

Midas Touch

SOLUTION FOR UPSRTC BUS MANAGEMENT



Passenger
Safety



Easy
Scheduling
And
Dispatch



Efficient
Communica-
tion



Improve
Service
Quality



Driver &
Conductor Safety



Advertising



Property
Safety



Portable



Reliable



Flexible

Effectively Ensuring Traffic Safety



FIXED VEHICLE COMPUTER



ACC power control



OBD



LED Display



Bluetooth barcode scanner



Bluetooth barcode scanner



Alarm button



GPS/4G/WIFI



STQC FP HF RFID



Server



Natgap



Network



Interceptor



Monitoring Center



Company management platform



Mobile phone client

1.

Verify driver and conductor's identity to ensure the highest safety standard

With MTA-3055 vehicle-mounted computers, you will be able to verify drivers' and conductors' ID by the following ways to enhance passengers' safety.



The driver only has the access to start the engine after his identity is verified. The Bus company can stop the vehicle via ACC if a critical breach occurs.

IC card, HF RFID module detects fast identity card.

Fingerprint, fingerprint scanning sensor of STQC qualified accurately verifies drivers.

2.

Keep your vehicle
and people on the road safe

Use MTA-3055 vehicle-mounted computer to
protect your passengers and staff.



Alarm button, passengers can call for help with an alarm button. MTA-3055 terminal will make a warning tune and send a SMS to passengers' emergency contact number. Through video supervision and real-time voice communication, you can know what is happening in the cabin.



OBD, MTA-3055 terminal obtains OBD data, such as travelling miles, speed, fuel consumption, malfunction, driving behavior, etc. It warns the driver of dangerous driving behaviors and risks.



Video and voice supervision,
provide a safe driving environment.

Built-in Camera, captures and records how drivers behave, to effectively reduce dangerous behaviors, like fatigue driving, smoking or calling during driving.



Built-in Camera



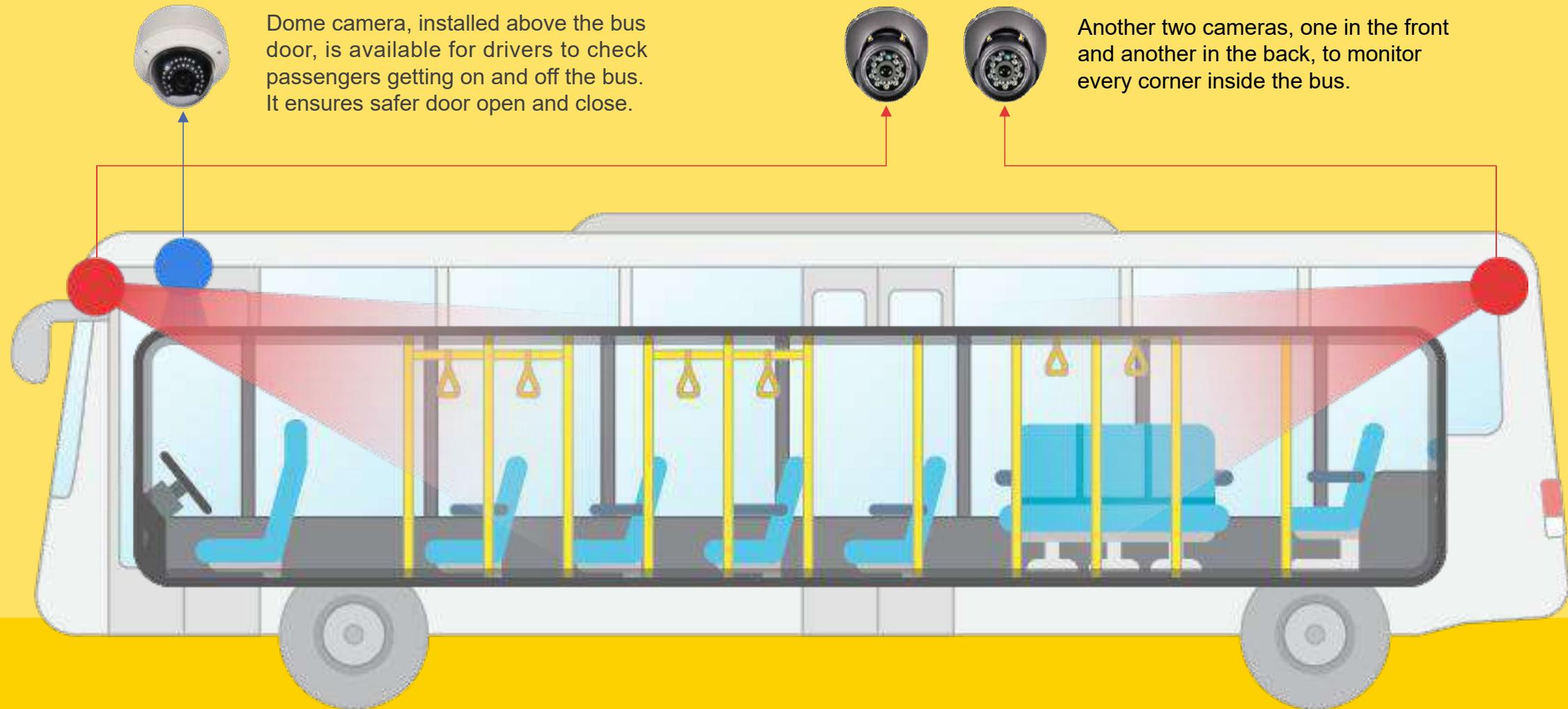
Camera



Camera



Large-volume memory stores up to 140-hour video records from each of the three cameras



Dome camera, installed above the bus door, is available for drivers to check passengers getting on and off the bus. It ensures safer door open and close.

