

# Welcome to VanJee Technology

## [ Science and technology application ]

- Build up the most efficient, safest and most comfortable transportation ecological environment.
- Achieve the barrier-free traffic flow, information flow and capital flow.

WANJEE TECHNOLOGY



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- 2 VanJee remarkable Projects
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# I. VanJee Introduction

# VanJee Introduction

1. VanJee Technology is a publicly traded company at Shenzhen Stock Exchange (SZSE:300552) and has four major product lines: 1. LiDAR, 2. Weigh-In-Motion, 3. Electronic Toll Collection (ETC), 4. V2X.
2. VanJee has been making great efforts and dedication in ITS industry over 25 years and has becoming the market leader in ITS industry.
3. WanJi has distributed more than 16 thousand WIM equipment, 16 million ETC OBUs and 4000 LiDAR sensors to the ITS industry as well as has obtained more than 100 intellectual property rights in the WIM industry.



**1 WIM**  
Weigh-in-motion



**2 LiDAR**  
Scanning Laser Sensors



**3 ETC**  
Electronic Toll Collection



**4 V2X**  
Vehicle To Everything

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QUOTES &amp; COMPANIES


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### Beijing Wanji Technology Co. Ltd. A

300552 (China: Shenzhen)

2:19 PM CST 12/11/18

**¥15.88** CNY

0.18 1.15% ▲

Volume

428,250

65 Day Avg Vol

1,218,919

1 Day Range

15.68 - 16.03

52 Week Range

13.09 - 29.95  
(10/15/18 - 06/15/18)

ADVANCED CHARTING

COMPARE

Open 15.68 Prior Close 15.70 (12/10/18)

1 Day 300552 1.15% ▲ DJIA 0.14% ▲ S&amp;P Mid Cap 400 -0.64% ▼ Industrial Goods -1.32% ▼

[OVERVIEW](#) > [PROFILE](#)
[ALL SECTIONS](#)

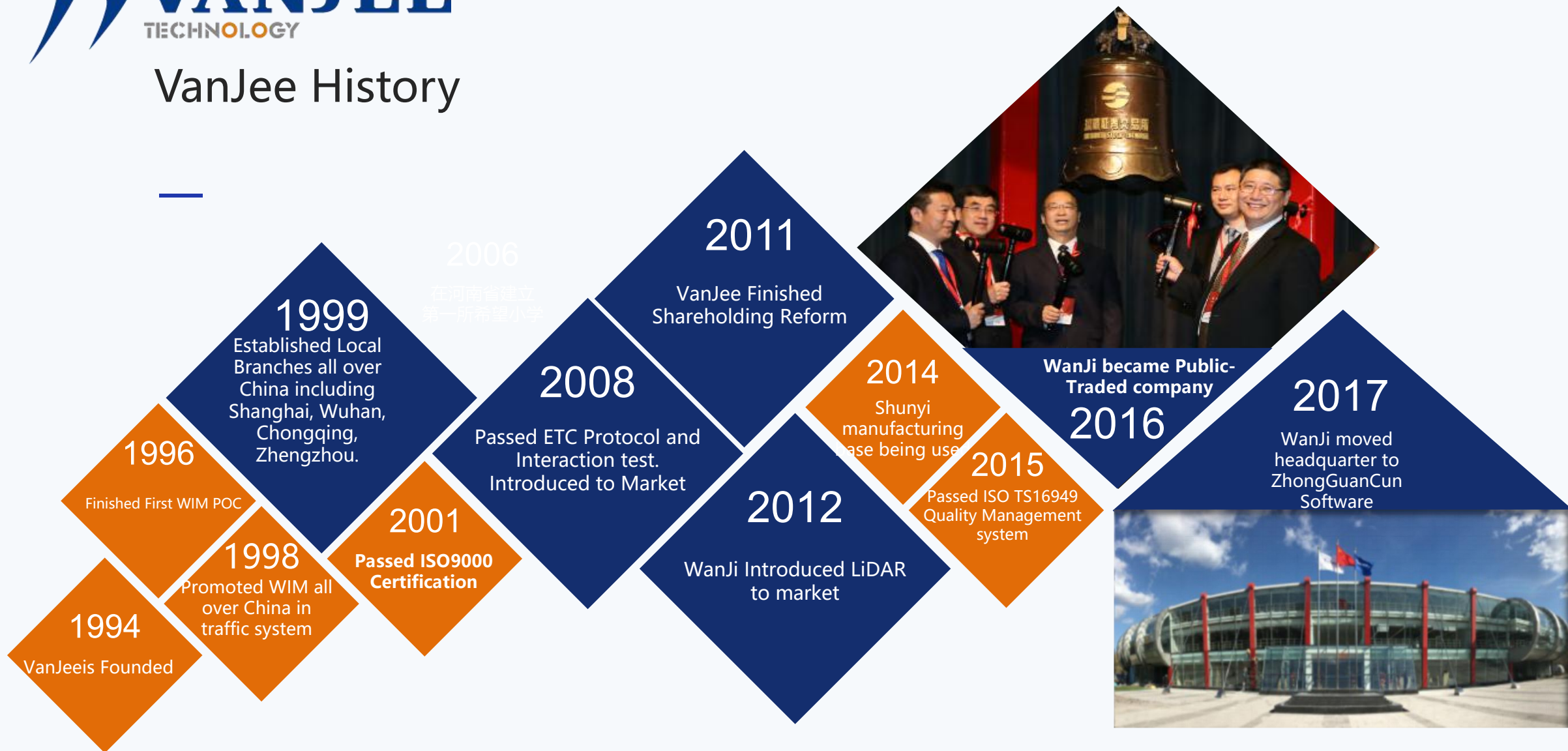
#### Company Info Beijing Wanji Technology Co. Ltd. A

