



MIDDLE DRIVE MOTOR

NEW INTELLIGENT TORQUE SENSOR  
INTRODUCTION

Chonqing Dragon&X-max

# Catalogue



**A—Complete bike effect pictures with mid drive motor**

**B—Motor break-up parts**

**C—Summary of product characteristics**

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**E—Power assembly suite and connection type**

**F—Mid drive motor Drawing**

**G—Climbing test**

**H—Available Spec. and application models**

## A. Complete bike effect pictures with mid drive motor

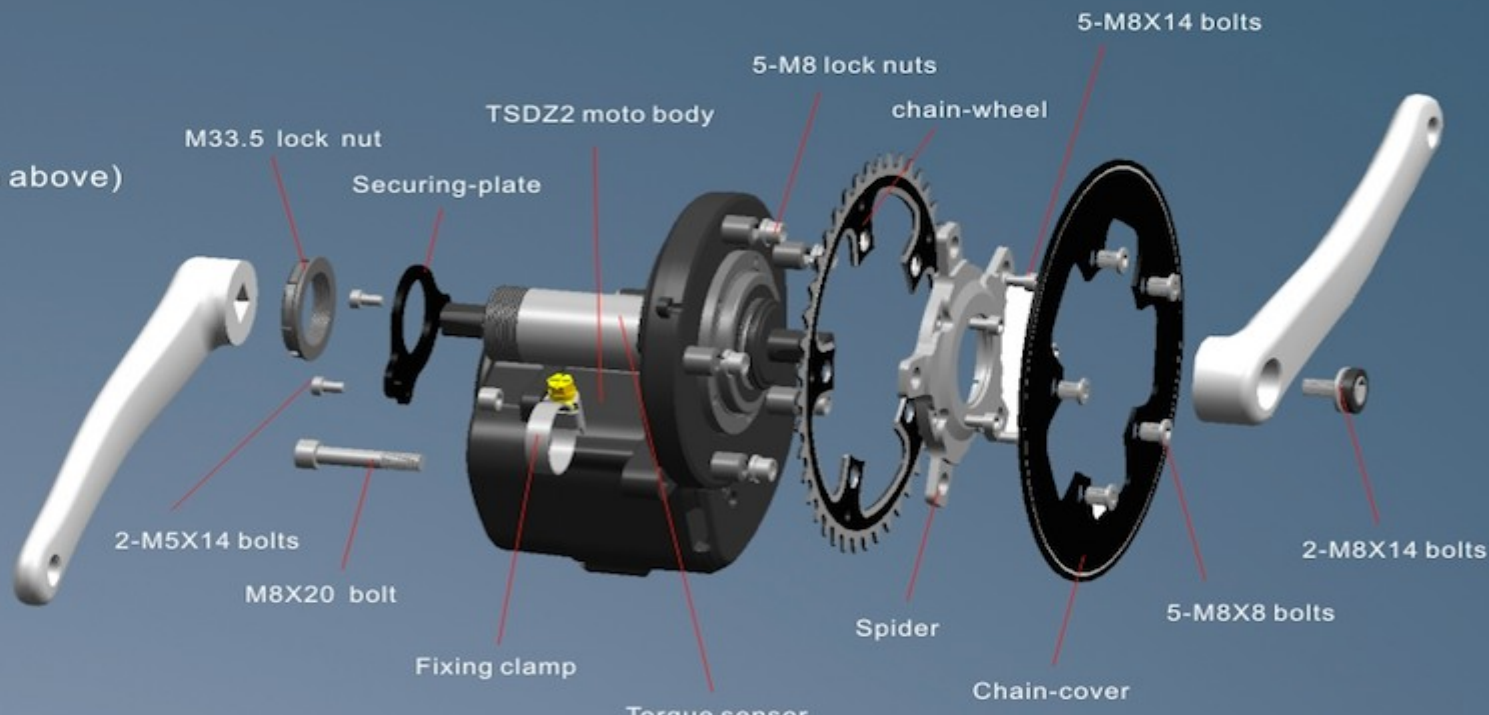


## B. Motor break-up parts

### 1.4 Motor break-up parts:

Motor,  
controller,  
torque sensor,  
speed sensor,  
general crank(42 teeth above)  
and accessories.