Another two cameras, one in the front and another in the back, to monitor every corner inside the bus.



Large-volume memory stores up to 140-hour video records from each of the three cameras



Bluetooth barcode scanner, verify the ticket; help inform passengers' emergency contact; assist statistical analysis of the number of passengers.



Alarm button, passengers can press the button to call police when in danger. A message can also be sent to the emergency contact, and an alarm sent to the backend database to check what happens in real time.



LED display, notify the next station; show messages received from the administrators; display ads.

EASTBOURNE BUSES

05-27
15:41
+53C

15:41



3.

Fully integrate all the functions
you need to enhance service



Drivers know how to behave when their company can see their performance through video or photo. Saved supervision videos and photos can serve as evidence to prove who was really at fault in accident scenarios.



MTA-3055 terminal can serve as a Wi-Fi hotspot to offer passengers internet access.



Based on GPS information, you can show region-based commercials to passengers.



OBD data tells driving behavior. Unsafe driving behaviors will be stopped.



Video Monitoring , map navigating , fares , and pushed information.



Plan the route within Geo-fence and navigate the driver to the destination. Avoid drivers to take a detour.

4.

Improve management to
gain a competitive advantage

Use MTA-3055 vehicle-mounted computer to
increase your bottom line.



Locate each vehicle. You will know where your vehicles are based on GPS data.



Interceptor can locate nearby bus, communicates and monitoring the bus situation via real-time video.



Administrators can talk to drivers on phone calls and video or voice messages, warning them of hazards and providing feedback on their safe driving behavior.



Geo-fencing ability ensures vehicle always run in locations where their services are permitted.

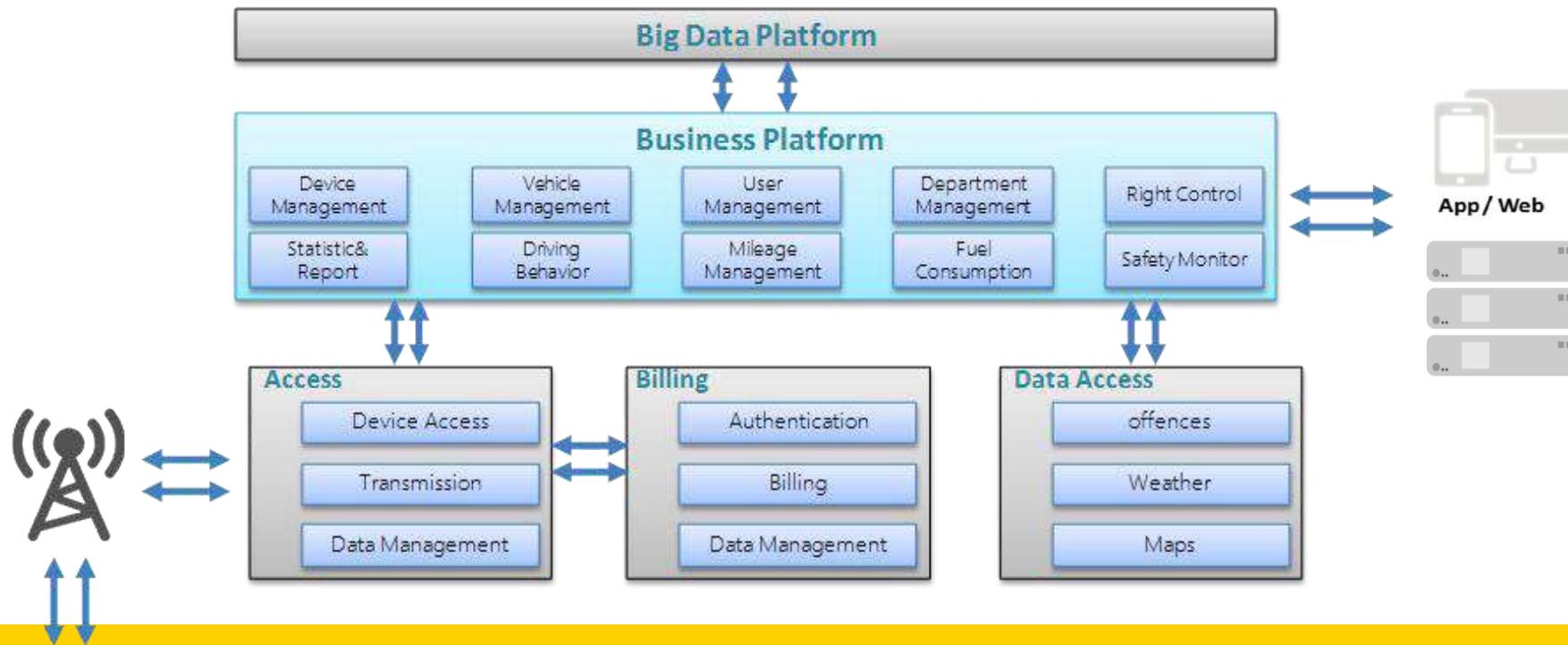


Collect and analyze big data, including vehicles' travelling miles, availability, company's revenue, etc.



