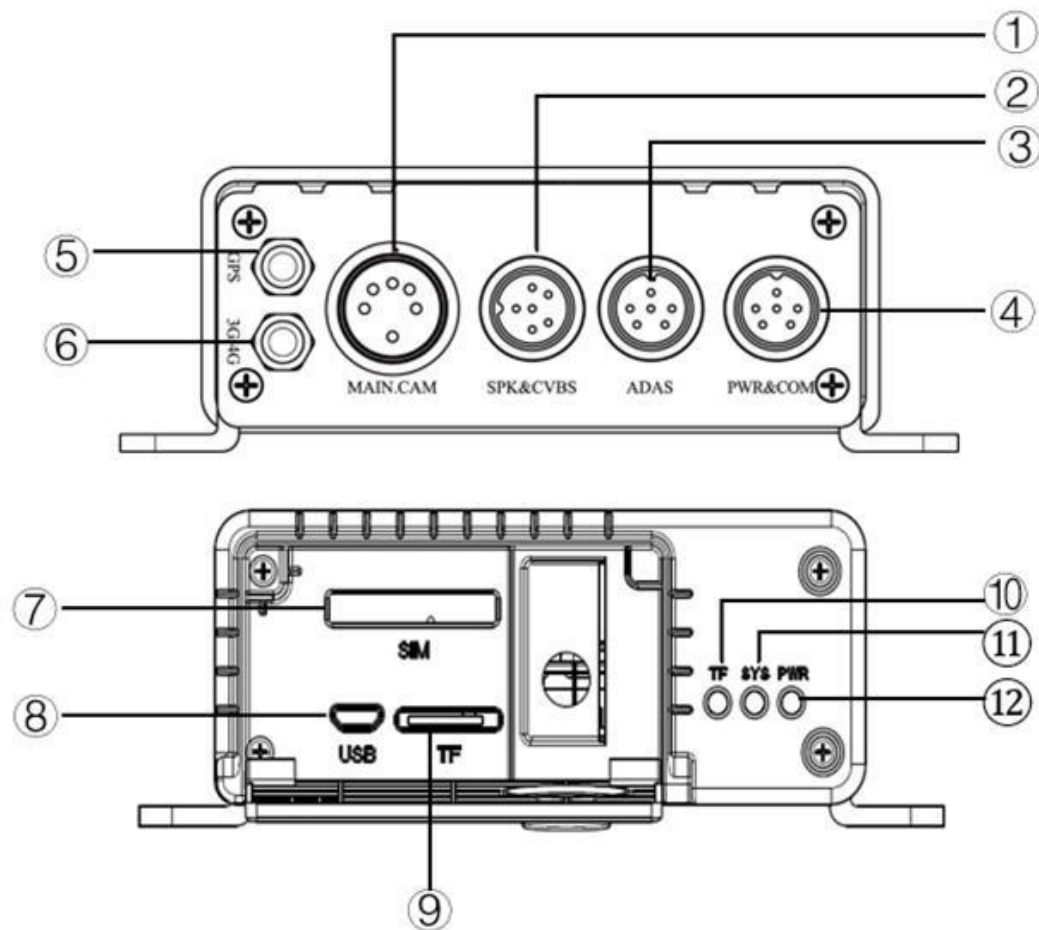

Anti-fatigue camera   ADAS camera   speaker

GPS&4G antenna

Host interface introduction

Host: MDVR (FT-920 series)

Interface name and description:

Number	Name	Description
①	MAIN.CAM Interface	Anti-fatigue capture camera interface
②	SPK&CVBS Interface	Speaker Interface & Video Output Interface (Fatigue Detection Camera CVBS Signal, ADAS Camera AHD Signal)
③	ADAS Interface	ADAS camera + turn signal signal interface (red line to left turn signal, yellow line to right turn signal, black line to ground)
④	PWR&COM Interface	Main power supply and communication interface (RS232 Ethernet two)
⑤	SIM card slot	The SIM card installs the card slot and supports the full Netcom (Note: pressing the yellow button next to the card slot will pop up)
⑥	USB Interface	USB interface for mobile phone APP debugging and firmware upgrade
⑦	TF card slot	Memory card slot (up to 32GB)
⑧	TF card indicator	Memory card indicator (current TF indicator is not used yet)
⑨	System indicator	System status indicator (SYS is steady green when the device is working normally)
⑩	Power Indicator	Power indicator (red light is always on during normal power-on state)

Anti-fatigue camera installation

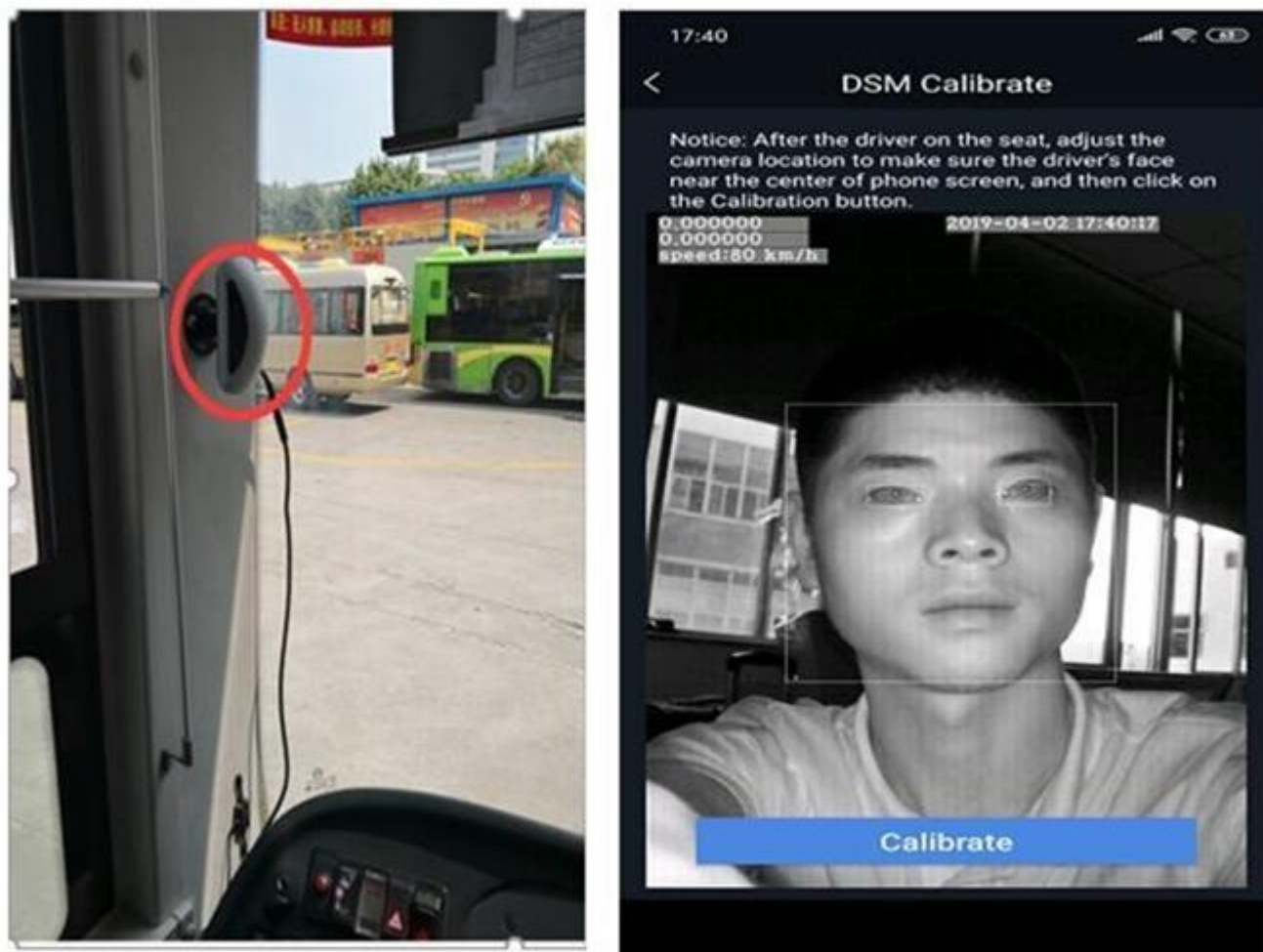The overall installation position and angle effect display, as shown in Figure 2.1-1

Figure 2..1-1

· ADAS camera installation

Installation position: take the center of the windshield as the axis, move up and down according to different vehicle types, generally installed at a lower point (note: do not let the wiper affect);

Installation method: There is a circle of 3M glue on the camera, which can be directly attached to the glass after tearing off the protective film;

Angle requirement: Rotation angle according to adjustment requirements (see 3.3 ADAS Commissioning for details)

2.3.1 ADAS Camera Installation Precautions:

1) The ADAS camera is mounted in the center of the windshield and is fixed with 3M glue (if it is a very inclined windshield, it is installed at a position slightly above the center; if it is a vertical windshield, Then install it at a position slightly below the center);

2) The ADAS camera is an analog camera. It does not support hot swap. You need to connect the cable before powering on the host. If the host has power, whether it is power or data line power supply, and then connect to the ADAS camera, then ADAS will not be able to use normally, and the mobile APP will not see the ADAS image; you need to restart the host to restore normal.

3) Connect the signal line of the turn signal to the vehicle. The signal line level is 3V-24V. The red line is connected to the left turn signal. The yellow line is connected to the right turn signal. The black line is not connected (red left yellow right).。

4) When the signal of the turn signal is connected, as long as there is a jump signal, it is possible to connect from the high voltage or the low voltage. The position of the signal taken by different customers may be different, and there is no mandatory requirement. Judgment processing is carried out on the ground

. overall installation wiring diagram

24
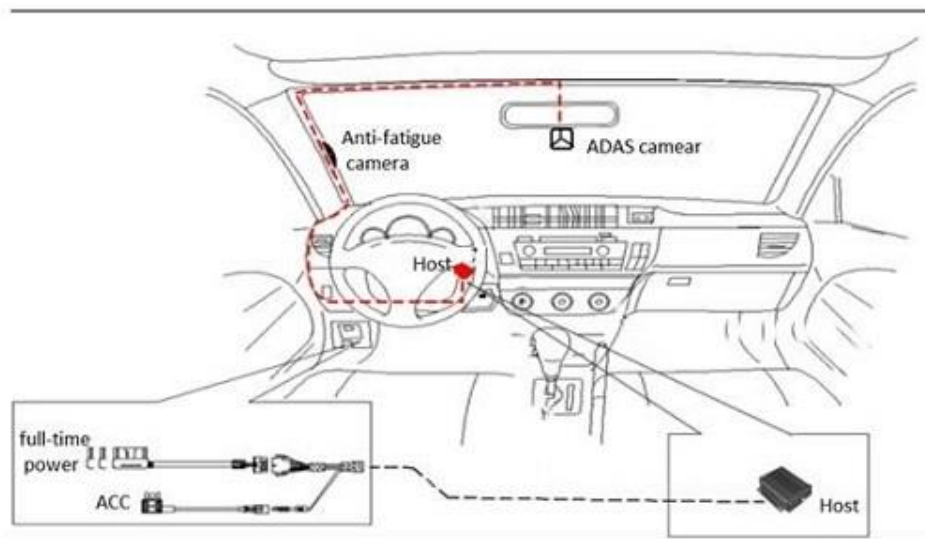
Debugging

- **3.1 Preparation for debugging: mobile phone installation test APP and connection host**

1）The camera debugging tool is the mobile terminal APP (Android version). The specific installation and debugging methods are as follows:

2) Install the driving safety analysis demonstration system .apk into the Android phone (the phone needs to support OTG).

After the device is powered on, connect one end of the debugging USB cable to the USB port of the host panel 2, and the other end to the OTG cable and then to the mobile phone (phone-OTG line-data line-host) as shown in Figure 3.1 below.

Note: The order of the OTG line and data line connection should not be reversed.

Figure 3.1

- **3.2 Anti-fatigue camera debugging**

Open the debugging tool (the debugging tool will pop up automatically when the phone is plugged into the OTG cable. If it does not pop up automatically, you need to open the app app manually.) If the initialization is successful, the communication is normal. The normal interface is shown in Figure 3.2.1. (Note: Please tear off the lens protective film before use, otherwise the image will be blurred).

