



WHY  
NORMAL 

Committed to the research and development of new energy two-wheel mobility vehicles

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service@kuickwheel.com  
Web: www.rictor.com



# PRODUCT MANUAL

## Company Introduction

We believe that time should not be wasted in traffic congestion whether in daily commute or weekend getaways. We are committed to providing high-quality, smart and green mobility tools for people who need to travel short distances.

Rictor is a brand specializing in the field of intelligent short-distance travel, established in 2014. Main business involves manufacturing and selling products such as electric scooters, E-bikes and electric motorcycles. Its products have been sold in over 80 countries and regions globally, with hundreds of millions of users experiencing its consumer-grade and shared-grade products.

Combining our strengths in core technology development for three electric components, supply chain management, complete vehicle manufacturing, IoT shared modules, AI-powered imaging systems and the establishment of shared vehicle networking operation platforms, we have garnered nearly 500 patents including inventions, PCT, utility models and design patents. We continue to dedicate ourselves to the research and development of new energy-powered two-wheel vehicles, integrating smart, technological and green travel into our company and product philosophy, offering a new choice for urban mobility.

At the same time, Rictor extensively employs a model of cooperation with overseas retail giants and online platforms, continuously establishing a global distributor system, aspiring to create an international brand, and proliferate Rictor's spirit and technology worldwide. Presently, our products have entered major overseas chain retailers such as FNAC, DARTY, BOULANGER, and have partnered with Teknihall, one of the top three aftersales service providers in Europe. Additionally, we have established warehousing, logistics, customer service and after-sales service systems in the United States and Europe.

For more information, please visit [www.rictor.com](http://www.rictor.com)

# 500<sup>+</sup>

Patents & Certificates

# 80<sup>+</sup>

Products have been sold  
to more than 80 countries  
and regions

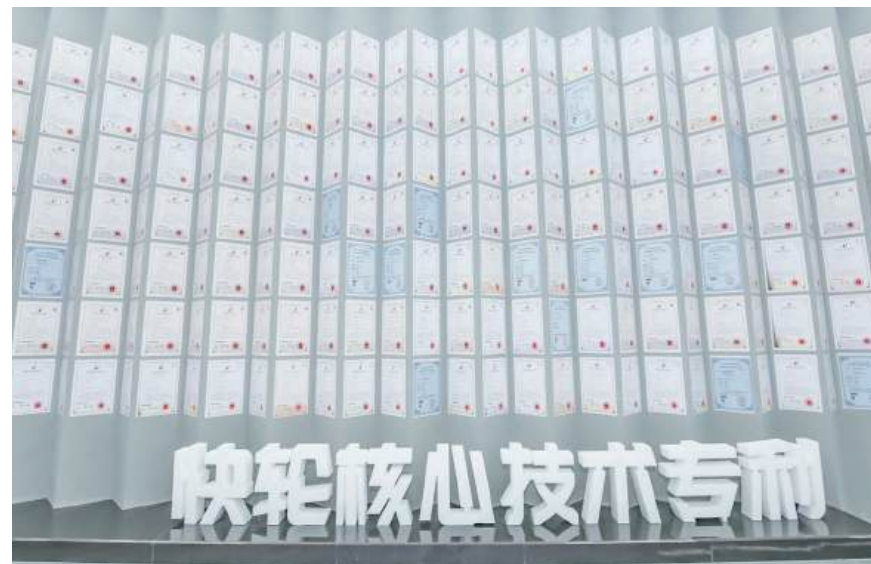
# 40%

Core technical staff

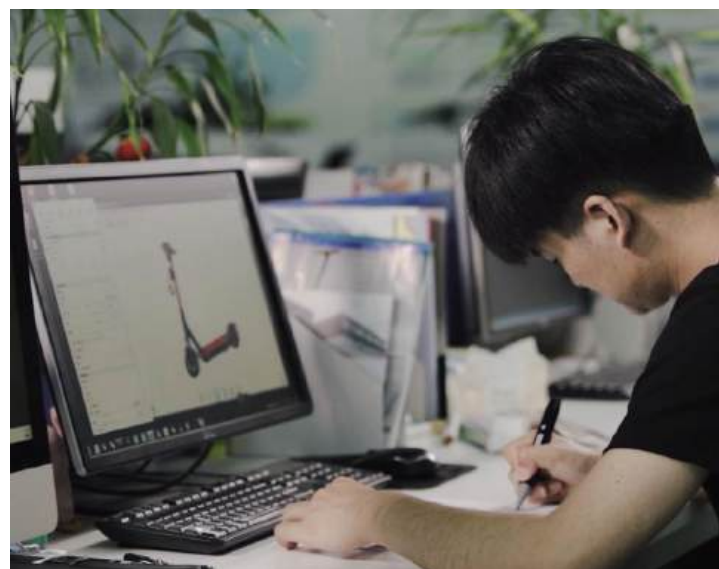
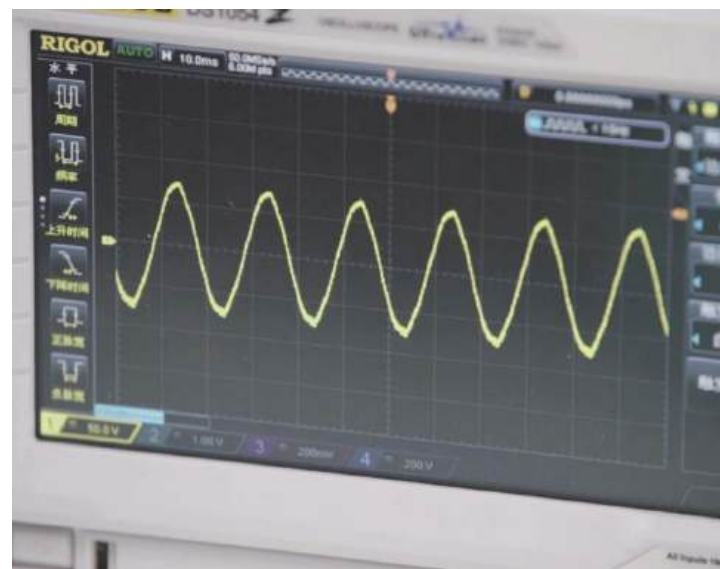