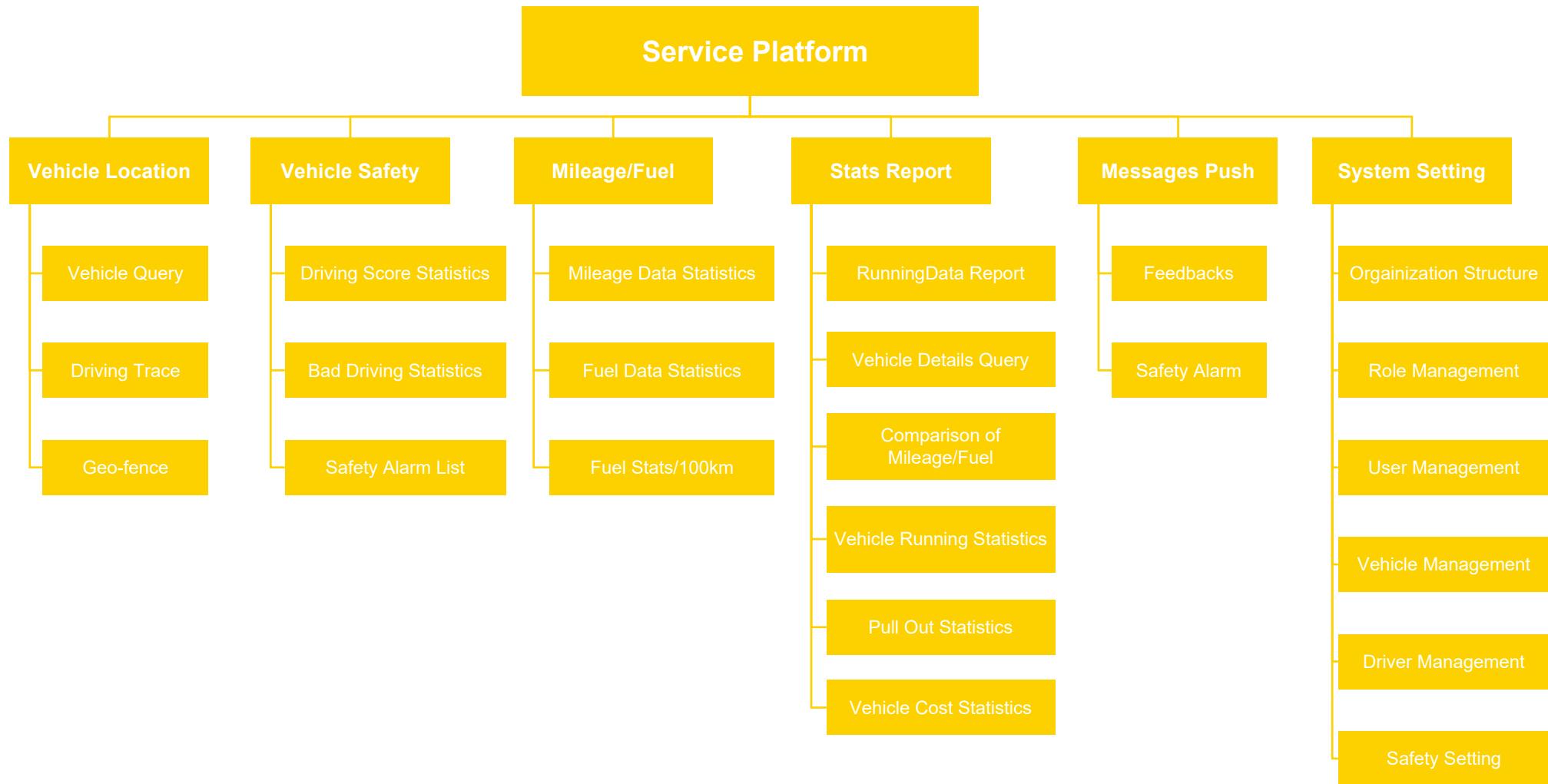
Record and store in-vehicle status in real time. Administrators can learn what is happening when there is emergency or check if the driver is driving properly whenever they want.

Fleet Management Architecture



MTA-3055 platform offers value-added services to fleet management business, through integrating real-time data from terminal into statistic reports, so as to increase the fleets' safety and efficiency. And the services include vehicle real-time monitoring, driving behavior analysis, fuel and mileage analysis, safety and alarms.