Description: The mobile test app contains test mode and driving mode. In debugging, you need to set the APP to test mode.

The setting method is: in "Configuration" - "Developer Options" - "Test Mode", click the button, the button turns blue and is set to test mode. As shown in Figure 3.2.2 below.

After the test is completed, the test mode needs to be turned off, that is, enter the driving mode.

Click "Configuration" - "DSM Calibration", click "Open Video", the video interface will be displayed. At this time, the installation angle of the lens can be fine-tuned according to the video screen. The driver is required to face the position of the driving posture in front of the entire screen normally, ensuring that the driver's face is placed at the center of the image. Click on the calibration and the anti-fatigue camera can be fixed after the calibration is successful. As shown in Figure 3.2.3 below:
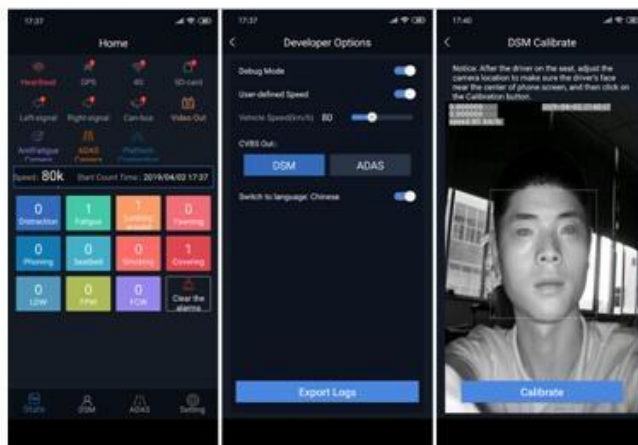

Figure 3.2.1   Figure 3.2.2   Figure 3.2.3

• 3.3 ADAS debugging

The ADAS Advanced Driver Assistance System is an optional feature for driving safety intelligent assist systems. It currently includes two functions: lane offset and front vehicle collision warning.

3.3.1 Alarm Function Description:

The vehicle deviates from the current lane to the left/right and does not turn the turn signal	Lane offset
Distance to the front car x meters (x is related to the speed of the vehicle and the set threshold)	Please keep the distance
Distance to the front car y meters (y is related to the speed of the vehicle and the set threshold)	Collision hazard

3.3.2 Debugging method

1) 1) Refer to the "2.3 ADAS Camera Installation" section to fix the ADAS camera to the center of the front windshield;

2) Measure the required vehicle parameter size, as shown in Figure 3.3.2-1, and record the test results. Later in the test APP "Configuration" - "ADAS Calibration", enter the corresponding body parameters.

Figure 3.3.2—1

3) After the ADAS camera is fixed, connect to the mobile app and select the appropriate parameters in "Configuration" – "ADAS Settings". As shown in Figure 3.3.2-2:

Figure 3.3.2—2

Default Value

According to the actual needs, the -20 supermarket's actual wheel exceeds the lane line by 20cm to trigger the alarm, and 0 means the actual wheel just hits the lane line

set according to actual requirements

4）ADAS calibration operation: On the mobile APP, go to "Settings" – "ADAS Calibration", as shown in Figure 3.3.2-3. View the ADAS video, fine-tune the scale on the camera, and then enter the corresponding parameters to ensure that the video can shine through the entire road surface. The distant horizon line is consistent with the horizontal line on the app (half the sky and half the road surface);

Figure 3.3.2—3

5) If the venue does not allow it, you can mark it at the same height (ie, the contour position) of the ADAS camera position about 1 meter in front of the car. Adjust the horizon position in the APP to coincide with this height, as shown in Figure 3.3.2. Calibration is performed as shown in Figure3.3.2-4;
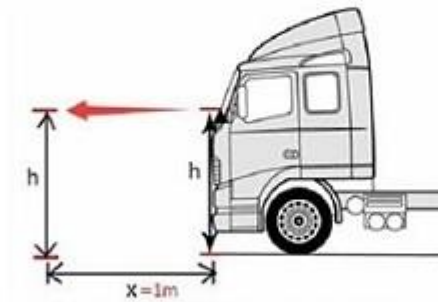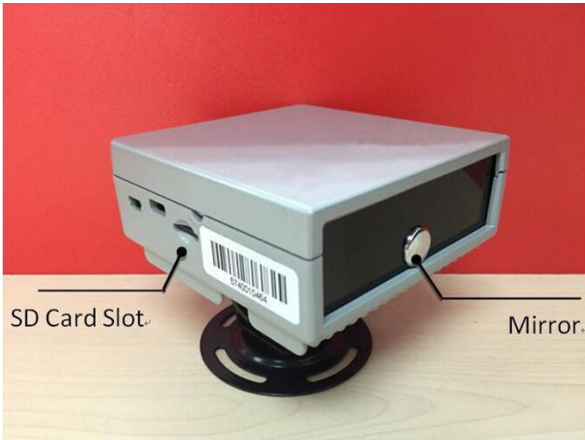

Figure 3.3.2—4

Misbehaviors X

Warning:

Phone

Warning level1

Camera covered

Face missing

Look aside

Smoking

Yawn

Specification

This device is a new driving safety monitoring system based on the fifth generation algorithm of fatigue model. With image recognition analysis, it can monitor driver's behavior and spirit condition all the time and give alarms or warning to reduce traffic accidents when it detects any misbehaviors during the driving, **such as keeping head down, sleeping, looking around / aside, face missing, smoking, making call, yawning, blocking camera and etc.**
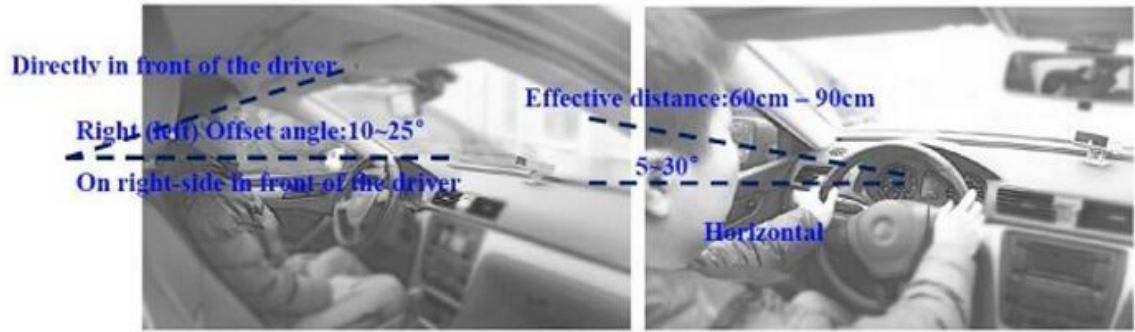
SD Card Slot.

Connector

Mirror.

1. Installation requirements

Use screws to fix FT-339A7 leaning to right side (10~30 degrees) in front of the driver and tilting up at the angle of 5~30 degrees;

Connect the lead terminal with the power supply wiring harness;

1. A top view of InstallationFigure   2. A side view of Installation
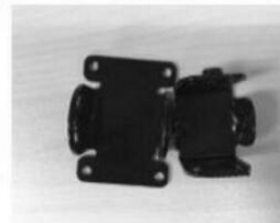
2. Accessories

1. Round head screw   2.Disc base   3. H ost

4. Long screw   5. Grub screw   6. Bracket

Vehicle IR Camera Series

Name & Model	Appearance	Features	Parameters
Camera **FT-120**		• Double glass design, anti-reflection • 24Pcs TAIWAN TYNTEK-chip LED • 3.6-16mm lens for different view angle effect • IR lamp auto light when condition lower than 5 LUX • Standard 3.6mm single board IR lens • Plastic shell, indoor camera	
Camera **FT-121**		• Double glass design, anti-reflection • 24Pcs TAIWAN TYNTEK-chip LED • 3.6-16mm lens for different view angle effect • IR lamp auto light when condition lower than 5 LUX • Standard 3.6mm single board IR lens • Metal housing, indoor camera	• Sensor: 1/3"SONY CCD • Effective Pixels: PAL:512(H)×582(V) NTSC:512(H)×492(V) • TV System; PAL/NTSC • Horizontal resolution:0Lux/F1.2 • Lens: 2.8mm/3.6mm/6mm/8mm/12mm/16mm optional , standard match 3.6mm) • Shutter Speed: 1/50 (1/60) -1/100,000Sec • S/N Ratio: ≥48dB • Video output: 1.0Vp-p75Ω • Wavelength of IR lamp:850nm • IR distance: 5-15m • Working Power: DC12V • Working Current: ＜260mA
Camera **FT-122**		• Double glass design • 24pcs LED • 3.6MM-16MM Lens optional • Match with 3.6mm lens • Metal shell, waterproof, inside and outside car • Infrared lighting automaticlly when illumination below 5 LUX	
Camera **FT-316**		• Double glass design • 24pcs LED • 3.6MM-16MM Lens optional • Match with 3.6mm lens • Metal shell, waterproof, inside and outside car • Infrared lighting automaticlly when illumination below 5 LUX • Standard 3.6mm single board IR lens • Metal case, waterproof design, common inside and outside the car	
IR Intelligent PTZ camera **FT-3018A7**		• Industrial Power supply, voltage range DC11V-18V • Support diferent camera, SDI,IPC and etc • High strength aluminum alloy precision casting shell, impact resistance, corrosion resistance; • 360 degree unlimited, up (+90°～-90°) without blind spots • Can set automatic cruise, horizontal scan, camera mode and tittle display ,etc • PTZ coordinates, lens magnification display function. Infrared night vision distance is more than 100 meters	• Horizontal manual control speed: 0°～60°/S • Vertical manual control speed: 0°～40°/S • Infrared light distance: 60m • Protection level: IP66 • Working temperature: -35℃～+75℃ • Power supply: DC12V(50VA) • Weight: 13kg

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Vehicle PTZ camera series

Name & Model	Appearance	Features	Parameters
Intelligent Laser PTZ camera FT-3018A7-J		• For all day surveillance design, working temperature-35℃~+75℃; • Night IR range distance more than 200M. Camera night IR range can be 500M • Real-time processing focal lens information, laser light spot can automatically zoom with the lens, but also remote adjustment independently . PTZ preset and laser spot size synchronous linkage. • Support diferent camera, SDI,IPC and etc • Laser spot angel 0.2°~30°, convenient for user night far and wide vision monitoring • The effect laser speckle, the maximum degree uniformity, and the spot of the maximum is eliminated by the imported display laser..	• Horizontal manual control speed：0°~60°/S • vertical manual control speed：0°~40°/S • Infrared light range：200m • Vertical angle：+90°~+90° • Preset points：128Max • control method：Multi-protocol,RS485 or onvif • Protection rating：IP66 • work temperature：-35℃~+55℃ • power：DC12V(50VA) • GW：6kg
Thermal imaging camera FT-3018A7-R		• For all day surveillance design, working temperature -35℃~+75℃ • High strength aluminum alloy precision casting shell, impact resistance, corrosion resistance; • Using the most advanced third generation refrigeration vanadium oxide (VOX) of infrared focal plane detector, 320 x 240 pixels • Provide excellent image quality and sensitivity, can detect temperature less than or equal to 85 mk (equivalent to f / 1 hour ＜ 35 mk); • Thermal imaging detection range over 500 m, can output clean-cut and clear thermal images under full dark or thin fog condition. • 24 hours surveillance switches between IR thermal imager and camera video. The internal heater can endure extreme weather while image staying perfect • Moisture-proof and waterproof	• Model: FT-3018A7-R-F50 • Field: 14 ° (horizontal) x 11 ° (vertical), 50 mm lens • Spatial resolution: 0.760 mrad (50 mmlens) • Detection range: About2.2 km About780m • Thermal imager performance: focal plane display (FPA), uncooled bolometer • Probe type: 320 x 240 pixels • Preset points: 128 Max • Control mode: Multi - protocol, RS485 • Protection grade: IP66
Intelligent infrared PTZ Camera FT-3022A7-B/J		• FT-3022A7 infrared • FT-3022A7-B zoom infrared • FT-3022A7-J synchronous laser • Wiper function, to ensure that the lens cleaning; • Can store 256 preset, data memory when power is off • Protection grade IP66, supports three levels of lightning protection, surge prevention • Configurable shock absorbers, vehicle power DC10.5 V - DC18V • Using the third generation of high power infrared lamp, with multiple sets of Angle, brightness can be adjusted to realized maximize lighting • Infrared lamp and camera really realize the three tank isolation which solved the problem of infrared lamp aging and ball machine lens fog problem	• Infrared irradiation distance: 120-150 - m (infrared type FT-3022A7) • Laser distance: 300-400 -m (laser type FT-3022A7-J) • Telephoto speed limit: support • Power off memory: support • Position coordinates information display: support • Temperature display function: support • Power supply: - DC18V DC10.8 V • Power consumption: infrared 50 w, 30 w laser • Working temperature and humidity: - 30 ℃ to 65 ℃ humidity less than 90% • Protection grade: IP66 (outdoor), TVS4000V lightning protection, surge, the surge • Weight: 6 kg
Intelligent IR PTZ camera FT-3023A7		• Using highly integrated 16-bit processor, lower power consumption and stronger steable. OSRAM high intensity light-emitting chip. • Using 0.9°precision motor-driven that low stable and runs smooth no jitter . adapt of industrial-grade components, suitable for all kinds of vile weather; • Used for video conference system • Combined with powerful magnet, used for portable outdoor vehicle monitoring • Work with shock absorbers fixed to achieve vehicle monitoring all day	• Horizontal manual control speed: 0°~220°/S • Vertical manual control speed: 0°~90°/S Preset point: 256 pcs preset point • Relative humidity: 90% • Protection rating: IP66 • Working temperature: -35℃~+75℃ • Power input: DC11V ~DC18V • GW: 2.5KG