### Explosive view:





## C. Summary of product characteristics

### 1. Stronger climbing ability

1.1 It can climb 25% slope easily and start at zero distance on the slopes  
The max torque can reach 68N.m



### 2. Longer mileage, the max mileage reach 140km

Mid driven motor mileage test report-1						
Model	26 inches Mountain ebike					
Motor	36V250W/3600RPM					
Road condition	Flat asphalt road surface					
Load	75kg (include ebike)					
Battery	36V5.2AH Lithium battery			36V10AH Lithium battery		
Display level	Low	Middle	High	Low	Middle	High
Mileage (transmission ratio : 42T-16T)	70-80km	50-60km	35-40km	120-140km	100-110km	70-75km

Mid driven motor mileage test report-2						
Model	26 inches Mountain ebike					
Motor	36V350W/4000RPM					
Road condition	Flat asphalt road surface					
Load	75kg (include ebike)					
Battery	36V5.2AH Lithium battery			36V10AH Lithium battery		
Display level	Low	Middle	High	Low	Middle	High
Mileage (transmission ratio : 42T-16T)	60-70km	40-50km	30-35km	100-120km	80-90km	60-65km

## C. Summary of product characteristics

### 3. Nice commonality, easy assembly

can be

installed on all bicycles



### 4. Small and light

, total weight only 3.4kg



### 5. Intelligence, Safety and more comfortable riding feeling



## C. Summary of product characteristics

### 6. Advanced technology, intelligence, stable performance

#### 6.1 Integrated intelligent torque sensor.

It can timely induct the rider's pedal power, rotating speed, the driving conditions of vehicle, and send the signal to CPU. After CPU make calculation, it will order the motor keep consistent work frequency. Thus make riding more comfortable and safe.

#### 6.2 Using passive signal transmission military technology.

Passive signal transmission technology is a kind of no power transmission technology, sensors work don't need electricity, signal transfer more security and stability.

#### 6.3 Using integrated circuit

Using integrated control circuit design, the performance is more reliable, with higher response speed.



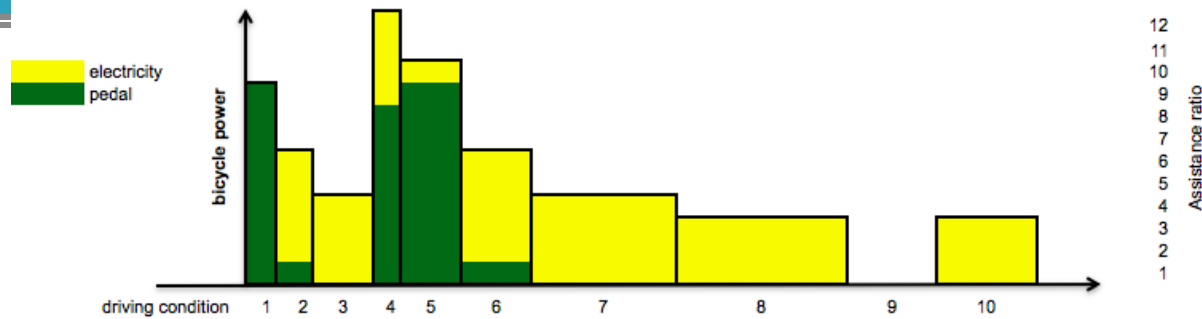
6.4 Reserving intelligent set port for power ratio and mode. Realizing personalized customization according to the requirements of different rider.



# D. The performance difference between Intelligent torque and speed sensor mid drive motor

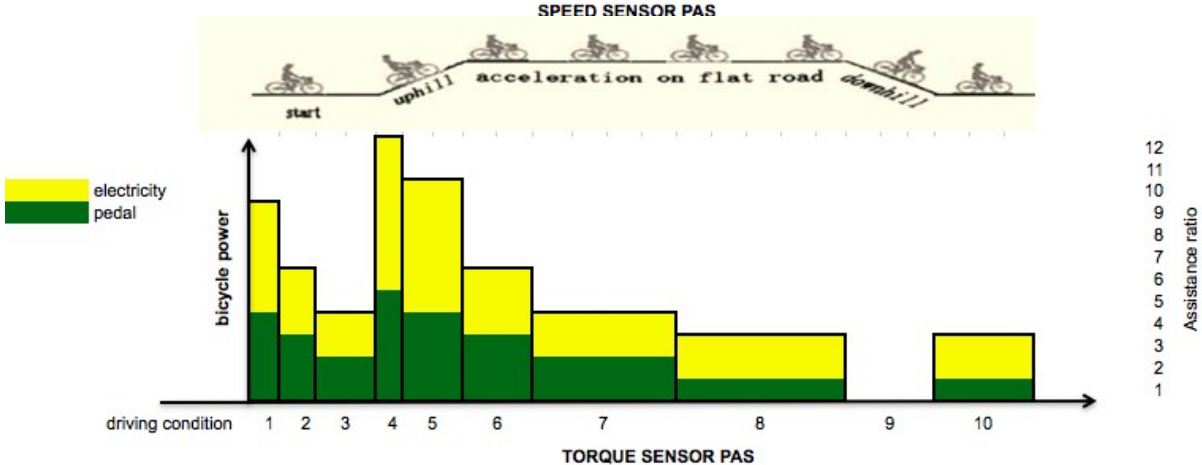
## 1.Speed sensor system working principle

short mileage, poor power drive operation ,not intelligent and not safe



## 2.Torque sensor system working principle

Advantage: stronger climbing ability, save electricity, longer mileage, comfortable, easy and friendly operation, safe  
Disadvantage:expensive