Fleet Management Functions

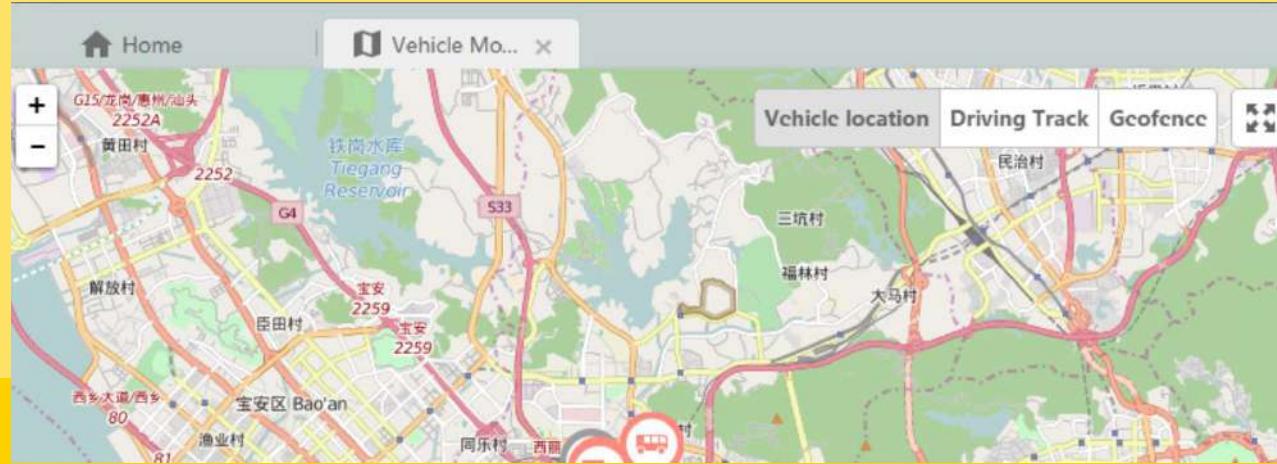


Cloud Platform and App Introduction



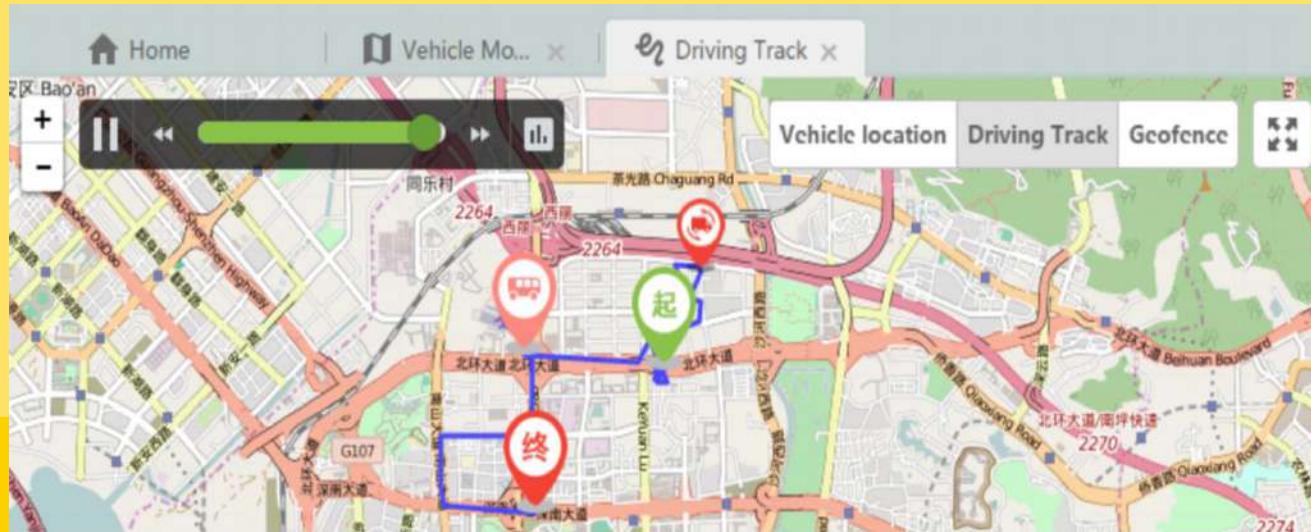
Fleet risk management cloud platform based on big data analysis

Real-time Monitoring



- Vehicle Location: Show the information of vehicle include direction, GPS speed, Meter speed, location, etc.
- Map View: The current selected vehicle location.
- Vehicle Trace: Check vehicle history information, and animation.
- Geo-fence: Set up geo-fence and monitor vehicles enter or exit the fence.