Building 601  
Beijing Beijing 100085  
China  
[Website](#) | [Map](#)

#### Description Beijing Wanji Technology Co. Ltd. A

Beijing Wanji Technology Co. Ltd. engages in the manufacturing, research and development of traffic flow investigation, video detection and intelligent transportation systems products. It sells laser detector, short range communication series, car equipment, issuing device, WIM series, laser test series and other transportation related products. The company was founded on November 2, 1994 and is headquartered in Beijing, China.

# VanJee History



# R&D strength

## ◆ Laboratories and equipment ◆



▶ EMC lab



▶ Out-field test lane



▶ Microwave physics lab



▶ 10,000-class dust-free workshop



▶ Optical lab



▶ Environment lab

## Sales and service network

VanJee has **9 marketing centers** and **32 technical service centers** to provide the best customer service for everywhere in China.



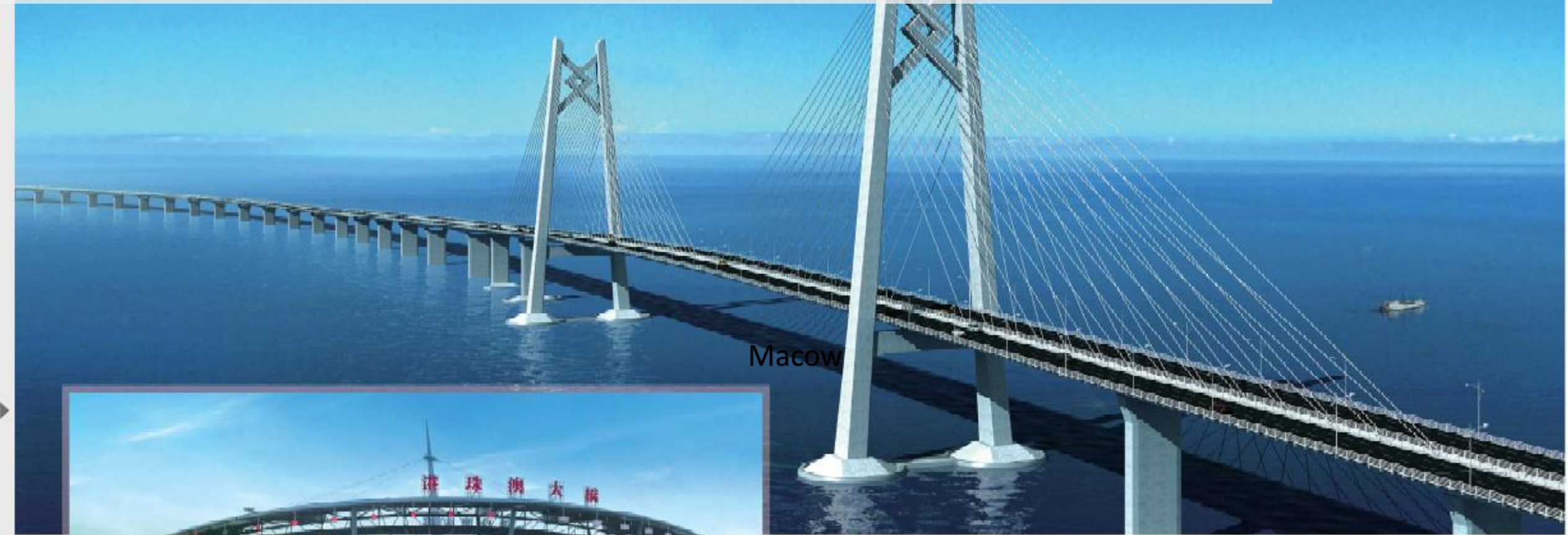


II.

## VanJee remarkable projects



# Hong Kong-Macow-Zhuhai Bridge



WanJi ETC in Hong Kong-Zhuhai-Macau Bridge

**WanJi ETC**

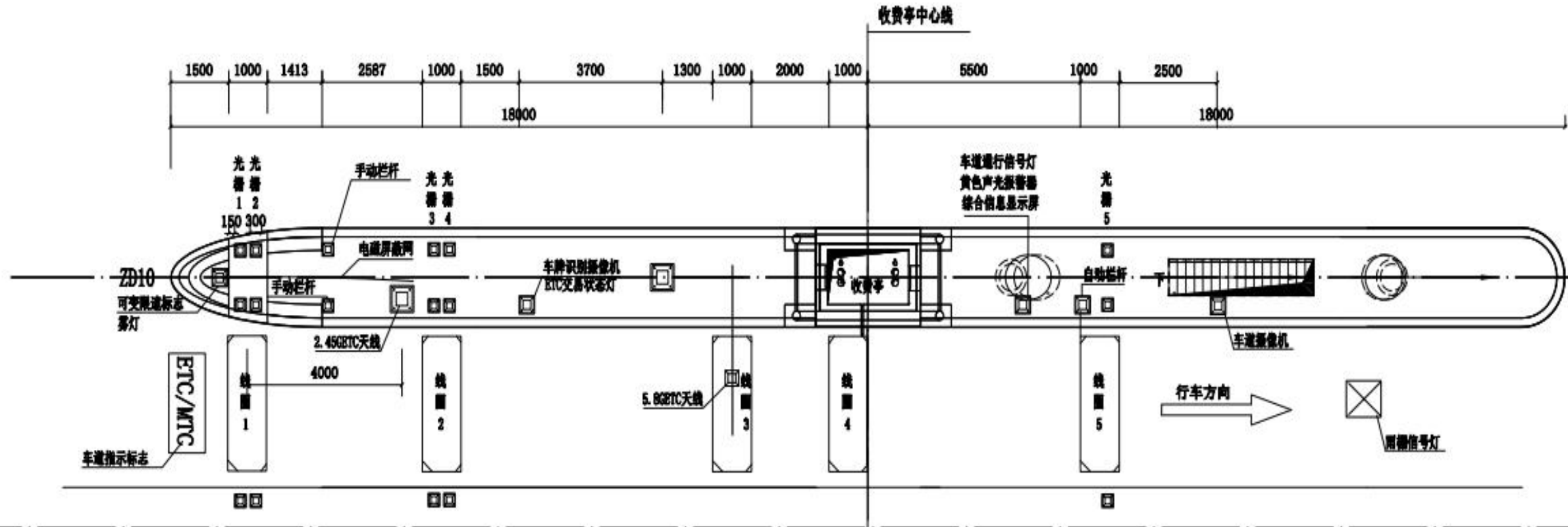
PRODUCTS:



# Hong Kong–Zhuhai–Macau Bridge

VanJee overcomes two major technical difficulties in the bridge:

- 1. The bridge has three tolling methods which are VanJee ETC DSRC, Auto-toll and Manuel-toll.
- 2. The bridge has 22 lanes with two directions. VanJee RSU has two great features which are anti-interference for signals as well as high accurate positioning method to deal with a large amount of traffic flow.