Special Accessories

Name & Model	Appearance	Features	Parameters
SATA HDD Reader ft-150series		• Metal Shell • Mini Size, easy to take • Easy and direct to read the videos in SATA HDD via USB on PC	• Input voltage: DC5V • Port: USB2.0 • Dimension: 80mm(L)×64mm(W)×26mm(H)
Car Power		• Features: Metal Shell, Hard Broken • Mini Size, easy to take • Wide voltage input, supply stable power for MDVR,Cameras,Pickup,Monitor etc	• Input Voltage:DC6-36V • Output Voltage:DC12V • Output Current:10A • Dimension:100mm(L)X100mm(W)X35mm(T)
Pick Up ft-192 series		• Mini Size, high sensitive, low noise • Wide working voltage, Built-in positive protecting circuit, avoiding burned machine. • Great front drive ability, long signal transmission • The reductive voice more clear, realistic and sweet-sound. • Compact size, suitable to surface mounted	• Working Voltage:9V～14V • Working Current:5mA～60mA • Sensitivity:200 mA/ubar • Frequency:50HZ～10000HZ • Max Output Voltage:5V-upp
Panic Button ft-195 series		• Metal Shell, Mini Size, easy to mount • Connecting with the Alarm input port of the MDVR for panic alarm.	• contactor:1 set open contactor 1 set close contactor • Dimension:76mm(L)X23mm(W)X14mm(H)
Alarm Light ft-196 series		• Plastic shell, Mini Size, easy to mount • Connecting with alarm input port of the MDVR to inform the emergency	• Output voltage:DC12V/200mA • Dimension:73mm(DM)X38mm(H)
Outer Box ft-166 series		• Metal Shell, hard broken • The fixed holes match the MDVR, safe and reliable • Look perfect and tide as MDVR connecting cable hidden • With keys for the security	• Dimension: 280mm(L) x 280mm(W) x 84mm(H)
Vehicle PTZ Keyboard ft-181		• Compact size, suitable for patrol cars, mobile police cars and other mobile systems using. • Three-dimensional joystick, achieve more functionality by smaller size. • Specifically for automotive using, low power consumption. • Infinitely variable-speed control speed dome rotation	• Communication protocol:PELCO-D(or customize for customer) • Baud Rate:Default 9600bp or customize if needed • Control address:1 • Communication way:RS485 • Joystick control:3-dimensional(up, down, left, right, zoom) • Woking power:DC12V • Power consumption:6W
Vehicle PTZ Installation bracket ft -185		• Metal material, durable, free from destroying • Mounting holes available for matching with PTZ, secure and reliable • Used for different vehicle by adjusting the iron	• Dimensions: 850mm (L) * 205 (W) * 190mm (H)
LED Small Pannel ft-198		• Extend accessory of remote control of the main engine and indicator light • Long extension control distance, can reach 5 to 10 meters • Complete indicator of the main engine status, such as power,alarming,video loss,video status • Elegant apperance, convenient to install	• Technical parameters: • Input voltage:DV12V • Working current:50 mA (12V) • Data connector:RS485 • Working temperature:-40℃-80℃ • Size:45mm(L)×35mm(W)×20mm(H)

Special Accessories

Name & Model	Appearance	Features	Parameters
Fire Box ft-525		• With strong & anti-corrosion steel box body can protect the security of the data effectively • Using nano insulation materials, with high temperature resistant function, can protect the SD card for 20 mins when suffering 600℃ high temperature. • Built-in professional industrial-strength SD card, 64GB max. • With the specific tech of waterproof, dustproof, explosion-proof technology, more safer and reliable • Aviation connector to achieve the external mirror image video recording	• Capacity for SD card: 8G, 16G, 32G option • Recording mode: External mirror image recording • Data interface: USB2.0 • High temperature performance: can protect SD card for 20 mins when suffering 600℃ high temperature • Protection Grade: IP67 • Size: 145mmx90mmx70mm
Oil consumption collector ft-541		• High detection accuracy:0.1mm oil level height measurement, ±0.5% precision error • Good long-term stability: Adopts the method of ultrasonic measurement • Easy to install and maintain: Just put the ultrasonic probe at the bottom of the tank outside • Environmental protection & non-pollution: Small Energy consumption, non-contact measurement • High reliability: Can work normally in the harsh environment.	• Working Voltage: DC9-36V • Measuring distance: 4cm - 100cm • Resolution: 0.1mm • Measurement: 0.5% • Working temperature: -40~80℃ • Protection Grade: IP66
OBD module ft-540		• standard OBDII port,. Covering all major automobile protocol, • all database will return as numerical methods, • Algorithm for accurate mileage. Accuracy 99.5%. • Supports instant fuel consumption, average fuel consumption and fuel consumption data. • Support vehicle diagnostic fault codes, two instructions to complete the fault codes read and erase. • Support sudden acceleration and nasty slowdown etc	See protocol table below
LED Monitor ft-196	Next station: Xing Dong	• Fully meet the on-board voltage requirements, Voltage range: DC9-36V • Standard common interface protocol:RS232/RS485 • Throughout the day can be divided into 8 hours 7-level brightness adjustment • Advertisements expire automatically deleted without consumption flows, comes with alarm function. • Supports Instant Messaging insertion support synchronized display of information.	• Pixel spacing: 6mm 7.62mm 10mm • physical densities: 2048/set • color: red, yellow, green, blue, white, • optimum viewing distance: 10-30M • ambient temperature:-30 ℃ ~ 70 ℃ • operating voltage: DC8~36V
CAR UPS POWER ft -161	UPS	• Pure sine wave output, always loaded with a full range of protection and high quality sine wave power supply. • High input power factor, high load capacity. • Wide input range input voltage range: DC8-36V. • The most advanced intelligent battery management, the most effective protection of the battery life. • Perfect protection measures. Output short circuit protection, overload protection	• Rated capacity: 12V/1400mA • input voltage: DC 8~36V • output voltage: 12V • standby time: ≥ 20 min • charge time: ≤ 4 hours • Max discharging current: 5A
Fuel and Power cut off controller ft-199		• Switch the power load, impact resistance, high vibration resistance • Able to withstand sand and dust, water, salt, oil, against vibration and shock • Ambient temperature range:-40℃ ~ 85℃ • Suction voltage:V≤ 60%VH(Fixed voltage):Coil voltage allowed 1.5VH • Has two States: normally closed, normally open optional	• Pull-in time:9ms • Release time: 7ms • Insulation resistance:100MΩ at500VDC, 50%RH • dielectric strength: 500Vrms, 1min • Impact: 20g, 11ms • Working environment temperature:-40℃ ~125℃
Capacitance oil mass inductor		• High resolution and measurement accuracy • No need for manual intervention,automatic calibration,can correctly output accurate liquid level height signal. • Measurement medium:diesel,gasoline,corrosion resistant	• Detection range:0.05-1m • Accuracy:0.1 • Medium temperature:-50-125℃ • Supply voltage:12-28VDC • Mounting:thread M16*1 or flanged mounting,can customize special requirement • Ground pole diameter:Φ16

OBD module ft-540 protocol table

Serial number	Protocol name	Protocol standard
1	ISO9141-2	ISO9141
2	KWP2000-5BPS	ISO 14230
3	KWP2000-FAST	
4	CAN BUS-11B-500K	ISO15765
5	CAN BUS-29B-500K	
6	CAN BUS-11B-250K	
7	CAN BUS-29B-250K	

System solutions

1 Public bus wireless video monitoring system solution

- Each bus install four (HD 1080P) cameras, 1 fireproof box and 1 panic button for driver.
- The panic button triggered alarm can be sent to the platform
- Support users remotely taking JPEG pictures and saved in server
- Support GPS/GLONASS modules, with high accuracy
- Support 3G/4G, monitoring center can check live data anytime.
- Big capacity 2TB for data storage, no need to format.Plug and play.
- The fireproof box with built-in 32GB SD,making recorded videos simultaneously saved in it. When there is a fire accident, the videos can be played completely without any damage, which provides a very effective evidence.
- Through the center platform, supervisors can manage all the buses' conditions in full aspects to avoid different kinds of possible accidents.

System topological graph
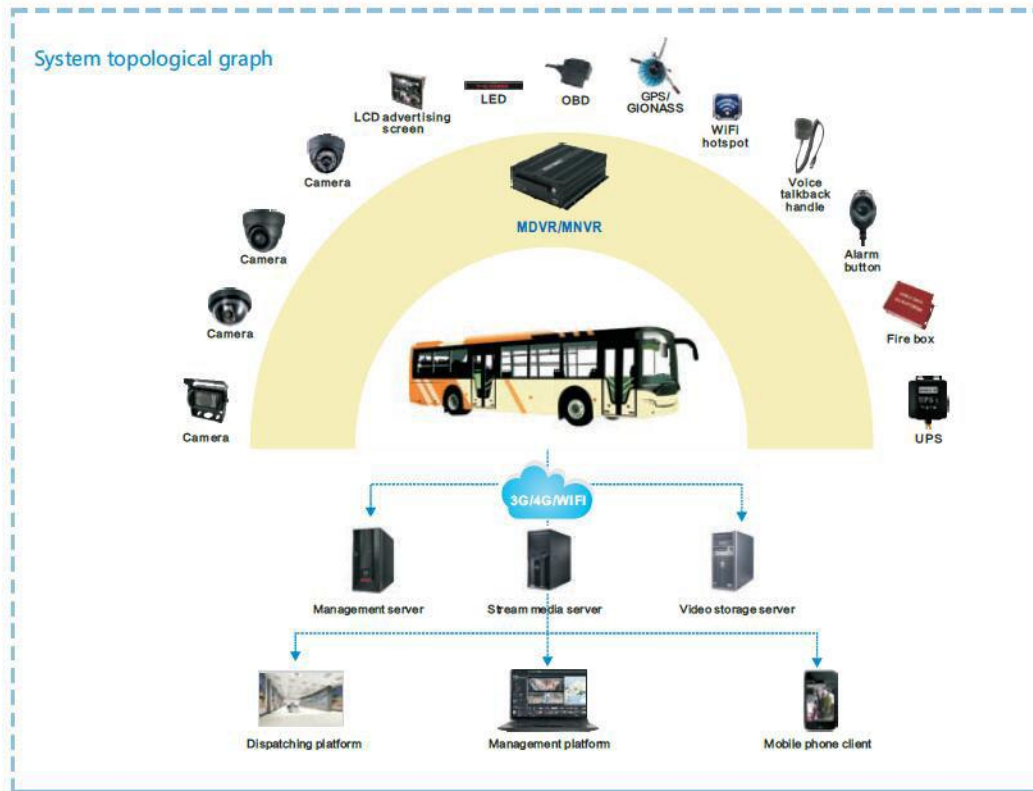
2 Public bus intelligent dispatching system solution

- Each public bus installs five cameras (HD 1080P), one fire box , one sound pick up & 1 alarm button, also can extend to connect with LED (for advertising promotion), dispatching board (with bus stop reporter) and people counting camera.
- Driver alarm button can support alarm on network platform.
- Support user JPEG images capture by management platform remotely and pictures can be stored in the server.
- Support GPS/ GLONASS dual modules positioning with higher location accuracy.
- Command center can operate the vehicle at any time by using 3G/ 4G
- Wifi hotspot built-in to achieve passenger view browser (max support 50 users)
- Support 2 TB Hard disk recording, no need format. Plug and play.
- Install fireproof box boxes, insert 32GB SD card ,to achieve HDD and SD card video recording storage at the same time.when vehicle catches fire. It also can guarantee the storage data in the fire box playback completely and provide the evidence for the accidents.
- The supervisor can master the bus running status in all directions and eliminate all kinds of security risks effectively through monitoring management platform.
- Extending LED by RS232 can update the advertisements contents , bus driving routes and running prompt.
- Can extend people counting system camera to statistic each platform getting on and off flow conditions , offering reference to data management for preventing tickets fee loss effectively.
- Support manual and automatic station report,built-in RFID module,support check on work attendance function of drivers.