## Nanjing R&D and Testing Base



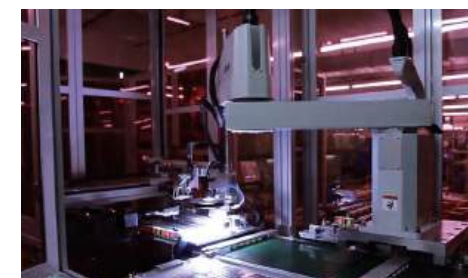
Covering  
**8000** m<sup>2</sup>



## Yancheng Factory



Covering  
**20000** m<sup>2</sup>







100<sup>+</sup> 132

Test Equipments      Test Standards

Stringent experimental testing standards

Actively involved in the formulation of national standards multiple times



General Technical Specifications for Electric Scooters  
GB/T 42825-2023

Fatigue Endurance Test

Horizontal Insertion and Extraction Force Test

Battery Impact Test

Vehicle Drop Test

Throttle Knob Aging Test

Salt Spray Test

Vehicle Horizontal Impact Test

Vehicle Raining Test

Battery Temperature Controlled Short Circuit Test

Falling ball Impact Test

Riser Horizontal Thrust Test

Motor Performance Test

Ultraviolet Aging Test

Comprehensive Fatigue Test for Handlebars

Fork Damping Test

Riser Fatigue Test

Handlebar Steering Mechanism Test

Key Life Test

Packaging Vibration Test

Whole Vehicle Double Roller Fatigue Test

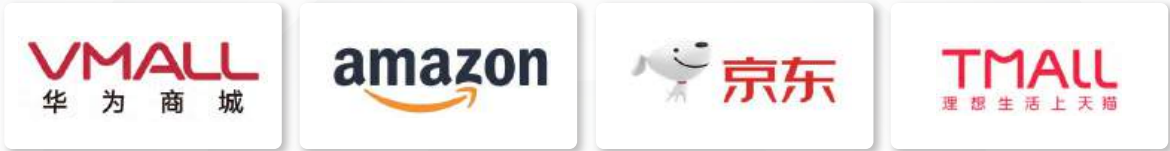
Battery Temperature Controlled Short Circuit Test

Tire Roundness and Runout Test

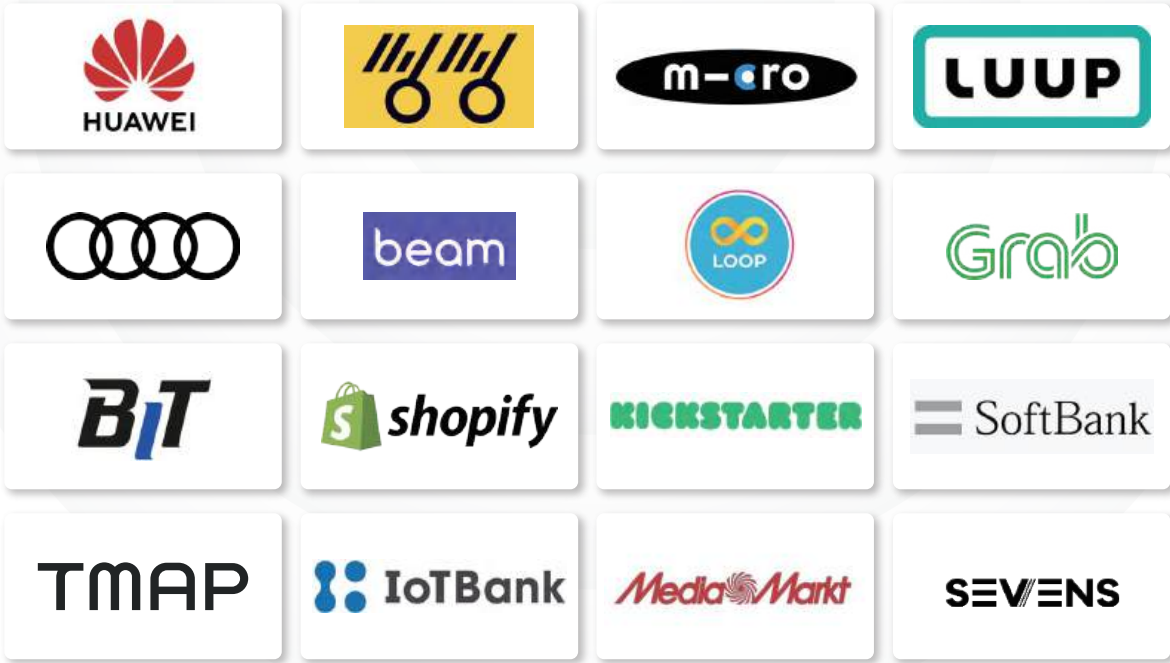


# Strategic Cooperation

## Official Sales Platforms



## Business Partners



# Patent Achievements

500<sup>+</sup>

More than 500 patent certificates

- Core Patents, Inventions Patents
- Utility Model Patents, Design Patents

50<sup>+</sup>

More than 50 product certificates



Component	Certified Content
Electric Scooter	CE, EN17128, EMC, EN\IEC60335, KC, RoHS, Reach, UL2272, JIS.
Electric Bicycle	EN15194, KC certified, ISO11243 certified
Batteries	CE, CB , KC, PSE, UL2271, UN38.3, MSDS, EU2023/1542
Charger	CE, EN/IEC 60335, EN/IEC 61558, UL, FCC, UKCA, RCM
Lamps/Reflectors	ISO6741, ISO6742, E-Mark, K-Mark