\*the bridge ETC layout: first one is Auto-toll, second one is WanJi RSU, third one is manuel toll



# Wuhan Multi-lane Free Flow in Yingwuzhou Yangtze River Bridge.

1. Wuhan Yingwuzhou Yangtze River Bridge is a two-way eight-lane road with a total length of 3.42 kilometers and a main span of 850 meters.
2. VanJee finished the first ETC Multi-lane Free flow project in China
  1. Handled vehicle speed up to: 180 km/hr
  2. The system has been running successfully since 2010
3. In Wuhan province alone, VanJee integrated 407,600 OBU's, 114 RSUs, plate number identification system and traffic data processing system.
4. The accuracy obtained in 2017 is 99.99%

# 02

## ETC series

◆ Product display ◆



WER13-01 RSUs



WEIH355 handheld dispenser



WEIF342 desktop dispenser



Pre-installed OBUs



WER09-01 RSUs



WEIH351 handheld dispenser



WEIF343 desktop dispenser



W116 double-chip OBU



Intelligent parking lot antenna 11-02



WEIH351B handheld dispenser



W-115B double-chip OBU



W-115B+Bluetooth OBU

# 1. VanJee ETC in Pakistan PKM Project

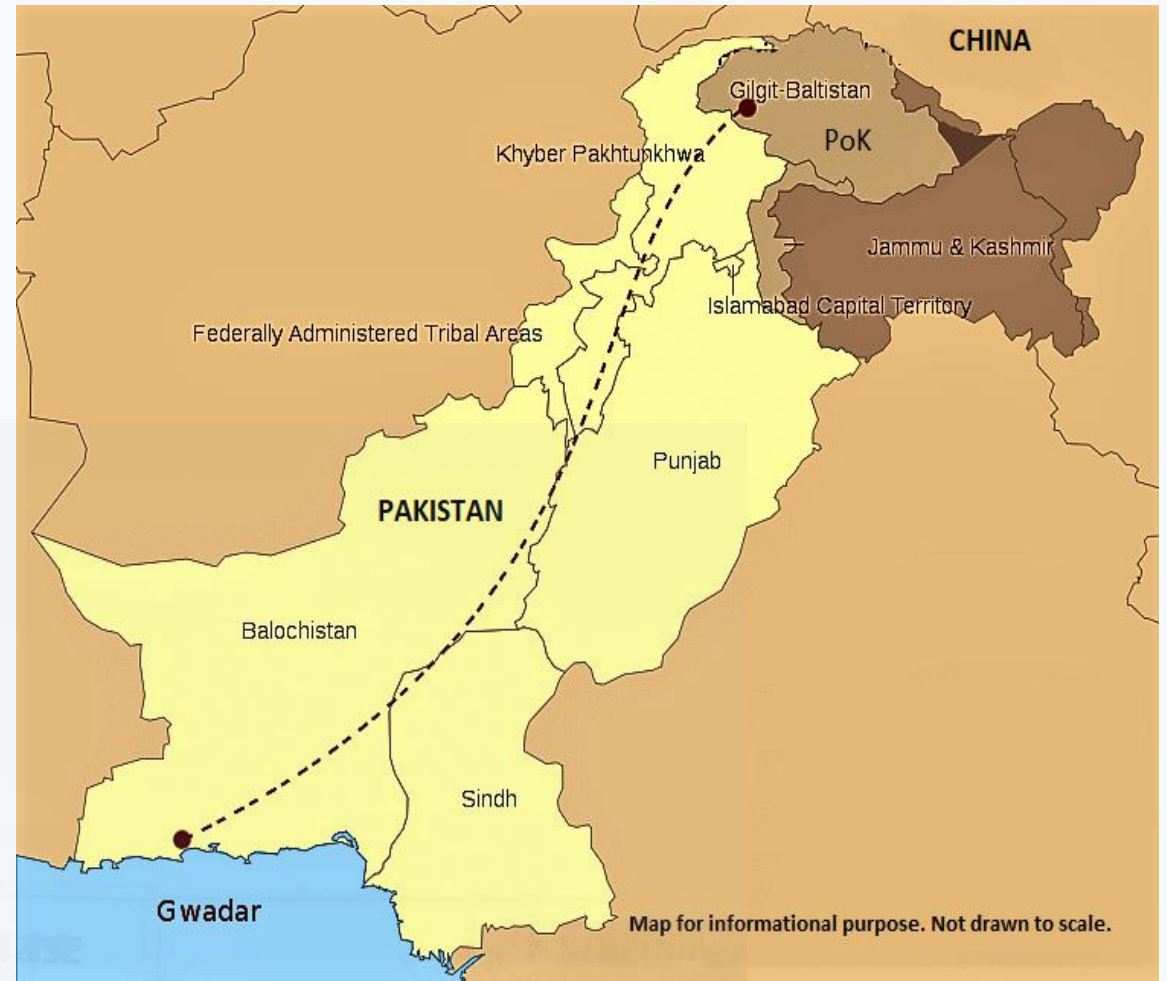
VanJee is the exclusive ETC supplier to supply all ETC equipment in Pakistan PKM project which is known as One Belt One Road flagship project

