

VanJee develops several types of ETC OBU :



Two piece type OBU  
W-115B



Single piece type OBU  
W-103



OBU+Car driving recorder

DSRC OBU (W-115B)

VanJee DSRC OBU (W-115B) has high compatibility which can be inserted by different banks IC cards. VanJee OBU has key cryptography (ESAM) to guarantee security of financial transactions and reliability of traffic data communication. Additionally, VanJee OBU would store important vehicle information for traffic management including plate number, vehicle type, axle number as well as record vehicle driving route to achieve toll fare distribution for specific road operators.

VanJee smart OBU has multiple functions which are ETC, Bluetooth, GPS and WiFi.



Parameter specification(OBU)	
IC card interface	ISO14443TYPE-A Standard Fully support ETC dual-interface CPU card
Power supply mode	The product adopts dual-mode power supply which are solar cell and lithium cell. Furthermore, the product adopts intelligent power management.
Lithium cell	3.2V/1250mAh
The average operation time without a fault	>50,000h
Communication interface	MiniUSB
Tampering protection	mechanical protection and electronic protection
User Interface	4-color LED indicator (red and green), buzzer, LED back-lit character display
Overall dimension	94*68*25mm
Weight	80g
Button	The product buttons on both sides check balance and transaction history
Operating temperature range	-25°C~+70°C (cold region -40°C~+70°C)
Operating humidity range	5% ~ 100%
Static electricity	8kV

VanJee develops several types of ETC RSU :



DSF RSU  
WER13-01



3rd generation of RSU



Parking lot RSU  
WER17-01



DSRC RSU antenna (WER 13-01)

VanJee DSRC RSU antenna (WER 13-01) has the great traffic information interoperability as well as high accuracy on ETC transaction. VanJee RSU has two major advanced functions which are Digital Beam Forming (DBF) and phased array to achieve precision positioning of OBU in vehicle accurately and strong signal zone. Based on these two functions, VanJee RSU would avoid ETC transaction errors completely due to interference from two vehicles in adjacent lanes and another vehicle following closely.

Parameter specification(RSU)	
Overall dimension	440mm*333mm*110mm
OBU positioning Highest precision	0.1m
Target tracking	Supported
HMI	LCD display
Communication interface	RS232/RS485, Ethernet, USB-1.1 or USB2.0, I/O
PSAM card	6 built-in PSAM chips which is comply with the Financial Card Transaction Code by PBOC
SD card	1 built-in SD card slot, supporting up to 8GB storage cards
Communication zone	Width: 0-3.2M (adjustable) Length: 3-20M (adjustable)
Protection grade	IP67
Reliability	MTBF > 70000h
Operating temperature	-45°C~+80°C
Operating humidity range	5% ~ 100%
Static electricity	8kV

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# ETC PRODUCTS





VanJee ETC in Hong Kong-Zhuhai-Macau Bridge

## VanJee ETC

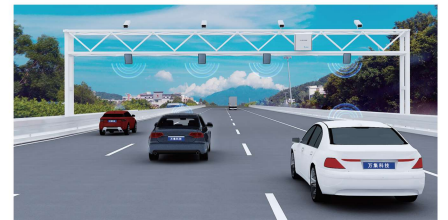
### PRODUCTS:

VanJee provides the most sophisticated ETC system in China which integrates RSU antenna, LIDAR system and plate identification cameras in tolling road as well as OBU in vehicle. VanJee did ETC projects in several China national projects which are Hong Kong-Zhuhai-Macau Bridge and Wuhan Yingwuzhou Yangtze River Bridge. VanJee is the sole designated brand to supply all ETC equipment in Pakistan PKM project which is known as One Belt One Road flagship project. VanJee developed RSU to make transaction with OBU by using DSRC 5.8GHz. Additionally, VanJee finished the first and the second Multi-Lane Free Flow (MLFF) project in Wuhan Yingwuzhou Yangtze River Bridge and the Beijing 2nd Ring Road. MLFF could make transaction with vehicle with speed 120 km/h.



VanJee ETC application in toll station

VanJee Technology has supplied more than 14 million pieces OBUs and distributed them all over China. VanJee also has supplied ETC products for multiple countries including Pakistan, Senegal, Mozambique, Indonesia and Myanmar. VanJee ETC would save drivers significant time and make traffic flow become more efficient. VanJee ETC would mitigate several traffic problems such as traffic jam, traffic accidents as well as saving energy consumption and emission pollution.



VanJee Multi-lane Free Flow



VanJee MLFF in Beijing 2nd ring road

VanJee MLFF in Wuhan Yuehu Yangtze River Bridge

In multi-lane free flow (MLFF), VanJee develops three positioning methods which are LIDAR and Digital beam forming (DBF) and phase array to avoid incorrect charging problem and can process a great amount of traffic flow. The LIDAR subsystem has four laser sensors to create four LIDAR lines to scan the vehicle four times. Camera would also identify plate number on each LIDAR lines. As a result, The LIDAR subsystem could obtain the vehicle track. Secondly, DBF in RSU antenna also would track the vehicle throughout ETC transaction. Thirdly, these two positioning methods must have consistent tracking results to guarantee the accuracy of ETC transaction. A RSU could process a large number of OBU transactions in the toll road with accuracy rate 99.99%.

### VanJee international policy on business partners and local agents

VanJee is looking for business partners and local agents. VanJee would provide fully support for local agents with sufficient guides and clear goals. VanJee and partners would work together to establish distribution channels and pursue common interest. As a result, VanJee and partners would achieve leadership sales, profits and value creation in a new market.