K1

750w	Rated Power
48km/h	Max Speed
40mile	Mileage (throttle)
85mile	Mileage (assistance)



A1

1300w*2	Rated Power
70km/h	Max Speed
80km	Mileage



Model b

350w	Rated Power
25km/h	Max Speed
45km	Mileage



Model a

350w	Rated Power
25km/h	Max Speed
30km	Mileage



S9

500w	Rated Power
40km/h	Max Speed
65km	Mileage



F1

350w	Rated Power
25km/h	Max Speed
30km	Mileage



S1-c pro

500w	Rated Power
25km/h	Max Speed
50km	Mileage



S2

350w	Rated Power
25km/h	Max Speed
45km	Mileage



M16

250w	Rated Power
25km/h	Max Speed
25km	Mileage



# K1 RICTOR Electric Motorcycle



## INTELLIGENT CONTROL



Pedaling force enhancement algorithm easily produces greater pedaling force



RICTOR's independently developed torque sensor accurately collects pedaling force

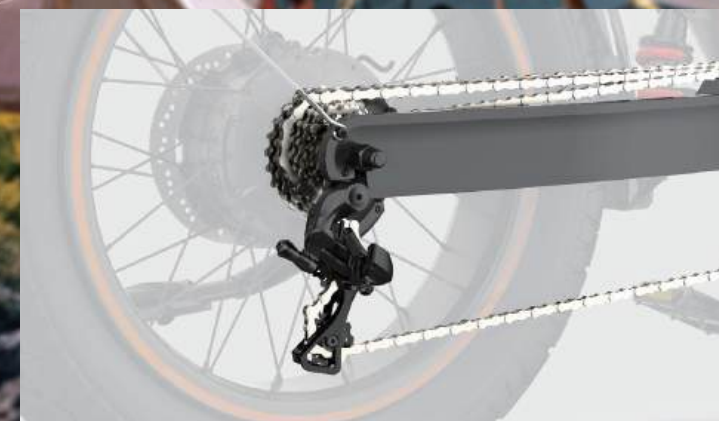


750W Bafang Motor



## Dual Battery Configuration

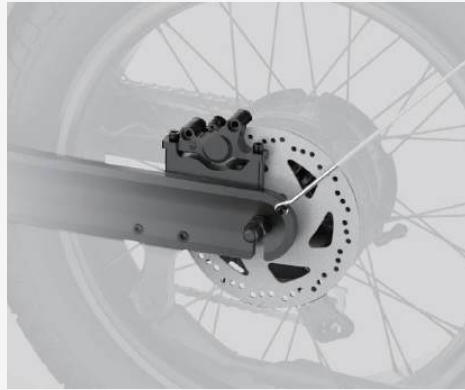
The vehicle can be equipped with a second 48V high-capacity battery, providing robust power and long range.



## Shimano 8-speed gearbox

A major brand and core supplier, featuring an 8-speed gearbox that significantly enhances transmission efficiency, meeting daily commuting needs.





### Front and rear hydraulic Disc brake system

180mm thickened and widened disc brake pad makes braking more sensitive and faster. Which makes the braking distance effectively shortened and the braking performance better.



### Automatic sensor headlight + Safety taillight

All-weather driving headlights with fluorescent, low-beam, and high-beam functions



### Hidden storage compartment

The spare battery compartment is also a storage compartment, with large storage space and integrated simple and beautiful lid design,

### Bluetooth remote Control key

Realize bluetooth non-inductive unlocking, Bluetooth remote control switching and unlocking.



### 20 inch oversized inflatable tires

Use high-performance road tires to increase grip on rain, snow and gravel roads and increase safety.

### Built-in iot module



### App intelligent interconnection A new way of smart travel



APP unlock



Vehicle status



Keyless start



OTA wireless upgrade



Automatic lock



Riding records



Intelligent anti-theft



Riding footprint



### Integrated dashboard

Color screen design, more cool, scientific and technological sense.

Rated Power 750W	Max Speed 48KM/h (assistance) 32KM/h (throttle)	Mileage( single battery) 40mile (throttle) 85mile (assistance)	IoT 4G
Battery (Battery Nominal battery pack )48V 20Ah (optional battery pack) 48V 20Ah	Braking system Front and rear hydraulic disc brake system	Waterproof Rating IPX5 (Core parts IPX7)	Net weight 34.5kg