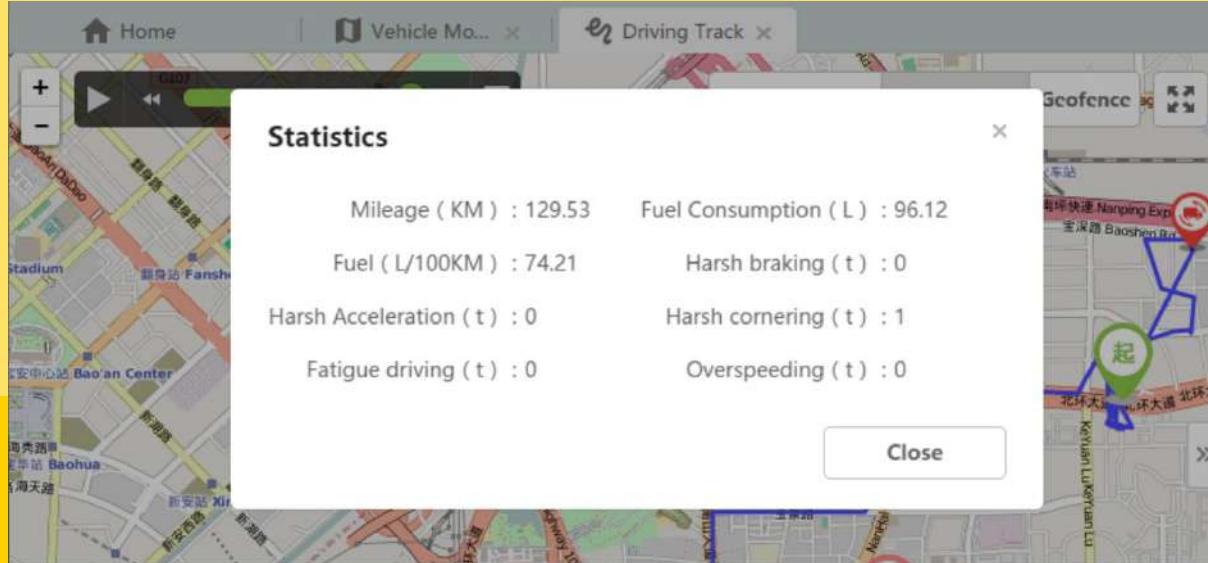
Track Playback



Track data details:

Data including: vehicle plate number, driver's name, phone number, the positioning time, positioning state, location type, GPS hourly speed (km), meters hourly speed (km), direction, altitude (meters), average speed, average fuel consumption, operating interval (s), geographical location, longitude, latitude, associated department, as well as the device number (PN), etc.

Driving trip statistics



The device can instantly upload the vehicle driving data. After the back end platform receive, the driving data statistics can be computed by day or month for the duration of segmented speed, operation duration, the accumulated mileage and fuel consumption of the vehicle, as well as times of bad driving behaviors including harsh accelerating, harsh braking, harsh cornering, and so on. Users can search driving information within a specific time of the device based on the vehicle e-drive number, plate number, device number and the associated department.

Driving Safety



In the main screen of vehicle safety page, the overall fleet safety score is displayed with advises for management. Through analysis between different departments, the fleet manager can have a clear clue on how to manage the fleets.

Driving Safety (cont.)

The screenshot shows a web-based application interface for driving safety analysis. At the top, there are three tabs: 'Home', 'Vehicle Saf...', and 'Driving Score'. The 'Driving Score' tab is active.

Below the tabs, there are several filter and search controls:

- A 'Time' dropdown with options: Today, Yesterday, This Week, and This Month (which is selected).
- A 'Date' input field with two date pickers and a 'Score' dropdown set to 'ALL'.
- 'Company' and 'Vehicle' selection dropdowns, both currently set to 'Select'.
- Checkboxes for 'Driving Score', 'Bad Driving', and 'Bad Driving/100km', all of which are checked.

On the right side of the header, there are 'Query' and 'Export' buttons.

In the center, there is a summary section with the following information:

- Average driving score of this month: **44points** (highlighted in green).
- Highest driving score: **testgroup (44points)** (highlighted in green).
- Lowest driving score: **testgroup (44points)** (highlighted in red).

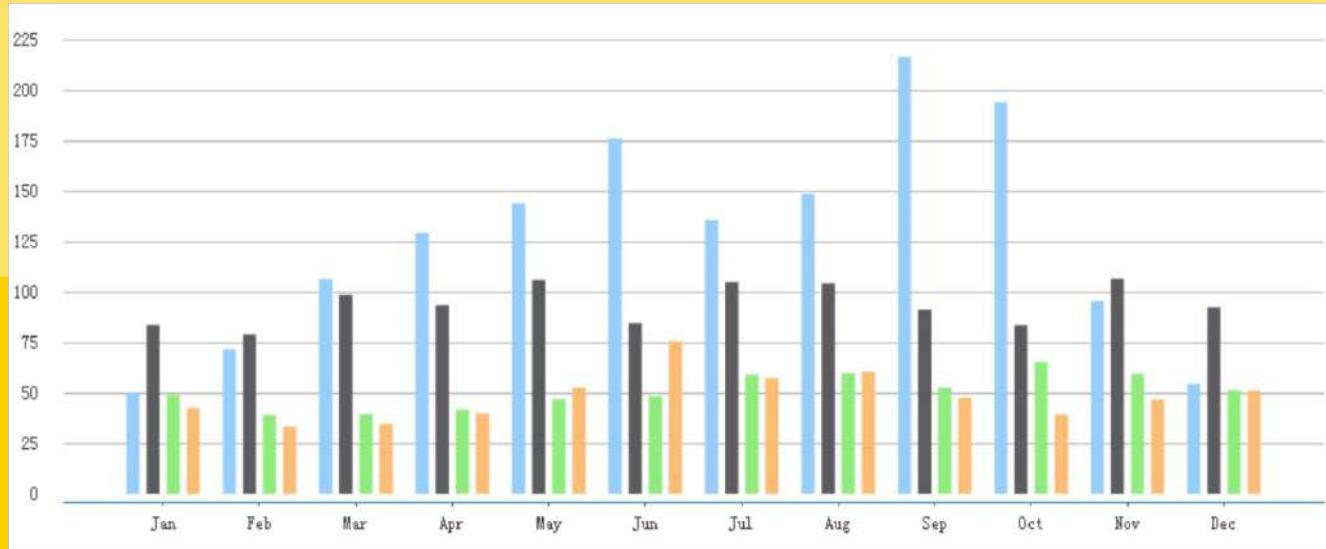
At the bottom, there is a table with the following data:

No.	Department	Vehicles Amount	Running Vehicles	Driving Score	Bad Driving	Bad Driving/100km
1	testgroup	210	3	44	69	3.6

Breakdown the fleet's driving score into different departments with respect to specific time range. The best or the worse driving will be listed, and the change trends of bad driving times, can also be projected.

Bad driving behaviors include harsh accelerating, harsh braking, harsh cornering, fatigue driving, over-speeding.

Statistics of Ticketing

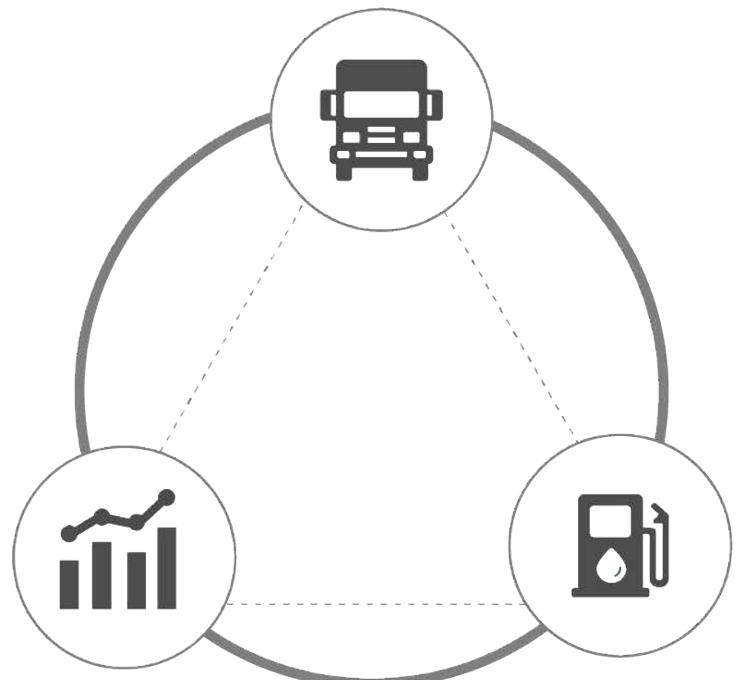


The total number of passengers and total amount of revenue can be summed up in real time on a daily, monthly or yearly basis.