**VanJee supplied :**

**ETC transceiver**

**OBU**

**ETC card**



# 1. VanJee ETC in Pakistan PKM Project



**FiberHome**

**VANJEE**  
TECHNOLOGY



# 2. CRBC-VanJee Togo WIM project





**III.**

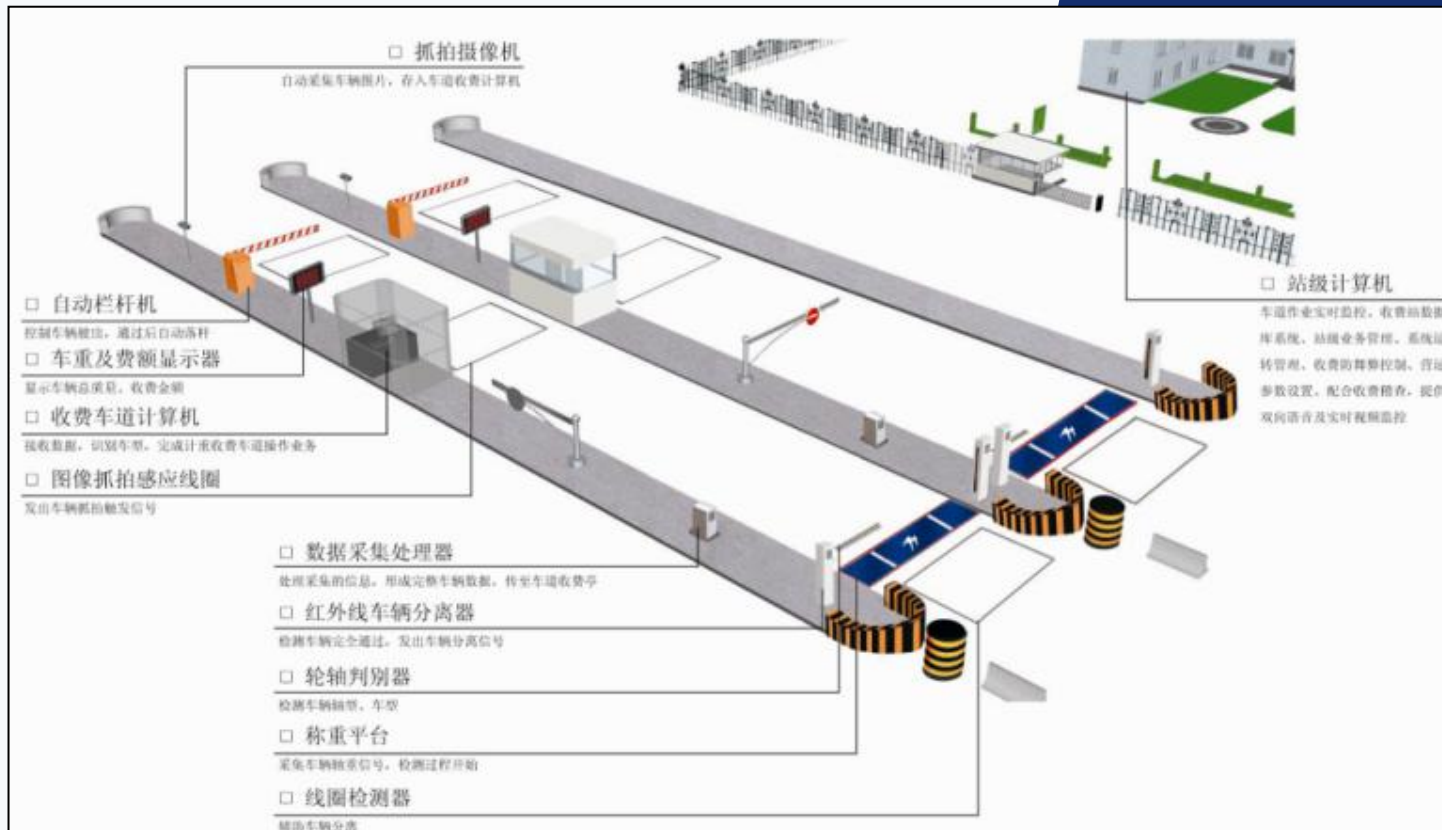
**VanJee products**



# 01 Weigh-In-Motion

1. VanJee WIM would guarantee highway maintenance and quality.

2. To save highway maintenance cost in long run.



▲ Toll-by-weight system structure

# Product Introduction



Wanji Low-Speed Weigh-In-Motion in Ningxia  
Wuzhong

Low-Speed  
Weigh-In-Motion



Toll-by-  
Weight

DCS-30KII is the cost-effective low-speed Weigh-In-Motion scale. The scale would achieve weighing accuracy 98% under the speed 30 km/hour to protect road as well as can perform continuous truck passing measurement.

# VanJee Direct Enforcement Enforcement System



1. VanJee front data collection system
  - axle weight, axle number, gross vehicle weight, vehicle image, license plate number and the short video for violated trucks.
2. WIM data management platform