# A1

High speed off-road  
electric scooter



Max speed  
**70km/h**

0-48km/h  
Acceleration time  
**4.9s**

Mileage  
**80km**

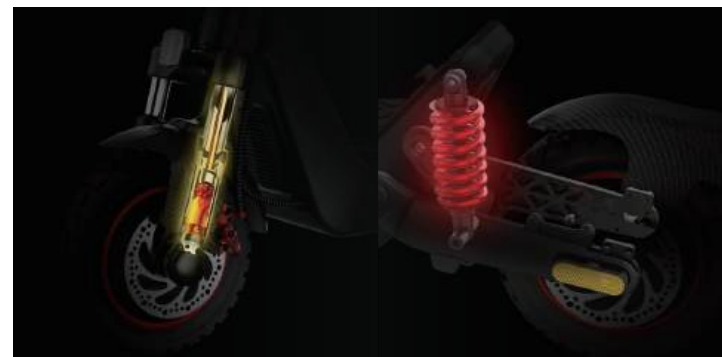
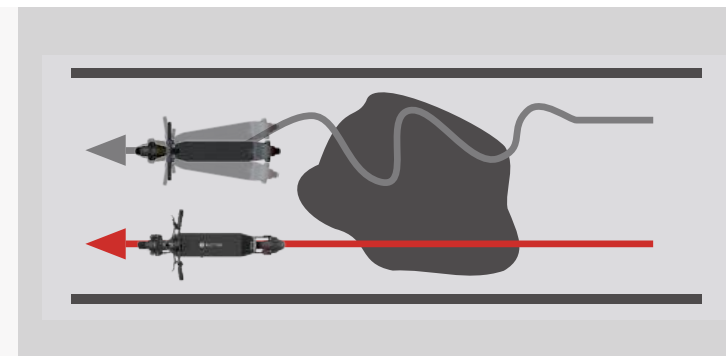


## 1300w\*2 motors front & rear dual drive

With a top speed of 70km/h, it can easily complete a 20% climbing. Under the coordinated control of the two-wheel drive controller, smooth acceleration and instant speed increase in third gear can be achieved.

## Dynamic traction control system

Through the precise electronic control algorithms, the risk of wheel spin on gravel and slippery surfaces is reduced, the traction is increased, and the wheel speeds are kept as consistent as possible to ensure the vehicle has good controllability.



## Front & rear dual shock Absorption system

The front wheel double-arm hydraulic shock absorber and the rear wheel carrier arm suspension adopt the same suspension structure as that of high-level motorcycles.



Front and rear dual hydraulic braking system

Use 140mm diameter, 2.5mm thick, heavy duty perforated ventilation plate.



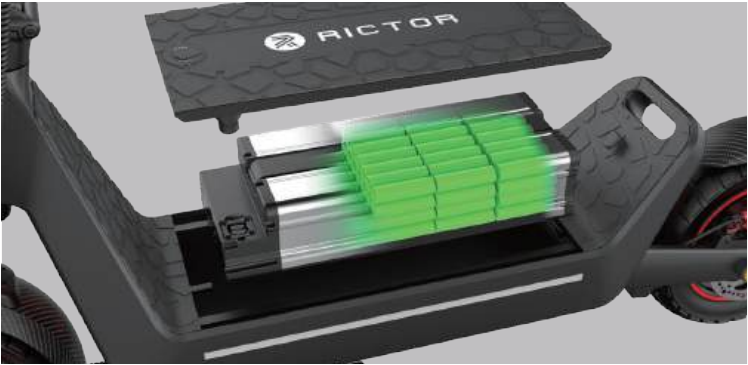
All-weather driving lights

LED all-weather driving lights integrated wuth daytime running lights, low beam, high beam lights



Full color ambient light

The ambient lights on both sides are composed of full-color LEDs, with bright colors and rich details.



Detachable battery

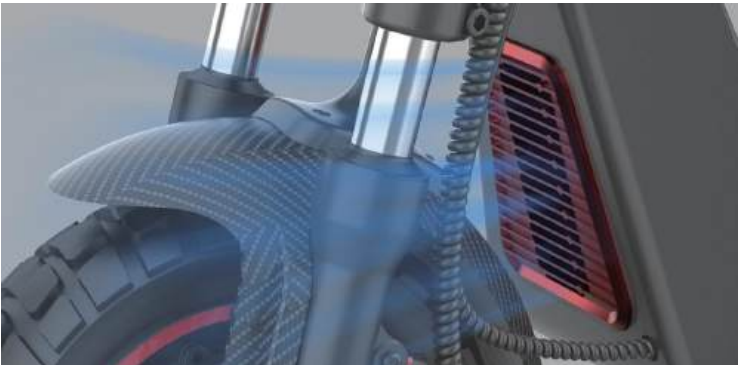
1087wh high performance Power battery

Adopt battery solid heat flow cooling technology to ensure stable energy output



Full color led display

Displays power, speed, light status, and operating mode



Air-cooled air intake grille

Simulated air intake grille for more stable heat dissipation

Rated Power 1300W*2 dual-drive motor	Max Speed 70km/h	Mileage 80KM	Max climbing slope 35%
Battery 51V 21Ah	Braking system front and rear double disc brake	Waterproof Rating IPX5 (Core parts IPX7)	Dimensions 1220*610*1201mm



# S9

Consumer  
Product



## 500w powerful motor

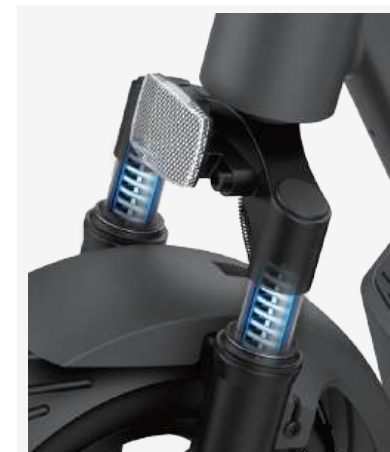
Maximum  
climbing angle  
**25%**

Peak motor  
power  
**750w**

Maximum  
torque  
 **$\geq 22\text{nm}$**

## Front and rear wheel double shock absorption design

Front double arm shock absorber, rear double rocker arm  
+ cylindrical shock absorber



## Detachable battery

Mechanical locking design of deck and easy-to-remove  
large-capacity battery pack design provides a longer  
battery life.