Risk Management



We Help You In



Fatigue driving behavior management

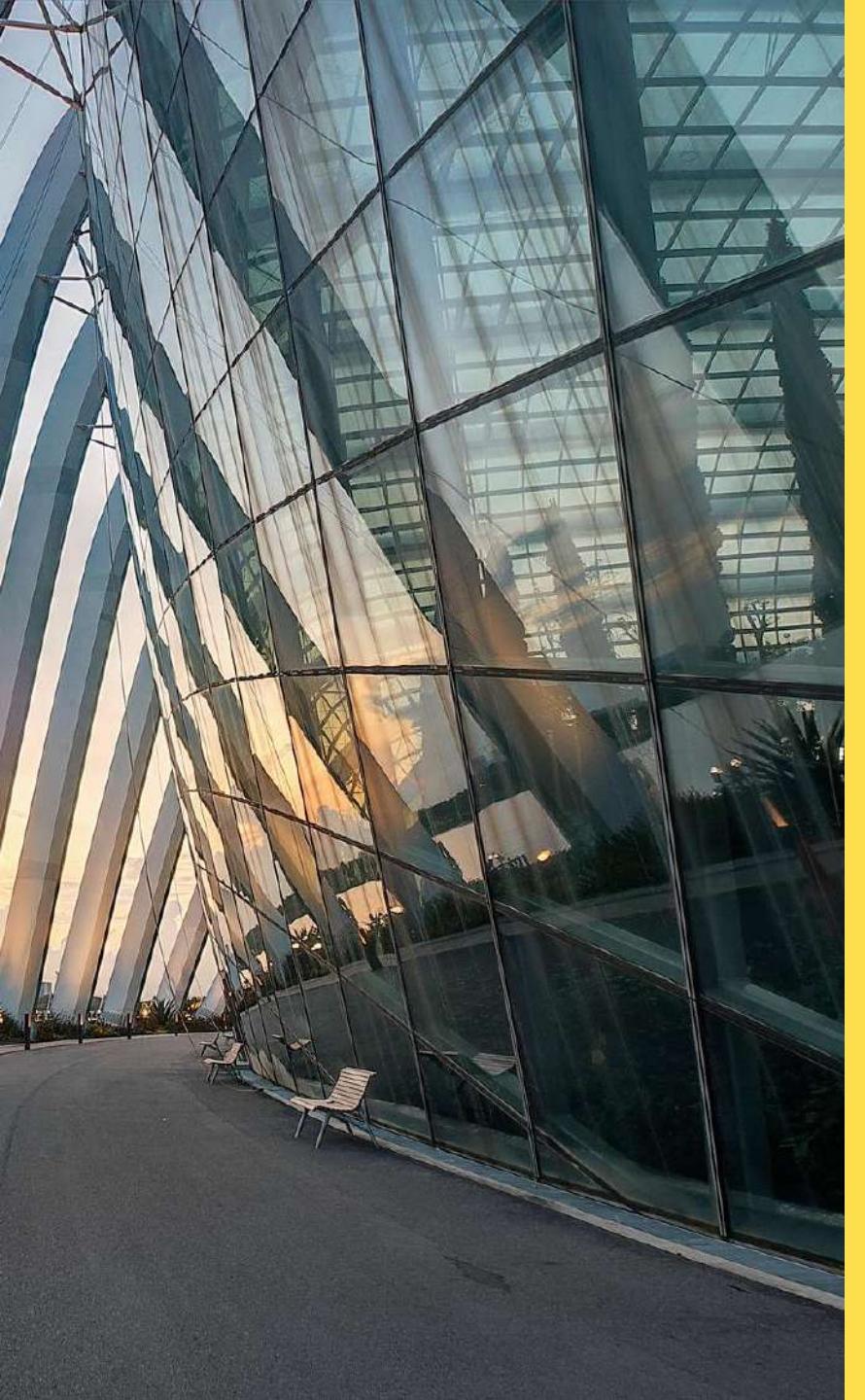
Records duration and other data which is related to fatigue while driving. Each driver can download the MTA-3055 TSP APP, and their smart phone will send a safety alarm to warn them to stop and rest when they are likely to feel fatigued while driving.

Analysis of fleet safety reports

Provides enterprises with analysis of fleet safety reports, including fleet risk estimation reports, accident analysis reports, traffic violation reports, etc. This allows us to provide scientific, objective, and concrete management indexes for fleet daily operations, and give advice on safety management. Fine fuel consumption management provides comparative and correlative analysis for mileage, driving behavior, and fuel consumption. This allows for transparent management of fuel consumption.

Fine fuel consumption management

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We Help You In



Setting up a Geo-fence to Prevent Private Use of Company Vehicles

The system can create a geo-fence for areas with vehicle access and provide monitoring for different time periods and fence types for vehicles. If a violation is found, an alert will be sent to notify the administrator.



Vehicle Cost Statistics

Clearly shows details for vehicle use through reports. Counts vehicle costs according to specific time periods, including total costs, fuel consumption costs, upkeep costs, toll charges, violation penalties, etc.

We Help You In

Flexible and Effective – Vehicle Management at Your Fingertips

Use smartphones to view vehicle positions at any time and monitor vehicle status in real time, enabling operators to quickly find vehicles and manage scheduling more effectively.

Convenient and Worryless – Traffic Management in Your Pocket

Intelligent Vehicle Management enables you to access all vehicle data and services while connected to a cell phone. Information about violations can be pushed to a phone in a timely manner to reduce the risk of repeated violations and deferred payment costs. Active alerts are provided for vehicle maintenance.

Transparent and Accurate – Cost Management Under Big Data

Clear data statistics and trend analysis, as well as combined mileage-fuel consumption reporting with vehicle tracking clearly shows vehicle use details. This accurately and effectively controls costs.



Cases Catalog



- 6.1 Fleet management project for Lafarge Shui On Cement Chongqing Ltd.
- 6.2 Fleet management project for Sinotrans Chongqing Co., Ltd.
- 6.3 Fleet management project for Shanghai Deppon Logistics Co. Ltd.
- 6.4 Fleet management project for Nanjing Shenpu Logistics Ltd.
- 6.5 Fleet management project for China CIMC
- 6.6 Fleet management project for Xi'an Lipeng Electronics Technology Ltd.
- 6.7 Taxi management solution for Yunlong Taxi Co. in Luoding city
- 6.8 Taxi management solution for Dazhong Taxi & Car Leasing Co.
- 6.9 Online platform for Chongqing Shipping Exchange
- 6.10 Marine GPS traffic management system for Chongqing Port and Shipping Administration Bureau
- 6.11 Bulldozer management project for Shaanxi Department of Public Security
- 6.12 Road emergency communication project for China Transinfo
- 6.13 Internet of vehicle project for Huawei Technologies Co., Ltd.
- 6.14 Vehicle management project for Sichuan Kunding Vehicle Industry Co., Ltd.
- 6.15 School bus management project for Nigeria
- 6.16 Coach management project for Zhenzhou Yutong Coach Manufacturing Co.,Ltd.
- 6.17 Taxi management project for Iraq

MTA-3055 Fixed Vehicle Computer



MTA-3055 is a vehicle computer with superior and reliable performance. Featuring 4G LTE network, 2.4G & 5G dual-band Wi-Fi, GPS & BDS, two-channel USB camera, 5MP autofocus camera, OBD data collection, Bluetooth 4.0 as well as biometrics, it can fully realize the overall management of driving school vehicles, school buses, taxis, buses, trucks, etc., effectively ensuring traffic safety.