System topological graph

3 Logistics transport vehicle monitoring system solutions

- Each vehicle installs four cameras (HD 1080P),real-time monitor front of vehicle,driver,vehicle inside,reversing rear view,protecting driving safety.
- The driver can trigger the alarm button in case of emergency incident and the signal will be transmitted to monitoring control center.
- Support JPEG format image capture remotely through cms platform and pictures will be stored on the server
- Support GPS/GLONASS dual-mode position with higher positioning accuracy.
- Command center can operate the vehicle at any time by using 3G/ 4G.
- Support 2 TB hard disk recording, no need format. Plug and play.
- The supervisor can master vehicles running status in all directions and eliminate all kinds of security risks effectively through monitoring management platform.
- Can extend fuel consumption statistical instrument,statistical fuel consumption status. Monitoring oil stealing phenomenon effectively.
- Support 1080P recording. Can support max 4CH/8CH 1080P HD video recording without any delay.
- Full HD video surveillance make logistics and transport chain clear and transparent. It also can strengthen emergency trace-ability to prevent goods loss effectively.
- Can extend Tire Pressure detector,real-time monitor tire pressure and temperature variation,preventing tire burst and air leakage,protecting driving safety.
- Can extend magnetic switch,real-time monitor tailstock door open or close status,preventing opening door on halfway,protecting goods safety.

System topological graph

37
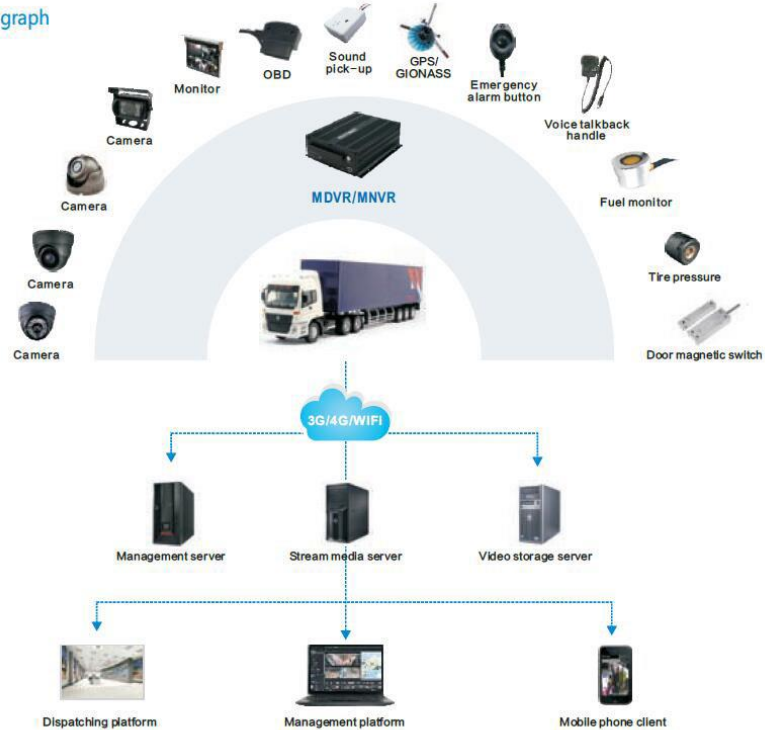
4 Passenger vehicles and transport vehicles monitoring system solution

- Each bus install five cameras(HD 1080P), one Fire box, one sound pick-up, one driver alarm button and one people counting camera.
- The driver can trigger the alarm button in case of emergency incident and the signal will be transmitted to monitoring control center immediately.
- Support JPEG image capture remotely through CMS platform and pictures will be stored in the server
- Support GPS/GLONASS dual-mode position with higher location accuracy.
- Command center can operate the vehicle at any time by using 3G/ 4G.
- Wifi hotspot built-in to achieve passenger view browser (max support 50 user)
- Support 2 TB hard disk recording, don't reguite format. Plug and play.
- Install fire boxes, insert 32GB SD card ,to achieve HDD and SD card video recording storage at the same time.when vehicle catches fire. It also can guarantee the storage data in the fire box playback completely and provide the evidence for the accidents.
- The supervisor can master the bus running status in all directions and eliminate all kinds of security risks effectively through monitoring management platform.
- Can extend people counting system camera to statistic each platform getting on and off flow conditions , offering reference to data management for preventing tickets fee loss effectively.
- Can extend ultrasonic fuel consumption sensor,real-time monitor oil consumption status of vehicles,preventing oil spilling and oil stealing,optimizing enterprise operation costs.
- Can extend fatigue driving pre-warning system,real-time detect fatigue and distraction status of drivers,providing safe assurance service for drivers and operation companies.

System topological graph
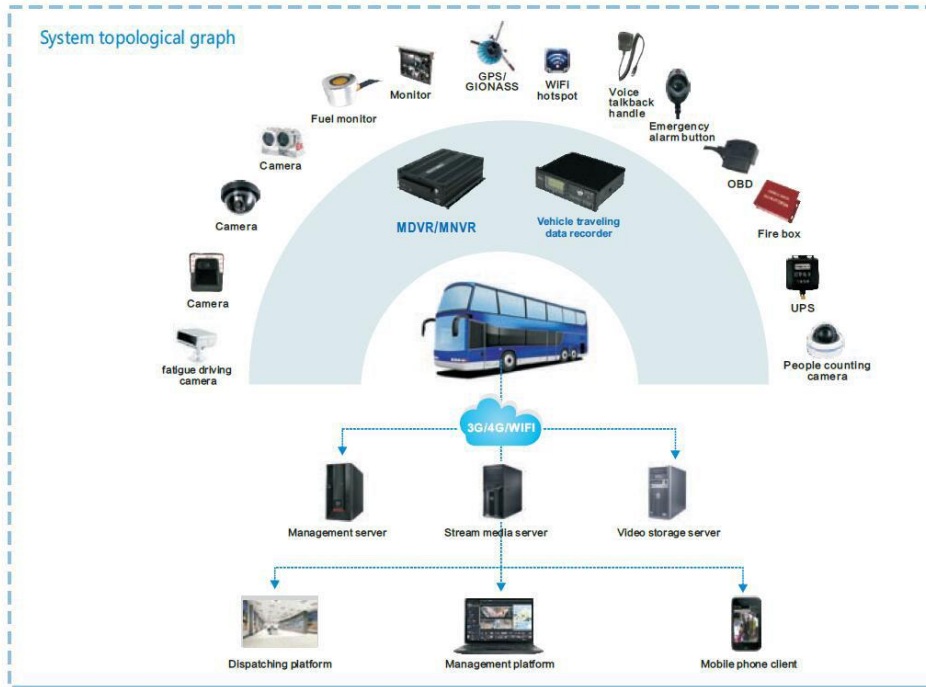
5 Police law enforcement vehicles forensics system solution

- Each car installs one vehicle PTZ camera (1080P-SDI/AHD),one indoor camera with audio(1080P-SDI/AHD),one emergency reinforce alarm button,one emergency JPEG image capture button,one voice talk-back handle,one 7 inch monitor with PTZ control rocker,law enforcement recorder device is optional.
- Trigger emergency reinforce alarm button,command center platform software can immediately receive alarm info of law enforcement vehicles need reinforce,then arrange nearest patrol vehicle to go to reinforce.
- If law-enforcement officers meet unlawful act,they can trigger button of JPEG image capture,can save the images in remote server immediately.
- Support GPS/ GLONASS dual modules positioning with higher location accuracy.
- Command center can operate the vehicle at any time by using 3G/ 4G
- Support 360 degree rotary PTZ camera,can get accurate location,track and shoot various unlawful acts and law enforcement progress.
- Support max 4CH or 8CH 1080P HD recording,no delay.
- Support 2 TB Hard disk recording, no need format. Plug and play.
- Police law-enforcement officers can wear law enforcement recorder from our company,to record videos & audios,take pictures etc. Of unlawful acts.
- To extract law enforcement recording is convenient and fast.Multiple storage modes(HDD,server) is safer.Support scene playback and backup recording,download recording remotely,extract recording from server etc.
- Command center can unified manage and command police enforcement vehicles via platform,improving enforcement efficiency.

System topological graph
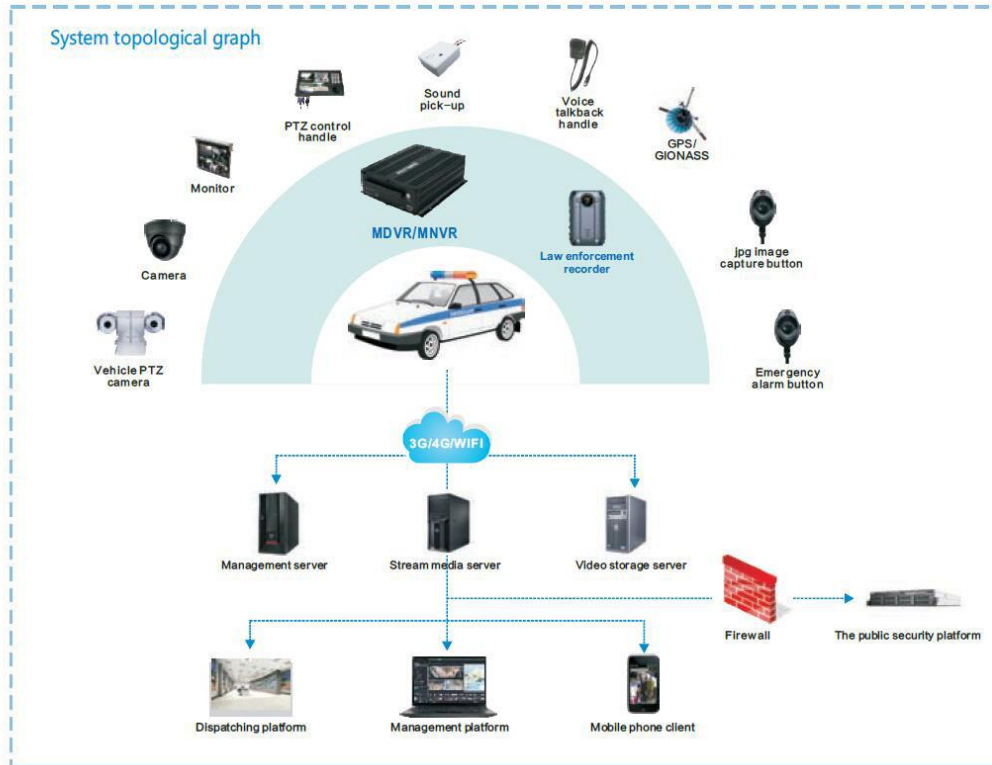
6 Taxi monitoring system solution (Working with Taxi on-calling system)

- Each vehicle install four cameras, real-time monitor front of vehicle,front row passengers,back row passengers,trunk.
- Driver alarm button can support alarm on network platform.
- Support passengers JPEG image capture and pictures can be stored in the server.
- Support GPS/ BD dual modules positioning with higher location accuracy.
- Command center can operate the vehicle at any time by using 3G/ 4G.
- Support 2 X128GB SD cards
- The supervisor can master the bus running status in all directions and eliminate all kinds of security risks effectively through monitoring management platform
- Extending LED by RS232 can update the advertisements contents.
- Calling-up and guide system connected by RS-232,Mobile DVR can transmit the communication services between calling-up terminal screen and backstage.
- Detailed vehicle grouping and multilevel account management combined with the unified and diversified management mode perfectly.
- Can extend service evaluation device,record drivers' service quality,improving customers' satisfaction.