  - Process and store truck information, the rule of evidence and violation confirmation.

## VanJee Weigh-Im-Motion projects

### Cases

▼ Yantian toll gate,  
Guangdong  
Province



▼ Hebei-Liaoning main  
road toll gate, Chengde-  
Chaoyang Expressway,  
Hebei Province



▼ Phoenix Mountain  
toll gate



▲ Aobaoliang toll gate,  
Inner Mongolia



▲ Ruyuan toll gate,  
Guangdong Province



▲ Jiayu Pass toll gate,  
Gansu Province



# 02

## ETC series

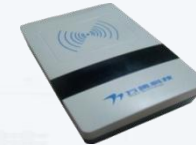
◆ Product display ◆



WER13-01 RSUs



WEIH355 handheld dispenser



WEIF342 desktop dispenser



Pre-installed OBUs



WER09-01 RSUs



WEIH351 handheld dispenser



WEIF343 desktop dispenser



W116 double-chip OBU



Intelligent parking lot antenna 11-02



WEIH351B handheld dispenser

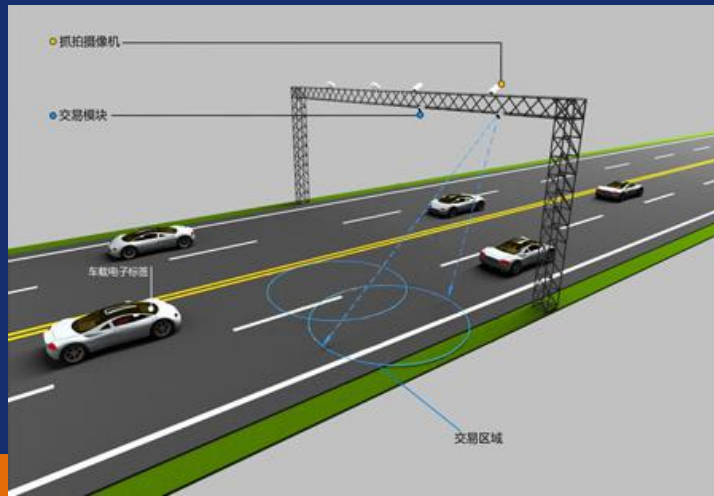


W-115B double-chip OBU



W-115B+Bluetooth OBU

# 1 MLFF system: is an information exchange system



▶ MLFF system demo

# ETC Multi-Lane Free Flow

## 2 MLFF system in Wuhan

Traffic capacity rate up by **23%**, exhaust emission down by **60%**, accident rate down by **15%**