 ANDROID SYSTEM

MTA-3055 Fixed Vehicle Computer



Android OS

The easy-to-use Android operating system easily realizes dynamic vehicle monitoring and management.



GPS

It can obtain real-time information like vehicle location, speed, direction and route, realizing realtime vehicle tracking. It raises an audible alarm if the vehicles veer out of the predetermined route.



Wireless Transmission

All captured data and information can be uploaded in real time via wireless networks. If failed once, it can be uploaded again and again.



Image Capture

Configured with front camera and USB camera, V600 can take photos and videos that can be simultaneously transmitted to the management center.



OBD Data Collection

MTA-3055 can accurately record the vehicle speed and fuel consumption, and raise realtime alarm. Professional vehicle fault diagnosis is realized to ensure road safety and prolong life span.



Safe Data Storage

Non-volatile memory ensures information storage under conditions of power off or network off.



Biometrics

Fingerprint verification facilitates safe information collection.



Voice Prompt

All prompt messages can be present in the form of voice. It can also record voices.



IC Card Reading and Writing

It can read and verify IC cards quickly and accurately, which is widely used in identity authentication and mobile payment.

Physical Characteristics

Dimension	188mm x 115mm x 29mm / 7.40 x 4.53 x 1.14in
Display	5.5" 720P TFT-LCD capacitive touch panel,
	16.7M colors, adjustable backlight brightness
Expansion Slot	1 SIM, 1 TF, 1 SD, 1 HF slot
Interface	Micro USB, USB type A, OTG, earphone
Input Mode	Touch input
Audio	Speaker, microphone; supporting voice calls
Keypad	8 function keys
Sensor	Gravity sensor, gyroscope

Performance

Option 1	CPU: Qualcomm 1.3 GHz quad-core
	RAM: 2GB
	ROM: 16GB
Option 2	CPU: Qualcomm 1.3 GHz quad-core
	RAM: 1GB
	ROM: 8GB
Expansion	Supports a total of 64GB by SD and TF cards

User Environment

Input Voltage	9V~60V
Operating Temp.	14°F to 122°F / -10°C to 50°C
Storage Temp.	-40°F to 158°F / -40°C to 70°C
Humidity	5%RH - 95%RH non condensing
ESD	8KV air discharge, 4KV conductive discharge

Developing Environment

Operating System	Android 5.1
SDK	Software Development Kit
Language	Java
Tool	Eclipse/Android Studio



RFID



Camera



OBD



4G



WiFi



Bluetooth



GPS

Data Collection	
Front Camera	
GC 5MP autofocus camera	
External Camera (optional)	
Two-channel (with infrared lamp), taking photos and videos simultaneously	
Resolution	320 x 240, 640 x 480, 1280 x 720
Fps	YUY2: 720p/15fps, VGA/30fps, CIF/30fps
MJPEG	720p/30fps, VGA/60fps, CIF/60fps
RFID	
HF	NXP
Frequency	13.56MHz
Protocol	ISO14443A/B
Chips	1) MF1 card (S50/S70), MFO (Ultra light),
	MF3 (Desfire D40/D41/D81), CPU_A card
	2) CPU_B card
	3) Others for customization
Fingerprint (optional)	
Sensor	TCS2SS
Size	256 x 288
Resolution	508DPI
Memory	1,000 PCS fingerprints

OBD (optional)	
Protocol	OBDII, ISO9141-2, ISO14230(KWP), ISO15765(CANBUS)
Communication	
WLAN	IEEE802.11 b/g/n
WWAN(E)	2G: GPRS(900/1800MHz)
	3G: WCDMA B1 B8
	4G: FDD-LTE: B1 B3 B7 B8 B20
WWAN(N)	2G: GPRS(850/1900MHz)
	3G: WCDMA B2 B5
	4G: FDD-LTE: B2 B4 B5 B7 B17
WWAN(C)	2G: GPRS(850/900/1800/1800MHz)
	3G: WCDMA : B1
	CDMA EVDD: EVDD Rev.A800MHz
	D-SCDMA: B34, B39
	4G: TDD-LTE: B38/B39/B40/B41
FDD-LTE: B1/B3	
Bluetooth	Bluetooth 4.0
GPS	GPS, A-GPS,
	BeiDou navigation satellite system (optional)

Accessories



Cradle



4G GPS
external antenna



Wire harness

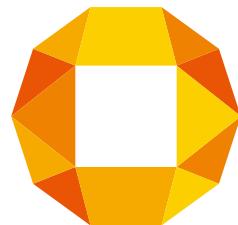


OBD module (optional)



External camera (optional)

THANK YOU



Midas Touch

www.midastouchinc.com