System topological graph

40
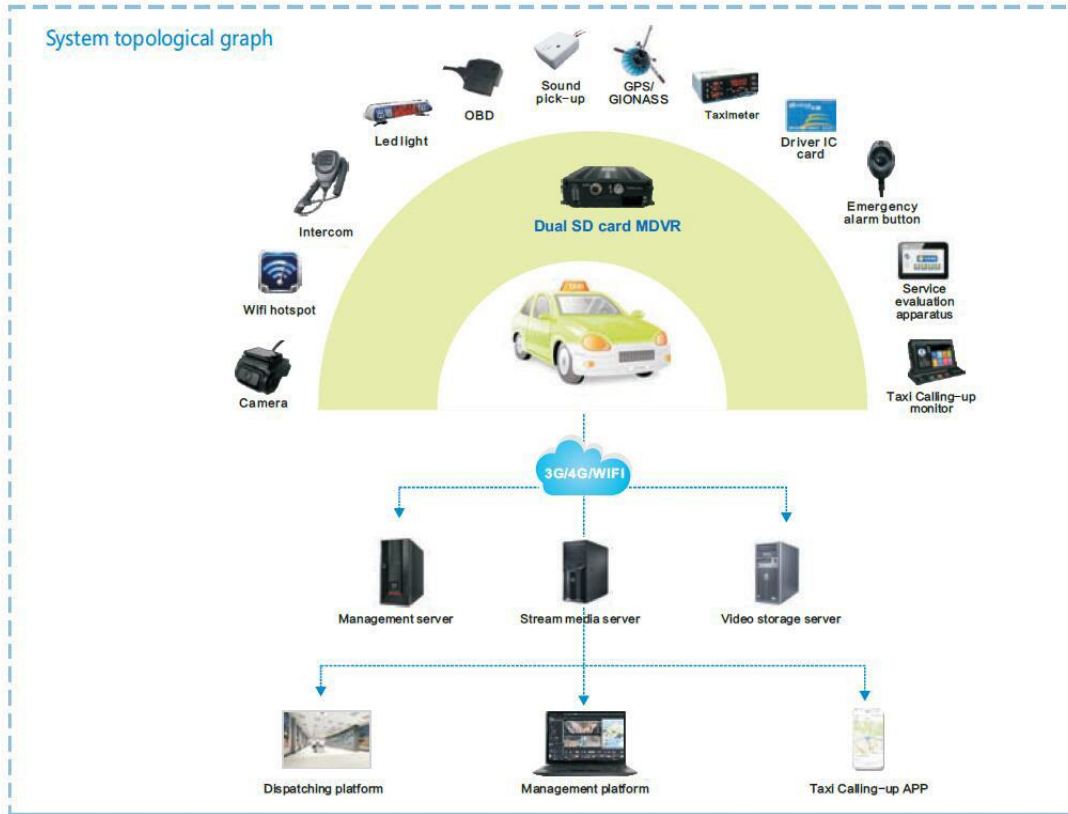
Taxi Surveillance Solution
NEW generation Android touch screen

Model: FT-JT1 (V3)

This powerful touch screen is perfect for taxi surveillance and fleet management. It's running on Android system, including lots of functions such as real-time video / recording, GPS tracking, network communication, on-board navigation, ADAS/DSM analysis , Face recognition, message notification, telephone, order list, payment record, etc. It is able to integrate with other accessories such as fare meter, LED advertisement panel, POS machine, driver panic button, service evaluator, Status LED displayer, speaker for extended functions.

Features:

★ Support 3G/4G network

★ 2 channels of 720P AHD video inputs, can be extended to 4 channels

★ 1 SD card, up to 256 GB

★ Support Wi-Fi hotspot

★ Support Face recognition

★ Support driver facial login system

★ Support ADAS / DSM（optional）

★ Internal GPS, 3G / 4G,Bluetooth module (support Bluetooth headset / OBD)

★ Support RFID card-reader for driver ID card verification

★ With service evaluation button

★ Support on-board navigation, message notification from center, telephone, live video, order list, payment record, and able to integrate with other accessories such as such as fare meter, LED advertisement panel, POS machine, driver panic button, service evaluator, Status LED displayer for extended functions.

★ Support driver facial login system

★ Multiple alarm reports and business reports

★ Support uninterrupted Audio recording, small file size for download

★ On-board power-off delay for data protection

★ 9V~36V wide voltage power supply

School bus security system solution

- Each vehicle install five cameras, a telephone monitoring pickup. a voice talk-back handle, a drive alarm button, a students get-off car alarm button, a alarm light(with siren function),one fireproof box,one oil cut-off electric control relay.
- Driver alarm button can support network platform, SMS and a key telephone trigger for emergency rescuing more timely.
- Use RFID technology to transmit RFID card information of students get on &off to vehicle intelligence terminal,vehicle intelligence terminal will record remotely and local at the same time, support continue transmission after break-point.
- Support students get on & off JPEG image capture function and pictures can be stored in the server.
- Support GPS/ GLONASS dual model positioning with higher location accuracy.
- Command center can monitor the vehicle any time by 3G/ 4G.
- Support 2 TB hard disk recording, no need format. Plug and play.
- Equipped with a "confirm button of all students get on & off bus " mandatory confirmation student has been off to prevent student left on the vehicle. Send SMS to parents timely,include the time of get on and off and position . Help parents keep track of their kids' status. If driver do not do this confirmation,vehicle extinction directly, monitoring center will receive warning messages, siren sounds and lights flash on the vehicle.
- Install fireproof box,built-in 32GB SD card ,to achieve HDD and SD card video recording storage at the same time.when vehicle catches fire. It also can guarantee the storage data in the fire box playback completely and provide the evidence for the accidents.
- All school buses running will be controlled by managers and supervisors by control center management platform.
- Easily and accurately to find out each student RFID recording from completed students RFID information form.
- Fast getting each bus detail information from customized vehicle information report form.

System topological graph
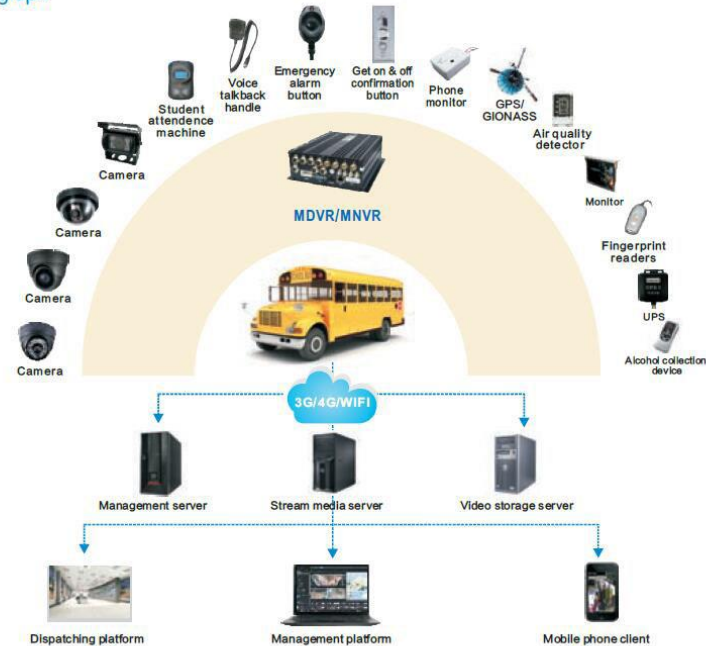
MDVR-classic models

Model:

FT VMR-HN87

3G/GPS/WiFi for option

Support 2 x SD Cards (Max 128GB for each card)

Bus Police car Truck Train Private car

Protection Panel

Security screws

Running indicator

Recording indicator

SD Up to 128GB | WiFi | GPS | 3G | 4channels x4 | D1 H.264

4 Channel D1 Dual SD Cards Mobile DVR   **Classic Model: FT VMR-HN87 series (SC VMR-HN87 series)**

Protection Panel

Camera 1 Camera 2

Camera 3 Camera 4

Front   Back

Connecting diagram

HDD

Monitor

3G antenna

WiFi antenna

GPS antenna

GROUND: ground wire(black)

ACC: gnition wire(yellow)

POWER: power wire(red)

GROUND: ground wire(black)

Alarm input
Alarm output

Cameras

PTZ

Router

Laptop/desktop
(Internet browsers)

45
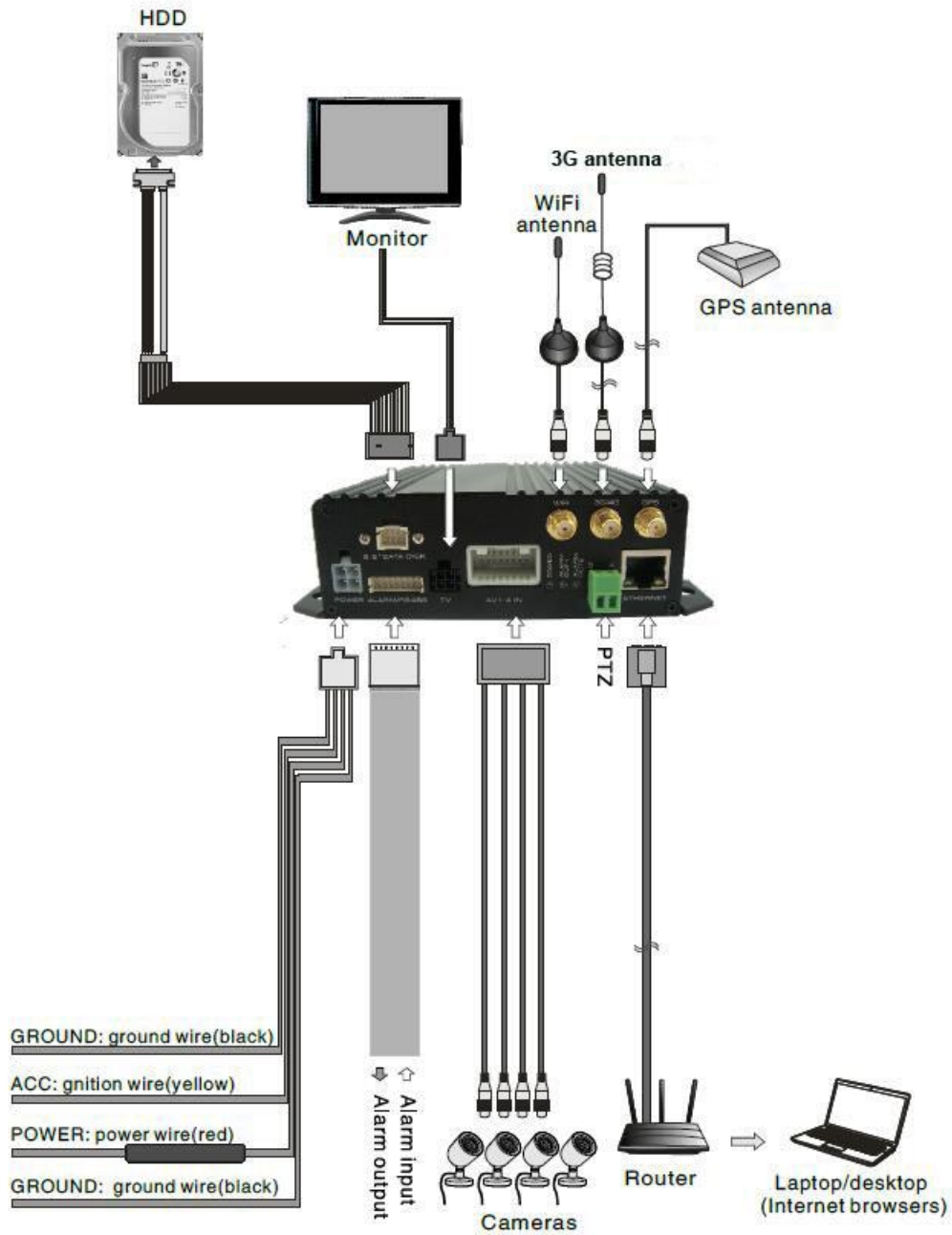
4CH Full D1 Mini HDD Mobile DVR
Model:
FT VMR-H40
4G/3G/GPS/WiFi for option
Support 1 x HDD (4TB in Max)