LED dashboard



Rear turn signal



E-mark headlight



Front handle turn signal

Shock-resistant and anti-fall handlebar turn signal ensures riding safety



Rotary handle bell + turn signal switch

Dual 10-inch tires  
Dual disc brakes

The front and rear wheels adopt a dual 10-inch wheel equipped with a dual disc brake system



Widen footboard

Wide deck design (width 192mm) with silicone pads for comfortable riding and standing



Rated Power 500W	Max Speed 40km/h	Mileage 65KM	Max climbing slope 25%
Battery 36V 15.6Ah	Braking system front and rear double disc brake + rear wheel electronic brake	Waterproof Rating IPX5 (Core parts IPX7)	Dimensions 1190*583*1170mm



# F1

Consumer Product



**Stylish large-screen Dashboard**

Large-sized dashboard provides a full view of riding status



**Front handle turn signal**

Anti-collision shell to prevent collisions



**K-mark automatic sensor headlight  
Led high-brightness taillight**

Escort night rides to make you safer.



**10-inch inflatable tire**



**Extremely thin body  
Lightweight and compact**

Thin and light body ensures to Optimized spatial arrangement and guarantee of a more stable riding.



**Front drum brake + Rear E-ABS**

Double brake guarantee, braking is fast and stable

Rated Power 350W	Max Speed 25km/h	Mileage 30KM	Max climbing slope 20%
Battery 36V 7.8Ah	Braking system front wheel drum brake + rear wheel E-ABS	Waterproof Rating IPX5 (Core parts IPX7)	Tire size 10in*2



# S1c-pro

Consumer Product



## Front dual suspension

helps in smooth riding on various terrains.

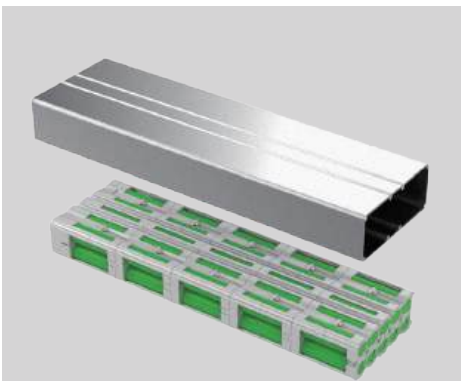
## 10\*2.5” widen tires

can adapt to various urban complex terrains, have good riding comfort and is easy to replace.



## Industry’ s first ipx7 Waterproof rating

Whole vehicle IPX5; core components IPX7.



## Metal explosion-proof Battery compartment



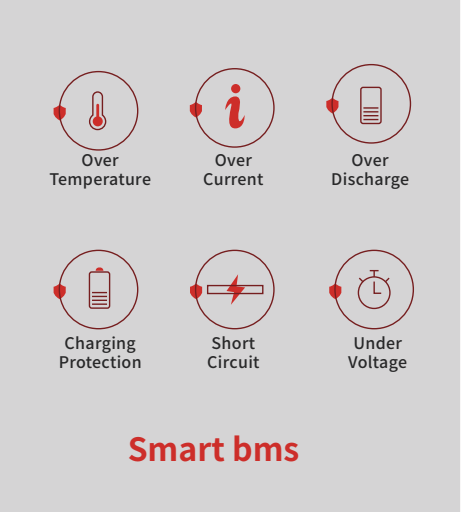
## Rear turn signals



## Front drum brake & Rear e-abs



## Led smart dashboard



## Smart bms



## 3-sec quick folding

Rated Power 500W	Max Speed 25km/h	Mileage 50KM	Max climbing slope 25%
Battery 36V 13Ah	Braking system Front Drum Brake & Rear E-ABS	Waterproof grade IPX5 (Core parts IPX7)	Dimension 1155*455*1195mm



# Model B

Consumer  
Product



Front dual suspension



10\*2.5" widen tires  
Rear disc brake & e-abs



Integrated widen  
Footboard



K-mark headlight  
K-mark led high-brightness  
Taillight



Led dashboard



Built-in coded lock

Rated Power 350W	Max Speed 25km/h	Mileage 45KM	Max climbing slope 20%
Battery 36V 13Ah	Braking system Rear Disc Brake & E-ABS	Waterproof grade IPX5 (Core parts IPX7)	Dimension 1135*500*1175mm



# Model A

Consumer  
Product



Hidden kickstand



Rear disc brake & e-abs



10\*2.5" widen tires



K-mark headlight  
K-mark LED high-brightness  
Taillight



LED dashboard



Front wheel shock  
Absorption

Rated Power 350W	Max Speed 25km/h	Mileage 30KM	Max climbing slope 20%
Battery 36V 7.8Ah	Braking system Rear Disc Brake & E-ABS	Waterproof Rating IPX5 (Core parts IPX7)	Dimensions 1120*516*1115mm



# S2

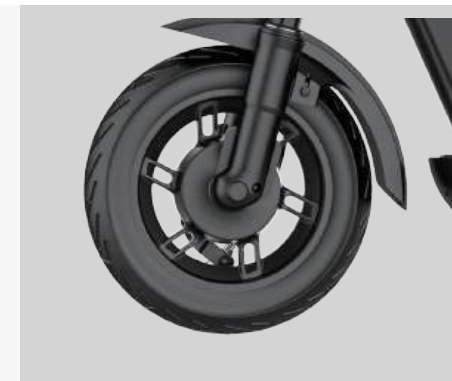
Consumer Product



Front dual suspension



Front drum brake &  
Rear e-abs



10\*2.5" widen tires



Integrated widen footboard



Led smart dashboard



K-mark lights

Rated Power 350W	Max Speed 25km/h	Mileage 45KM	Max climbing slope 20%
Battery 36V 13Ah	Braking system Front Drum Brake & Rear E-ABS	Waterproof Rating IPX5	Material Aluminum alloy