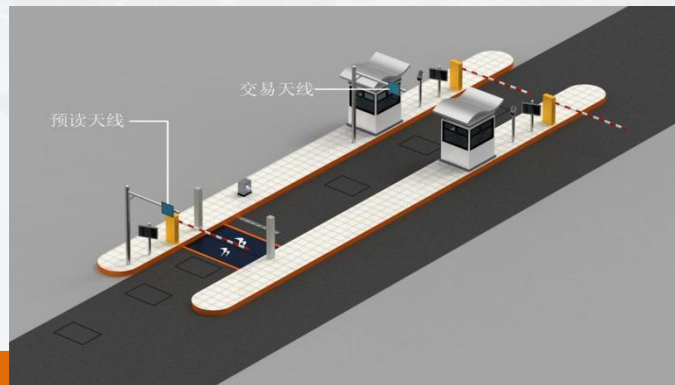
▶ MLFF system in Wuhan



▶ Congestion control in Beijing

# ETC by DSRC method

- ① **All model ETC system:** supports ETC for all vehicle models.
- ② **Background of all model ETC system:**



## ▶ All model ETC structure

- Pre-read antenna+ transaction antenna
- Multiple sense coil
- Double information screen
- Front barrier
- Dual weighing platform



All model ETC pilot project



## ETC DSRC

### 1 Intelligent parking lot management system:



▶ Guangzhou ETC intelligent parking lot



▶ Wuhan ETC intelligent parking lot

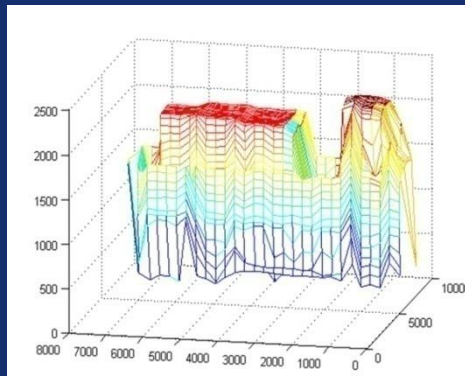
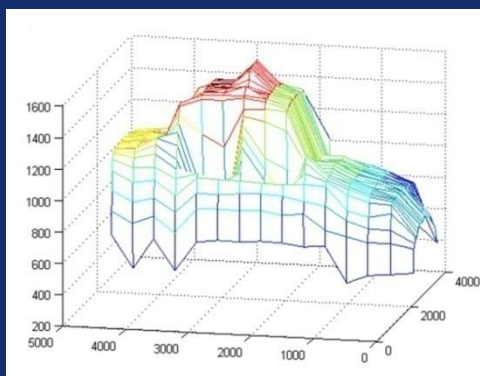


▶ Demo of intelligent parking lot management system

# 03 LIDAR series

## VanJee LiDAR is applied in ITS

VanJee LiDAR would perform three major functions: 1. Vehicle classification 2. Vehicle counting, 3. Vehicle dimension measurement, 4. Vehicle speed enforcement



VanJee LiDAR would classify **the outline of vehicles.**

## Cases



- ▶ Traffic statistics accuracy  $\geq 99\%$
- ▶ Average model error  $\leq 95\%$
- ▶ Average speed detection accuracy  $\geq 94\%$



WLR-710

Long-lasting cast aluminum alloy shell with firm structures;  
 Protection grade as IP68, water and dust proof, and able to be comfortably accommodated to complicated environment;  
 Measurement distance as 40 meters with strong detection capacity and easy scanning of 8 lanes.



WLR-711

Reliable timing circuit for accurate timing and high precision within short distance;  
 Multi-pulse echo, multiple collections, strong anti-interference capability;  
 Angular resolution as 0.25° with subtle partition and subtle feature recognition.



WLR-711B

Special design of optical structures, direct reshaping through micro lens, detection distance of reflecting surface as 70 meters;  
 High precision timing and pulse width correction algorithm with the precision as  $\pm 17\text{mm}$ .



WLR-712

Adopting multi-level signal proposal technology, high-frequency pulse occurrence technology, and multi-pulse echo technology;  
 Wide range of detection, high frequency of measurement destinations, strong environment suitability, availability to be used in large-angled scenarios;  
 Compact structure and small size.



WLR-713

8L-LiDAR ( 8 layers LiDAR ), industrial-level electric and structural design, meeting applications at the level of car regulations;  
 Beam reshaping by micro lens, multi-circuit high precision timing circuit, and high-frequency laser pulse occurrence technology;  
 Amount of point cloud output per second reaching 144,000 points for accurate recovery of the 3D image of the measured subjects.