MAX4TB

Bus　Police car　Truck　Train　more

4 Channel D1 HDD (Hard Disk) Mobile DVR　　**Classic Models: FT VMR-H40 series (4 channels) / FT-VMR-HD80 series (8 channels)**

Front

Back

4 Channels D1 HDD Mobile DVR & Its Full Accessories

Hd40 Accessories List

GPS (Optional)   Combined control wire   anti-shake kits

3G/4Gantenna(Optional)

AV input cable with
aviation connector
or RCA connector

WIFI Gantenna
(Optional)

One power
cable with fuse   user manual   Key

Platform Softwares——MyEye

(for Playback (Vplayer), Local /Cloud Monitoring (CMS), Remote Real-Time Video Monitoring / Downloading (Car_Client), Server (Car_Server))

Playback Software Interface
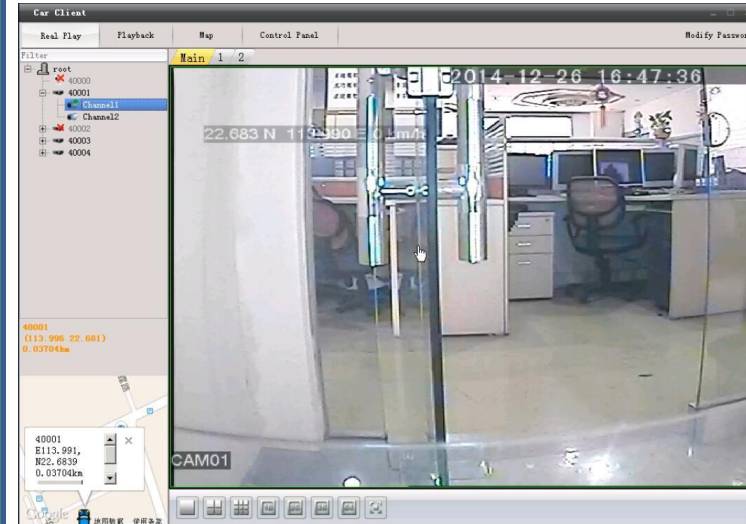
MyEye Client (Car_Client)

CMS Software Interface
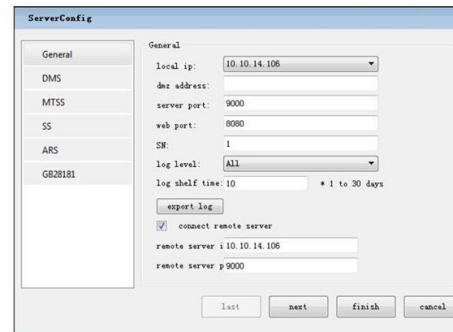
MyEye Server

(Car_Server)
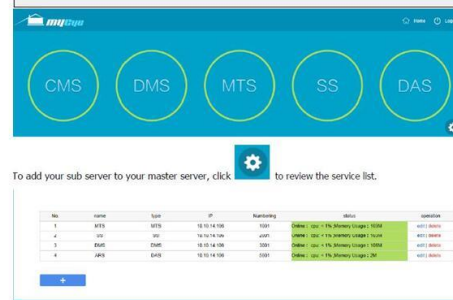
Software for

Server's settings and Configuration

Mini MDVR (Mobile DVR)

4 Channels or 8 Hybird channels (4CH AHD cameras + 4CH Digital cameras) 1080P Mini Hard Disk MDVR

(models: 4CH: FT-DVR 9804 series / 8 hybird CH: FT-DVR-9844 series)

FT-DVR 9804 series

FT-DVR 9844 series

MAIN FEATURES:

1. High video quality based on the H.264 High Profile.

2. High resolution recording. Up to mega-pixel for 4 channels (1280 x 1024) or 8 hybird channels (1280 x1024).

3. Compact size, much easier for installation.

4. Support from 8VDC to 32VDC, applicable for 12VDC and 24DC vehicles.

5. The recorder provides each camera with stable +12V DC power; DVR can detect the short cut on power circuit.

6. Can use ignition to control the power. Configurable power timer after ignition is off.

7. Support automatic record, event trigger record, schedule record.

8. Can record speed with audio and video. Support overspeed alarm.

9. Support 3 sensors, can record brake, return, right turn, left turn light status into the record file.

10. Use avi format for record file. Compatible with different player software.

11. Support FAT32 file system, record file can be read directly on Windows, Linux.

User Interface

LIVE	RECORD	SYSTEM
NETWORK	STORAGE	ALARM
MOTOR	GPS	POWER

System Architecture

Standard Accessories

	Hard disk mobile DVR , 1 pcs
	AV Input Cable 4 channels DVR : 2 pcs 2 channels DVR : 2 pcs 1 channel DVR : 1 pc
	AV Output Cable, 1 pcs
	Signal Cable, 1 pc

	Power Input Cable, 1 pc
	3A fuse, 1 set
	Remote Controller, 1 pcs
	Player Software, 1 set, burned in CD

Optional Accessories

	GPS Receiver
	Panic Button
	USB Reader
	Backup Power Supply

	AV Extension Cable

Unlock MDVR to install SD card & Hard Disk
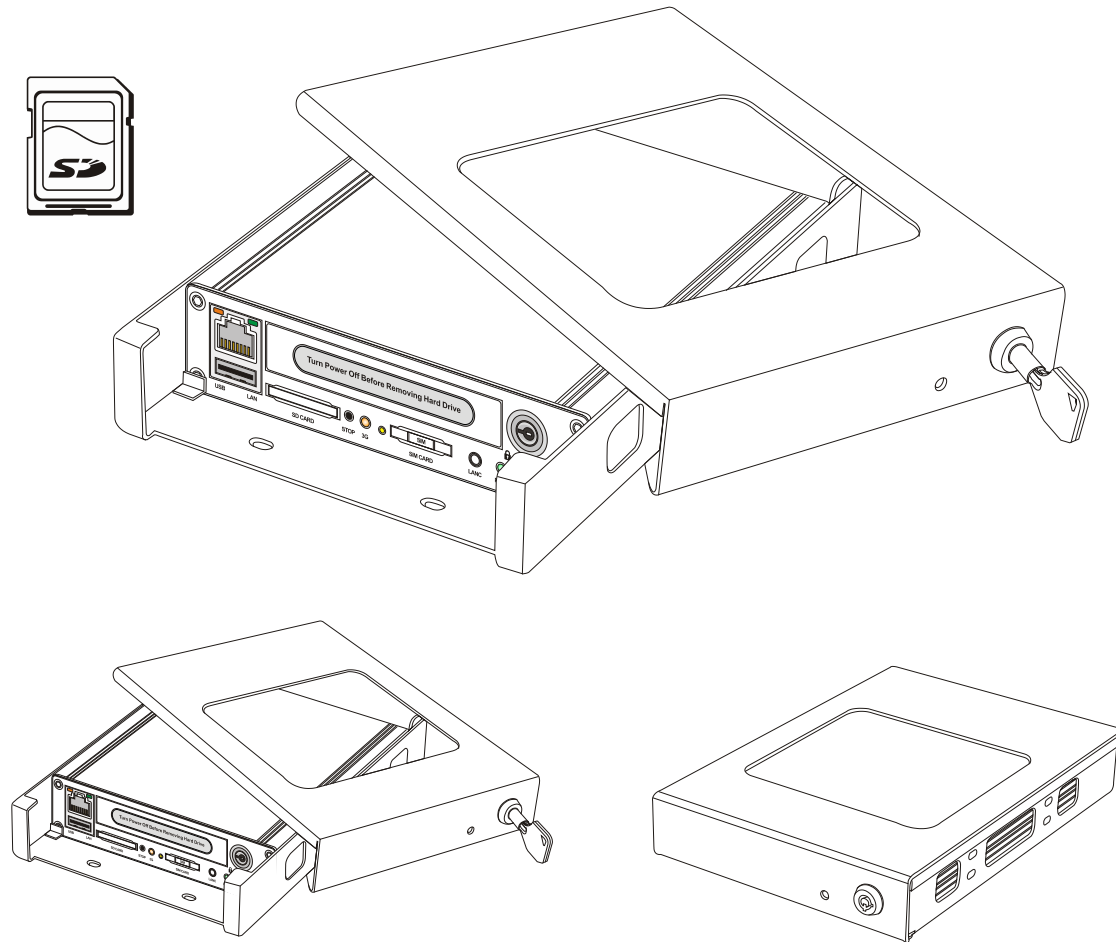
4 Channels 1080P SD Card Mini MDVR
(FT-SDVR 104 series)

MAIN FEATURES:

1. High video quality based on the **H.265** High Profile.

2. High resolution recording. Up to mega-pixel for 4 channel (1280 x 1024) and D1 resolution for 1 channel (704x576).

3. Compact size, much easier for installation.

4. Support from 8VDC to 32VDC, applicable for 12VDC and 24DC vehicles.

5. The recorder provides each camera with stable +12V DC power; DVR can detect the short cut on power circuit.

6. Can use ignition to control the power. Configurable power timer after ignition is off.

7. Support automatic record, event trigger record, schedule record.

8. Can record speed with audio and video. Support overspeed alarm.

9. Support 3 sensors, can record brake, return, right turn, left turn light status into the record file.

10. Use avi format for record file. Compatible with different player software.

11. Support FAT32 file system, record file can be read directly on Windows, Linux.

User Interface

LIVE   RECORD   SYSTEM

NETWORK   STORAGE   ALARM

MOTOR   GPS   POWER

System Architecture

Player Software

Display multiple cameras at the same time

List detailed record file information

Support display location on the map

search record file by time

easy way to control playback

support face blurring for privacy

support G-Sensor information

support file encryption for record file

support file integrity check for record file

Support Display G-Sensor Data diagram

display the x, y, z axis data with different color

Standard Accessories

	SD Card Video Recorder, 1 pc
	Lock Box, 1 pc
	AV Input Cable 4 channels DVR : 2 pcs 2 channels DVR : 2 pcs 1 channel DVR : 1 pc
	AV Output Cable, 1 pc

	Signal Cable, 1 pc
	Power Input Cable, 1 pc
	3A fuse, 1 set
	Remote Controller, 1 pc

Optional Accessories

	GPS Receiver
	Panic Button
	Backup Power Supply
	AV Extension Cable

Portable Mini Modular All-In-One Mobile DVR

Mini Modular 2 Channels (Built-in 1CH 1080P or 720P AHD Camera + 1CH Additional Camera Externally Connected) MDVR

Additional Camera (connected externally)

UPS Battery

Mini Modular Million HD Mobile DVR

NK6M with mini size design, the whole device adopts industry grade plastic, light weight, portable with cheap transportation. In accordance with the installation design of online network car, maximum simplify installation, only connecting the power cable, stick on the windshield with professional 3M sticker. Modular and multi-combination design to meet more requirements, UPS backup power supply(Optional), can be equipped with external hanging camera. Mobile terminal device can directly connect with the Mobile DVR via WIFI, easy configuration/high integration with powerful function.
Support 3G/4G/GPS/WIFI/Bluetooth/G-Sensor/Intercom/TTS etc...