# M16

Consumer Product



Rear disc brake & e-abs



Integrated throttle & Display



10\*2.5" shock-absorbing Air tires



K-mark headlight



K-mark LED high-Brightness taillight



High carbon steel Structural frame

Rated Power 250W	Max Speed 25km/h	Mileage 25KM	Max climbing slope 16%
Battery 36V 6Ah	Braking system Rear Disc Brake + E-ABS	Waterproof Rating IPX5 (Core parts IPX7)	Dimensions 1164*460*1124mm



Shared product introduction



WHY BE NORMAL



KS3000

500w	Rated Power
25km/h	Max Speed
60km	Mileage



Super C

350w	Rated Power
25km/h	Max Speed
45km	Mileage



Super S

500w	Rated Power
25km/h	Max Speed
60km	Mileage



X520D

500w*2	Rated Power
25km/h	Max Speed
65km	Mileage(16.75Ah)
95km	Mileage(24.5Ah)



GS1 3000

500w	Rated Power
25km/h	Max Speed
45km	Mileage



SE200

500w	Rated Power
25km/h	Max Speed
50km	Mileage



SE140

500w	Rated Power
25km/h	Max Speed
55km	Mileage

# KS3000

Electric scooter  
for sharing



**Front Dual Hydraulic Suspension**  
helps in smooth riding on various terrains.

A close-up photograph of the front fork and suspension system of the scooter, highlighting the dual hydraulic shock absorbers.

**E-mark Headlight & LED High-brightness Taillight**

Two close-up photographs: one of the front headlight assembly and another of the rear LED taillight, both illuminated.A close-up photograph of the scooter's deck showing the double leg kickstand mechanism.

**Double Leg Kickstand**

A side-by-side comparison of the front and rear wheels. The front wheel is 12 inches in diameter, and the rear wheel is 10 inches in diameter. Both wheels feature a drum brake system.

**Front 12" & Rear 10" Wheels**  
Has greater passability

**Front & Rear Drum Brake + Rear E-ABS**  
Double braking guarantee, fast and stable.

A photograph showing the internal IoT module installed within the scooter's frame.

**Built-in IoT**  
Has higher waterproof performance. Has CAT-4 and Bluetooth 4.0. GPS+BDS; supports NFC function. CAN communication; supports voice functions.

A photograph of the LED smart dashboard mounted on the handlebars, displaying various metrics like speed and battery level.

**LED Smart Dashboard**  
The LED dashboard provides a clearer display.

**Detachable Battery**  
The fully sealed aluminum-alloy battery case, combined with waterproof cables, can reach IPX7 waterproof level, increasing safety and reliability.

A photograph of the detachable battery unit, which is a rectangular box with a green internal component visible through a transparent section.

Rated Power 500W	Max Speed 25km/h	Mileage 60KM	Max climbing slope 25%
Battery 36V 16Ah	Braking system Front and Rear Drum Brake & Rear E-ABS	Waterproof Rating IPX5 (Core parts IPX7)	Length ≤1.25m



# Super C

Electric scooter  
for sharing



## Detachable Battery

Detachable battery pack ease the charging and maintenance for the operator.

## Double Leg Kickstand



## Embedded IoT

Embedded IOT IoT with higher waterproof performance. IoT features include CAT-4BLE4.0; GPS+BDS, NFC support, Can communication, and voice function.



## Mechanical drum brake

The mechanical drum brake equipped on the front wheel provides good comfort and can easily pass through speed bumps.

## K-mark Headlight

K-mark automatic sensing headlight ensures a safe nighttime driving.



Rated Power 350W	Max Speed 25km/h	Mileage 45KM	Max climbing slope 20%
Battery 36V 13Ah	Braking system Front drum brake + rear E-ABS	Waterproof Rating IPX5 (Core parts IPX7)	Dimensions 1195*500*1118mm

# Super S

Electric scooter  
for sharing



## Integrated IoT Module

IoT features include CAT-4, BLE 4.0, GPS+BDS, and voice function.



## K-mark headlight

K-mark automatic sensing headlight ensures a safe nighttime driving.



## Front and rear drum brakes + rear E-ABS

double brake guarantee a fast and stable braking



## Cover with hinge

The cover is not easily deformed and is easy to open

## Shock absorbing arms

The front wheel arms are shock-absorbing, helping to provide a smooth ride on a variety of terrains.

**10**inch  
Large  
10-inch tires



## Detachable Battery

### Integrated rubberized pedal

The metal pedal is put into the rubber mold to form the foot pad. The foot pad will not fall off and is strong and durable.



Rated Power 500W	Max Speed 25km/h	Mileage 60KM	Max climbing slope 25%
Battery 36V 16AH	Braking system front and rear drum brakes + rear E-ABS	Waterproof Rating IPX5 (Core parts IPX7)	Dimensions 1280*485*1150mm



# GS1 3000

Electric scooter  
for sharing



## Front wheel double arms shock absorption

Dual-arm shock absorbers equipped on the front wheel offer a smooth ride over various terrain

## Front reflector

Equipped with reflectors that meet EKFV requirements, enhancing driving safety.



## Double LED Safety Tail Light

Always on red light, flash during brake.