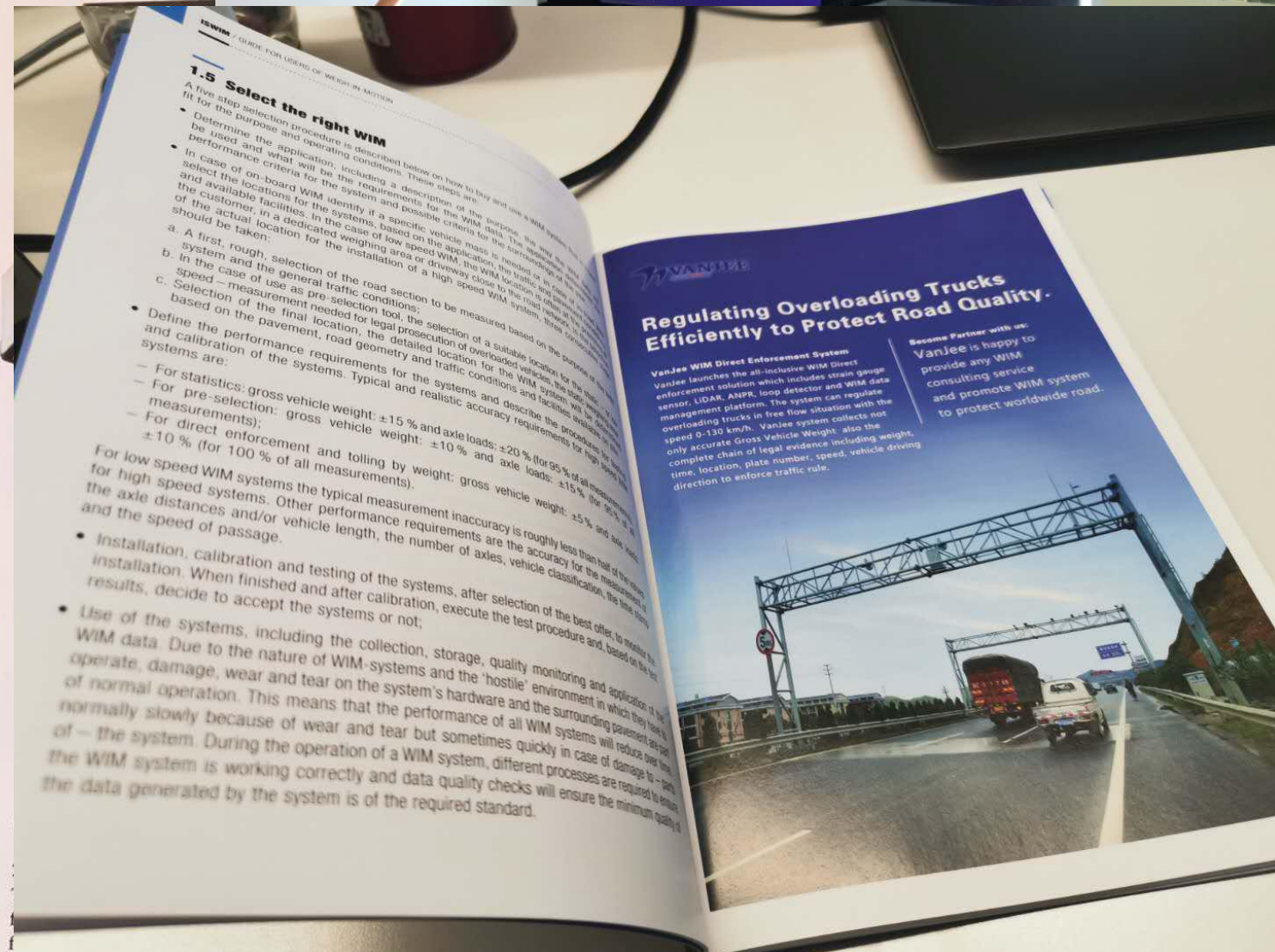


# LiDAR Application

## ◆ LiDAR cases ◆



# IV. VanJee Globalization Efforts



in China and is now looki

万集科技



## V. Conclusion

VanJee has been in ITS history for 25 years including ETC, WIM, LiDAR and V2X. VanJee is dedicated to provide the best ITS solution including developing better sensors, communication methods and methodology. VanJee is confident to use her experience and expertise to protect worldwide road, guarantee traffic safety and improve traffic efficiency.



Thank you !

Stock name: VanJee technology stock code:300552