Products Features:

1. Industrial level system,reliable electromagnetic compatibility design, ensure the stable work of whole system
2. Anti-disassembly and dustproof structure, interfaces and mount equipped with protective cover
3. Built in 1CH 1080P/720P AHD camera, support 1CH additional AHD camera(max 1080p)
4. Monitoring angle of cameras can be adjusted flexibly, applicable to different monitoring angles and vehicle type
5. Built in high sensitivity MIC for recording the audio in the car, integrated speaker for audio broadcast and warning prompt
6. Integrated 6 indicator lights for observing the deivce state
7. Integrated 1 panic boton, 1 power button and 1 WIFI station and AP mode switch key.
8. Support direct connection with Phone for configuration, video download and preview.
9. Bluetooth module for option, support wireless headset for intercomunication and Phone call
10. Built in wifi module for autodownload and AP function for sharing hot spot
11. Built in GPS, 3/4G module for realtime monitoring
12. Support line off set and other driving rules alarm, up to 16 lines and areas
13. Built in G-sensor module for motion detection
14. 1CH video output, support monitor preview
15. Support 8-36V wide power input, support external UPS
16. Reliable file system ensures the accuracy and stability of video data
17. Support 1SD card and 1TF card(each max 128G),antishock design.
18. One High-speed USB interface for data back
19. Support 3CH IO input,1CH RS232 or 1CH 485 and 1CH Can bus interface
20. TTS voice for reading the Chinese and Inglish scheduling text info
21. Support capture alarm pictures manually. ACC delay Function

Specifications:

	Model No	FT-DVR-NK6M
System	UI	Graphic Menu WIN8 User Interface
	OS	Embedded Linux Operating System
	Solution	HI3521A Chipset
Video&Audio Input	Video Input	2 Channel
	Audio Input	1 Channel
Video&Audio Output	Video Output	BNC
	Audio Output	1 Channel
Video &Audio Parameters	Video Compression Format	H.264
	Video Encoding Resolution	1080P/720P/D1/HD1/CIF
	Video Bit Rate	250kbps ~ 4096kbps
	Audio Compression Format	G.711A
Video Storage	Storage Type	Double SD Card
Network	3G/4G	Support
	WIFI	Support
	Bluetooth	Support
	AP	Support
Satellite Positioning	GPS/BD Positioning	Support
Function Interface	Serial Data Interface	1 Channel RS232/1 Channel RS485
	I/O Interface	3 Channel Alarm Input/
Other	Power	DC8-36V
	Consumption(Not include disk)	< 12W
	Operation Type	Remote Control/Smart Phone

Pannel Definition (FT-DVR-NK6M)

GPS function
Video indicator
Power indicator

3G/4G function

WiFi function

Bluetooth function

Emergency alarm button

Wifi swift button

ON/OFF button when Host working alone

Photosensitive sensor

Infrared Night Vision Function inside car

Status Indicator

Integrate 1CH 1080P/720P Camera

1 CH Video Output,12V 2A output USB Backup pret

Support Two SD Card (Max 256GB each)

Front

Back

ITEM		Parameter
OS		Linux
Language		Chinese/English/Others (can be customized)
Video Compression		H.264 Compression Mode
OSD		Overlays information such as date time and vehicle ID
GUI	Graphical User Interface	Connect to external LED screen. Setup system parameters with the remote control. Setup via Computer directly with WIFI Hotspot.
Recorder	Video Input	2 channels(1 channels built-in ,1Ch External) 1080P AHD HD / SD / Mixed Video Input
	Video Output	1CH AV output
	Preview	Support 1/2 channels full screen preview
	Resolution	Support 1080P/720P/D1/CIF, MAX:2CH 1080P
	Video Quality	0-7 levels, 0 is the highest level, 7 is the lowest level.
	Video Standard	PAL: 100f/s , CCIR625 line,50field; NTSC: 120f/s, CCIR525 line,60field; CIF: 256Kbps ~ 1.5Mbps, multi image quality optional; HD1: 600Kbps ~ 2.5Mbps, multi image quality optional; D1: 800Kbps ~ 3Mbps, multi image quality optional; 720P : 1Mbps~4Mbps, multi image quality optional; 1080P: 800Kbps-6Mbps, multi image quality optional;
	Record Mode	Auto recording with ACC Power on. Timed recording, alarm recording and manual recording .
Audio	Audio Input	2CH ,(1CH built-in , 1CH External)
	Audio Output	1 channel
	Compression	G.726 compression

Alarm Input		1CH level Alarm Input
Communication Interface		1CH RS232 &1 channel RS485
Wireless transfer		Support Built-in 3G network, WCDMA,CDMA2000,TD-SCDMA compatible with GPRS,EDGE; Support Built-in 4G network, TTD-LTE, FDD-LTE
Position		Support Built GPS/BD Module,can make playback analysis of vehicle routing
Video Storage	Storage	Max support 1X256GB SD Card
	Upgrade	Support USB flash disk updating,SD card upgrade , OTA remote upgrade automatically
Video Storage	File Format	H.264
	File System	Special Car system File System
Video Playback	Video Search	Search video by Record Time/Record Type etc
	Playback	Max support 2CH Replay /Stop/ Forward/Reverse Support x 2,x4,x8,x16. forward or backward play
Safety Management		User/Admin 2 Levels Different Passwords , support screen lock
TTS Voice Broadcasting		Support TTS voice broadcasting
Voltage & Power Consumption	Power Management	Adaptive wide power input, with overload, undervoltage, short circuit, reverse connection and other protection functions; Support the timer switch machine, delay shutdown function.
	Voltage Input	DC:+8V ~ +36V
	Voltage Output	12V @1.2A 1 channels,with IR 12V @0.9A 1channels,with IR
	Power-off Protection	UPS Technology,All video information can be saved automatically when the power is cut off, and make sure that all the files can not be damaged.
	Power Consumption	Normal Working ＜10W, Standby state <0.5W
Working Environment	Temperature	-20℃ to +70℃
	Humidity	20% to 80%
	Heater device	Build-In Hard disk Heater(Temperature Sensor)
others	Size	125mm*130mm*150mm

Mini Megapixels HD Mobile DVR Recorder

Mini Modular AHD 1080P MDVR

KE6 Mini size (just bigger than a Cammera), portable with cheap transportantion. Powerful function, High integration. Support3G/4G, GPS,WIFI, BLUETOOTH, G-Sensor, Talkback, TTS...function. Easy installation: Stick on the windshield with professional 3M sticker, and connect the power. Convenient Maintance, the device are two parts with main and holder which disassembly freely. The Main part can work seperately with DC12V output. So any quality issue happen, just take off and check the main part, and change a new main part.


Products Features:

1. high technology for thermal design upto 70℃ workig temperature.

2. The whole industrial grade program, system design and reliable electromagnetic compatibility design, to ensure stable work and the stability of the peripheral electronic equipment.

3. The whole structure is designed for anti- tamper and dust-proof, to ensures preventing the SD, SIM card and antenna connectors from destroying.

4. The whole module adopts the embedded plug structure. They not only meets the requirements of convenient dis-assembly , but also protects the conditions of vehicle vibration.

5. Support IE, Phone APP, Ipad

6. The equipment integrated built-in 2 cameras 1080P with 2.0 Megapixels. (it supported external 2 cameras 1080P Camera [3rd and 4th Channels).

7. The host device of the integrated infrared light for internal can achieve High definition surveillance under the condition without light.

8. Integrated with microphone (Inside car audio record)

9. Integrated with speaker (Audio broadcast and early warning)

10. Host device carry 6 status indication light (Survey equipment work status)

11. Build-in one video output (Achieved video preview and rear Review function via the connection of the monitor.)

12. Support wide Voltage input (6V to 36V). Support Reverse Polarity Protection, over-voltage, over-current, overload protection. Support 12V output and 4A Current.

13. Support two SD Card (Each SD support 128GB max. Auto loop recording)

14. Support TTS with Chinese, English broadcasting.

15. Working temperature:-40℃ - 70℃

Specifications:

	Model No	FT-DVR-KE6
System	UI	Graphic Menu WIN8 User Interface
	OS	Embedded Linux Operating System
	Solution	HI3521A Chipset
Video&Audio Input	Video Input	4 Channel
	Audio Input	4 Channel
Video&Audio Output	Video Output	BNC
	Audio Output	1 Channel
Video &Audio Parameters	Video Compression Format	H.264
	Video Encoding Resolution	1080P/720P/D1/HD1/CIF
	Video Bit Rate	250kbps ~ 4096kbps
	Audio Compression Format	G.726
Video Storage	Storage Type	Double SD Card
Network	3G/4G	Support
	WIFI	Support
	Bluetooth	Support
	AP	Support
Satellite Positioning	GPS/BD Positioning	Support
Function Interface	Serial Data Interface	1 Channel RS232/1 Channel RS485
	I/O Interface	1 Channel Alarm Input/
Other	Power	DC8-36V
	Consumption(Not include disk)	< 12W
	Operation Type	Remote Control

Structure diagram

69
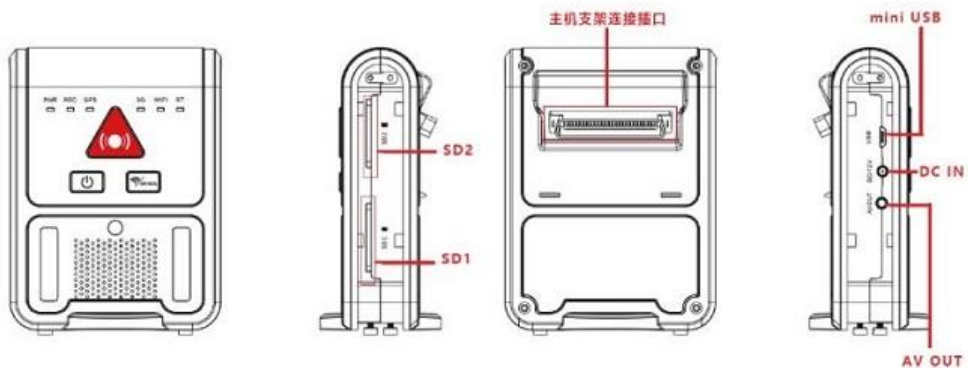
Intelligent All-in-One (4G/GPS/G-sensor/WiFi for option) 1-4CH Mini Portable Mobile DVR (Model: FT-DVR-NK6I)

Model: FT-DVR-NK6I

Main Features

1) H.265 compression, longer storage time, clearer and smoother transmission;
2) Integrate DSM driving behavior and driver face recognition function;
3) Support hybrid mode, 1080P/960P/720P camera;
4) New flat interface, support remote control, mouse operating, setting on client management platform;
5) Easy to install, can use 3M glue to paste the device directly on the windshield, the installation can be completed in 1/10 of installation time of the traditional MDVR, which not only meets the requirements of convenient disassembly and assembly, but also on-board vibration;
6) The whole machine industrial level program and system design and reliable EMC design ensure the stable working of itself and peripheral electronic equipment;
7) The whole machine structure is equipped with good datechable and dustproof design to ensure the TF, SIM Card, antenna and connection port are not damaged;
8) Built-in one AHD camera, and can extend 3 more AHD cameras input;
9) Integrated front camera can be adjusted in the vertical direction, and the camera could be completely locked through the structure after adjustment;
10) Integrated high sensitive MIC in car-audio, integrated speaker for broadcast and warning;
11) Integrated with four status indicators, the working status of the equipment can be observed in real time;
12) Can build-in WiFi module, automatically download,support AP hotspot to give 5 peripjerals to share the Internet;
13) Built-in GPS/BD moduels to achieve speed, position, time and route management;
14) Support line departure and area entry and exit alarm, device max can save 16 lines and areas;
15) Integrated 3 / 4G communication module for remote monitoring and management;
16) Built-in G-Sensor module can realize automatic alarm upload of abnormal vibration, rollover, impact, and sudden brake;
17) 1CH video output, can be connected to the car monitor for video preview and visual reversing function;
18) Support 10V-36V adaptive wide voltage input ultra-low power consumption design, support reverse connection / over-voltage and over-current overload protection, maximum 12V / 1.5A output;
19) Supports dual TF card storage (Single card supports up to 256G) Reliable file system ensures the accuracy and stability of video data and storage media.
20) 5CH alarm input, 1CH of alarm output, support alarm button to capture pictures manually
22) 1CH external USB interface, 2CH RS232 and 1CH RS485;
23) Support TTS voice function, can realize Chinese and English TTS scheduling broadcast;
24) Delay shutdown function, delay time can be set; can achieve ultra-low power sleep, GPS position can continue to report in sleep state; keep location updated;
25) Firmtop vehicle professional RMVS software can realize remote monitoring and management functions of computers and mobile phones;
26) Supports low temperature startup and work. The machine has a highly reliable heat dissipation design, and the working temperature can reach: -40℃ to 70℃.
27) Support APP preview maintenance, real-time preview function of mobile handheld terminal

Successful cases

New Zealand 3G public bus surveillance project

Russia Moscow police car project

Dubai school bus 3G surveillance project

Dubai public bus 3G surveillance project

Mexico School bus project

Turkey Public bus project

USA School bus project

USA Truck project

USA Armored car project

Russia Train project

Singapore bus project

USA Truck project

Paraguay Boat project

Belarus Taxi project

Iran Police car project

Turkey Public bus project

Taiwan public bus surveillance,airport bus,
Sanitation truck surveillance project

India school bus project

Canada school bus project

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Car Dashboard Camera

Introduction or definition

A dashcam, **car dashboard camera**, car DVR, driving video recorder, car black box or event data recorder (EDR) is an onboard camera that continuously records the view through a vehicle's front windscreen and sometimes rear or other windows.