## Optional IoT module with status light

Integrated status lights + speaker, serving as the guardian of the city during the night.



## Front and rear drum brakes + rear E-ABS

Double braking guarantee, braking is fast and stable.

## 500W motor

Rear wheel 10 inches 500W motor, stronger dynamic performance, better passability characteristics.

Rated Power 500W	Max Speed 25km/h	Mileage 45KM	Max climbing slope 25%
Battery 36V 13Ah	Braking system front and rear drum brakes + rear E-ABS	Waterproof Rating IPX5 (Core parts IPX7)	Dimensions 1198*490*1140mm

# X520D

Electric scooter  
for sharing



**Front and back dual 12 inch 500W motor**  
**The world's first dual motor Sharing Electric Scooter**

Dual motors in the front and rear respectively, each equipped with a 12-inch motor with a rated power of 500W, producing a peak power of up to 1200W for the entire vehicle.



**Detachable battery**

Detachable battery pack ease the charging and maintenance for the operator.

**Large capacity battery pack**

13S7P 48V 23.4Ah/  
13S5P48V16.75h  
Maximize riding time



**Optional IoT module with status light**

Integrated status lights + speaker, serving as the guardian of the city during the night.



**Front wheel double arms shock absorption**

offer a smooth ride over various terrain.

**Fully wrapped brake cable**

Neat appearance, enhanced brake safety protection



**Charging Port**

More convenient bounce cover design, waterproof and dustproof.



**Fully wrapped fender**

Fully wrapped structure with K-Mark tail lights and license plate, significantly enhancing driving safety.

Rated Power 500W*2	Max Speed 25km/h	Mileage 65km(16.75Ah) 95km(24.5Ah)	Max climbing slope 30%
Battery 48V 16.75Ah 48V 24.5Ah	Braking system Front and back dual drum brake + E-ABS	Waterproof Rating IPX5 (Core parts IPX7)	Dimensions 1196×528×1250mm



# SE200

Electric scooter  
for sharing



## Integrated IoT

IoT features include CAT-4, BLE 4.0, GPS+BDS, and voice function.

## AI smart camera

Intelligent recognition of current traffic conditions.

- 01 Pedestrian lane and motorcycle lane alerts.
- 02 Detection of pedestrian distance with corresponding alerts.
- 03 Parking alignment check.
- 04 Wrong-way detection.



## LED smart dashboard

Real-time display of vehicle status information

Current speed

Bluetooth status

Battery status

Headlight

Lock

Vehicle status

## Silicone rubber grips

The handle is made of skin-friendly silicone material, resistant to aging (UV resistant).

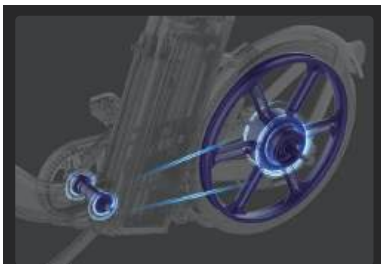


## 500W High power motor

500W  
Rated Motor Power

630W  
Peak Motor Power

51NM  
Maximum torque



Pedal force enhancement algorithm effortlessly generates greater force while pedaling.



RICTOR self-developed torque sensors, accurately collecting pedal force.



Dual closed-loop kinetic energy controller, ensuring comfort and safety.

## 20<sup>inch</sup>

20-inch sport wheel hub with solid tires.

## Front drum brake & rear disc brake

Dual braking protection



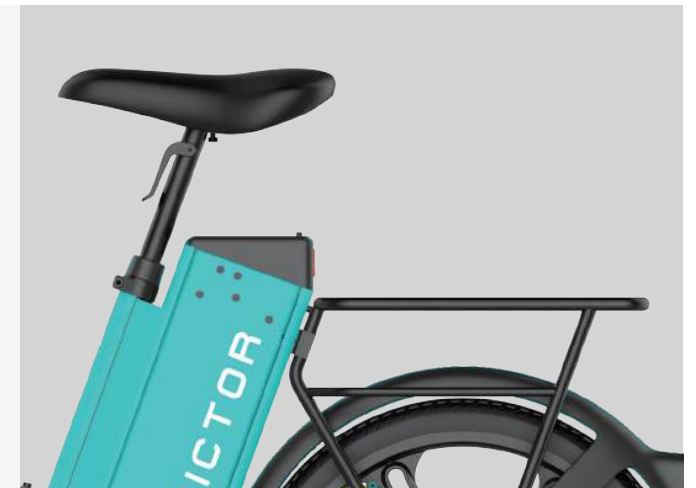
## Detachable battery design

Detachable battery pack ease the charging and maintenance for the operator.

## IPX7

Battery, controller, motor waterproof grade is IPX7.

## Adjustable seat Supports installation of rear rack



Rated Power 500W	Max Speed 25km/h	Mileage 50KM	Max climbing slope 20%
Battery 36V 16AH	Braking system Front and rear drum brakes	Waterproof Rating IPX5 (Core parts IPX7)	Dimensions 26Kg



# SE140

Electric scooter  
for sharing



### Mechanical lock

Cooperate with IOT control to realize automatic unlocking, manual locking when returning the car, and the signal is uploaded to the server.



500W  
motor rated power

630W  
motor peak  
power

51NM  
maximum torque



### Detachable Battery Design

Detachable battery pack ease the charging and maintenance for the operator.

### IPX7

Battery, controller, and motor are all rated IPX7 for waterproof.

### Integrated IoT

IoT features include CAT-4, BLE 4.0, GPS+BDS, and voice function.