Model: FT-DVR-810

Real 4K/30fps, GPS, WiFi, 4K+1080P, H.265

Accessories	QTY	Unit Price (USD)
Car Charger	Sample Price (1-5 pcs)	$XX
USB Cable	1000pcs	$XX, including dual lenses, GPS, WiFi
Bracket	Remark: if no need GPS, WiFi, $X/pc less	
Manual		

Stage	ID	Mock-up	T0	T1	P	MP
Status	Ready	Ready	Ready	Ready	Ready	Ready

Model Name	FT-DVR-810
CPU	Hisilicon 3559 V200
Sensor	Front Cam: SONY STARVIS IMX415 Rear Cam: SONY IMX323
Video Resolution	Front Cam: 3480*2160P@30fps Rear Cam: 1920*1080P@30fps
Lens Angle	Front Cam: F1.8 170 degree Front Cam: F1.8 140 degree
Screen	2.31'' LCD Screen
G-Sensor	Support
Motion Detection	Support
Loop Recording	Support
GPS / WiFi	Support
Built-in power	Super Capacitor
Storage	TF Card, 4G~256(Class 10 +)
Format	H.265
Language	Chinese, English, Korean, Japanese, Russian, French, German, Thai, Italian, Portuguese, Spanish etc.

Model: FT-DVR-698C

Dual-Lens FHD 1080P, Mini, G-sensor, GPS / WiFi for option

Accessories	QTY	Unit Price (USD)
Car Charger	Sample Price (1-5 pcs)	$XX
USB Cable	1000pcs	$XX, including dual lenses, GPS, WiFi
Bracket	Remark: if no need GPS, WiFi, $X/pc less	
Manual		

Stage	ID	Mock-up	T0	T1	P	MP
Status	Ready	Ready	Ready	Ready	Ready	Ready

Model Name	FT-DVR-698C
CPU	Novatek96663 V2
Sensor	Sony IMX323 + Sony IMX323
Video Resolution	Front Cam: 1920*1080P@30fps; Inside Cam: 1920*1080P@30fps
Lens Angle	170 degree + 170 degree
Screen	2.0 inch Screen 4:3
G-Sensor	Support
Motion Detection	Support
Loop Recording	Support
GPS / WiFi	Support
Built-in power	Super Capacitor + button cell
Storage	TF Card, 8G~128G (Class 10＋)
Format	H.264
Language	Chinese, English, Korean, Japanese, Russian, French, German, Thai, Italian, Portuguese, Spanish etc.

Model: FT-DVR-693

Dual-Lens FHD 1080P, Mini, G-sensor, GPS / WiFi for option

Accessories	QTY	Unit Price (USD)
Car Charger	Sample Price (1-5 pcs)	$XX
USB Cable	1000pcs	$XX, including dual lenses, GPS, WiFi
Bracket	Remark: if no need GPS, WiFi, $X/pc less	
Manual	Notice: this model can be customized into Single-lens 4K Camera.	

Stage	ID	Mock-up	T0	T1	P	MP
Status	Ready	Ready	Ready	Ready	Ready	Ready

Model Name	FT-DVR-693
CPU	Novatek96663 V2
Sensor	OV4689 + Sony IMX323
Video Resolution	Front Cam: 2880*2160P@24fps; 2560*1440P@30fps; 1920*1080P@60fps; 1920*1080P@30fps; Rear Cam: 1920*1080P @30fps
Lens Angle	170 degree + 170 degree
Screen	2.0 inch Screen 4:3
G-Sensor	Support
Motion Detection	Support
Loop Recording	Support
GPS / WiFi	Support
Built-in power	Super Capacitor + button cell
Storage	TF Card, 8G~128G (Class 10 +)
Format	H.264
Language	Chinese, English, Korean, Japanese, Russian, French, German, Thai, Italian, Portuguese, Spanish etc.

Dual 1080P, ADAS, Voice Control Streaming Video Mirror, GPS

Model Name	FT DC-S04
CPU	Mstar 8339
Sensor	SC2363
Video Resolution	2 CH: 1080P + 1080P
Video Format/ Compression	MOV/ H.264
Photo Resolution	14M
View Angle	150° +130°
Screen	9.66'' IPS TOUCH Screen
GPS	support, Optional
ADAS	Support
G-Sensor	Support
Parking Mode	Support
Battery	500mAh
Memory Card	Max to 64GB Micro SD, C10
Language	Multi Language

Accesories	QTY(pcs)	Unit price (USD)
Car Charger USB Cable Bandage Manual	Sample (1-5pcs)	$XX
	1000pcs	$XX,including 1080P Rear Cam and GPS
	WiFi	Optional, Extra $X/pc
	Voice Control	Optional, Extra $X/pc

Stage	ID	Mock-up	T0	T1	PP	MP
Status	Ready	Ready	Ready	Ready	Ready	Ready

2K/30fps, GPS, WiFi (Dual Band: 2.4G and 5G)
2K+1080P, Super -Cap

Accessories	QTY	Unit Price (USD)
Car Charger	Sample Price (1-5 pcs)	$XX
USB Cable	1000pcs	$XX, including GPS, WiFi, 1080P Rear Cam
Bracket Manual		Remark: if no need 1080P Rear Cam, $X/pc less

Stage	ID	Mock-up	T0	T1	PP	MP
Status	Ready	Ready	Ready	Ready	Ready	

Model Name	FT DC-LS01
CPU	Hi3556V200
Sensor	OS04B10, 4MP
Video Resolution	1- CH: 2K 1440P/30fps 2- CH: 2K + 1080P
Photo Resolution	8M
Rear Cam	1080P (Optional), 130°
View Angle	150°
Screen	No Screen
GPS	Support, Built-in
WiFi	Support
G-Sensor	Support
Loop Recording	Support
Battery	Super-Cap
Memory Card	Max to 128GB Micro SD, C10
Language	Multi Language
Size (Unit)	98*29*44mm (include lens)

4K, GPS, WiFi, **1080P+1080P**, 3.0” OLED Touch Screen
Magnetic Rechargeable Mount, Grid UI, Gesture Sensing

Model Name	FT DC-GS31
CPU	NTK96660
Sensor	Option A: OV4689, 4MP Option B: Sony IMX335, 5MP
Video Resolution	1- CH: 4K 2880*2160P/24fps 1920*1080P/ 60fps 2- CH: 1080P + 1080P
Photo Resolution	12M
Rear Cam	1080P (Optional), 130°
View Angle	150°
Screen	3.0 inch OLED Touch Screen
GPS	Support
WiFi	Support
G-Sensor	Support
Parking Mode	Support
Battery	400mAh
Memory Card	Max to 128GB Micro SD, C10
Language	Multi Language
Size (Unit)	82*55*30mm (include lens)/ 83g

Accessories	QTY	Unit Price (USD)
Car Charger	Sample Price (1-5 pcs)	$XX
USB Cable	1000pcs	$XX, including GPS, WiFi, 1080P Rear Cam
Bracket Manual		Remark: if no need 1080P Rear Cam, $X/pc less

Stage	ID	Mock-up	T0	T1	PP	MP
Status	Ready	Ready	Ready	Ready	Ready	Ready

4K, GPS, WiFi , Dual 1080P

Accessories	QTY	Unit Price (USD)
Car Charger	Sample Price (1-5 pcs)	$XX
USB Cable	1000pcs	$XX, including GPS, WiFi, 1080P Rear Cam
Bracket Manual		Remark: if no need 1080P Rear Cam, $X/pc less

Stage	ID	Mock-up	T0	T1	PP	MP
Status	Ready	Ready	Ready	Ready	Ready	Ready

Model Name	FT DC-GS21
CPU	NTK96660
Sensor	OV4689, 4MP
Video Resolution	1 CH: 4K 2880*2160P/24fps 1920*1080P/60fps 2 CH: 1080P + 1080P
Photo Resolution	12M
Rear Cam	1080P (Optional), 130°
View Angle	150°
Screen	2.35 inch LCD
GPS	Support
WiFi	Support
G-Sensor	Support
Parking Mode	Support
Battery	400mAh
Memory Card	Max to 128GB Micro SD, C10
Language	Multi Language
Size (Unit)	66*77*33mm (including lens)/ 80g

Real 4K/30fps, GPS, WiFi, **4K+1080P**
Super-cap, H.265

Accessories	QTY	Unit Price (USD)
Car Charger	Sample Price (1-5 pcs)	$XX
USB Cable	1000pcs	$XX, including GPS, WiFi, 1080P Rear Cam
Bracket		
Manual		Remark: if no need 1080P Rear Cam, $X/pc less

Stage	ID	Mock-up	T0	T1	PP	MP
Status	Ready	Ready	Ready	Ready	Ready	Ready

Model Name	FT DC-W2
CPU	Hi3559V200
Sensor	OS08A10, 8MP
Video Resolution	1- CH: 4K 3840*2160P/30fps 2- CH: 4K + 1080P
Photo Resolution	8M
Rear Cam	1080P (Optional), 130°
View Angle	160°
Screen	2.35inch IPS screen
GPS	Support
WiFi	Support
G-Sensor	Support
Loop Recording	Support
Battery	Super-Cap
Memory Card	Max to 128GB Micro SD, C10
Language	Multi Language
Size (Unit)	75*64*43mm (include lens)

More models of Car Dashboard Cameras

FHD 1080P, Mini, G-sensor,
Parking Mode, Motion Detection

Model No.: **FT DC-V10**

FHD, Built-in **GPS**, WDR

Model No.: **FT DC-G56N**

FHD 1080P, WiFi, IPS Screen,
Super-Cap

Model No.: **FT DC-G75**

Real 4K/30fps, GPS, WiFi,
4K+1080P, H.265

Model No.: **FT DC-W1**

Dual 1080p cameras, GPS / WiFi
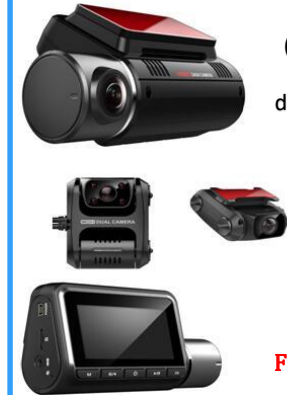for option
Model No.: **FT DVR-692**

Triple-Lens
(3 channels)
1080p dashcam,
GPS / WiFi for
option

Model No.:
FT DVR-720A

Triple-Lens
(3 channels)
1080p dashcam,
GPS / WiFi for
option

Model No.:
FT DVR-720K

Triple-Lens
(3 channels)
1080p
dashcam, GPS
/ WiFi for
option

Model No.:
FT DVR-720E

Super Capacitor, WiFi, IPS Screen.
FHD 1080P

Model No.: **FT DC-G70+**

4K, GPS, WiFi 3-in-1

Model No.: **FT DC-GS63D**

2-in-1 Dual lens, GPS, WiFi
1080P + 1080P, Super -Cap,
Perfect Night Vision

Model No.: **FT DC-LS02**

FHD 1080P, 3 inch IPS Screen,
WiFi

Model No.: **FT DC-G71A**

Chengdu Firmtop Technology Co., Ltd

Professional Supplier of Vehicle Surveillance Products
& Car Electronics

Welcome to contact us!