### K-mark Headlight

K-mark automatic sensing headlight ensures a safe nighttime driving.



Rated Power 500W	Max Speed 25km/h	Mileage 55KM	Max Motor Torque 51NM
Battery 36V/ 13A~16.75AH	Braking system Front and rear drum brakes	Waterproof Rating IPX5 (Core parts IPX7)	Length ≤1.2m

Optional Accessories

A variety of accessories for shared vehicles is designed to meet different usage needs.



IoT Klink-Internet of Things (IoT) connecting module

Rictor's shared IoT has been exported to dozens of overseas countries, including the United States, South Korea, Japan, Singapore, Mexico, Brazil, the United Kingdom, France, Belgium, the Netherlands, Norway, Italy, etc. We possess extensive experiences in overseas IoT vehicle communication.

- Features:
- 1. Uses a publish/subscribe messaging pattern, enabling one-to-many message distribution.
  - 2. Specialized lightweight IoT protocol, minimizing network traffic consumption.
  - 3. Supports QoS0/1/2 messages.
  - 4. Server-side can handle a peak load of 1 million concurrent MQTT connections for a single node.
  - 5. Server is designed for easy implementation of node-based distributed clustering.

2G 4G NB 5G LTE CAT1  
Wireless communication network

Integrated gyro and accelerometer to know body status and motion alarms

Integrated GPS, GLONASS, BeiDou, Galileo & QZSS Positioning Technology

Highly integrated, waterproof IPX7, send vehicle data to the server in real time

BT5.0 Low power consumption Long-distance transmission, can connected to the mobile without network

OTA upgrades IoT modules in the air, and supports ECU and BMS upgrade



Wireless Charging Phone Holder



E-chain lock



Helmet lock

AI camera

- 01 Pedestrian lane and motorcycle lane alerts.

03 Detection of pedestrian distance with corresponding alerts.
- 02 Parking alignment check.

04 Wrong-way detection.

Core	ARM A9 @1Ghz
Computility	0.7T
Pixels	1920*1080
Taking angle	Horizontal70°
Focallength	4mm
Work distance	50m
Size	38mmx38mm



Cup holder



Metal basket



Rearview mirror



Optional Accessories

WHY BE NORMAL



Self-developed charging cabinet/  
charging station

- Industrial sheet metal material
- Self-stop when fully charged
- Water immersion/smoke/-temperature detection
- Overload protection
- Smart power-off
- IP54 grade for rain and dust resistance
- Cabinet lightning protection
- Fault warning
- Charging/door status detection



Charging Station



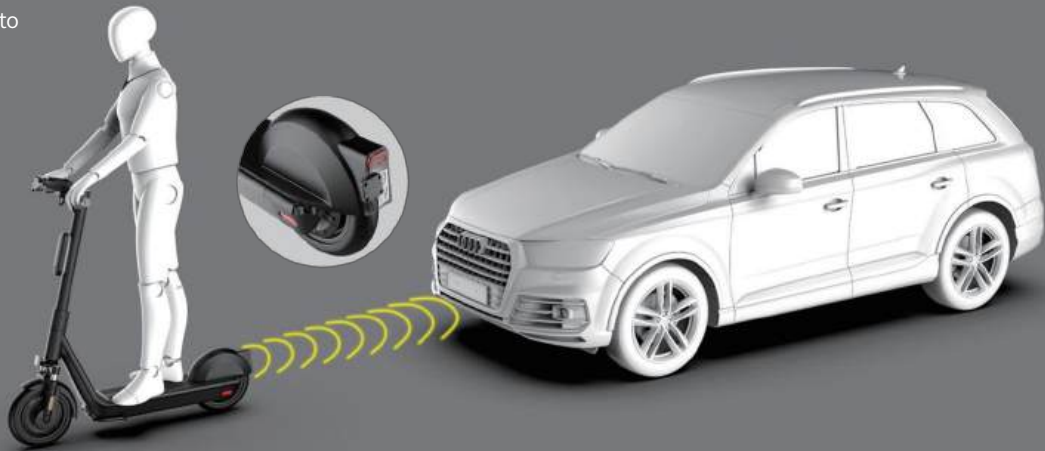
Whole vehicle wireless  
charging



Charging station/E-scooter  
/Ebike

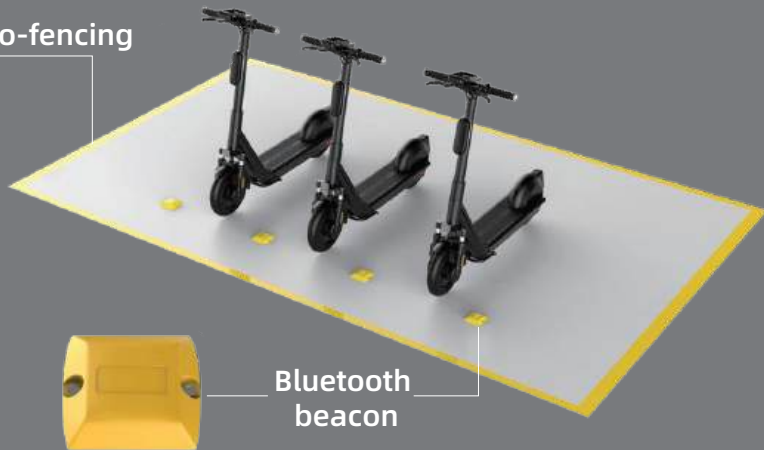
Millimeter-wave radar

Radar module built into  
the rear fender.



Bluetooth parking station technology

Geo-fencing



With Bluetooth beacon



Without Bluetooth beacon