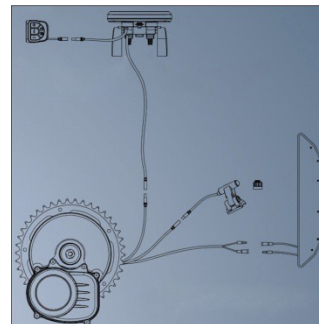


## 1、Power assembly suite

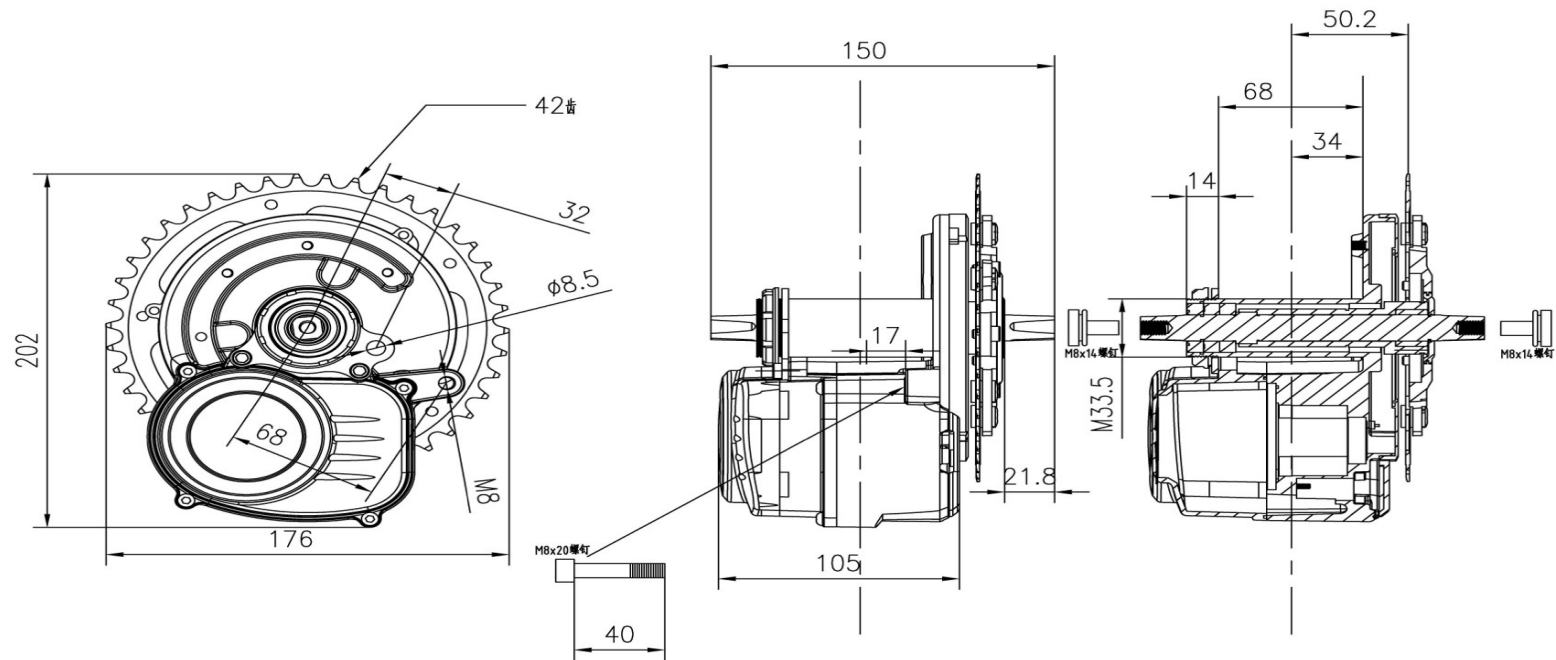
1.1 Mid drive motor    1.2 LCD display



## 2、Connection and install method



# F. Mid drive motor Drawing



# H. Available Spec.



**Spec.1 :**  
  
36V250W  
  
Max torque : 50N.m  
  
Max power : 250W  
  
Max speed : 25km/h  
  
Rated voltage : 36V

**Spec. 2**  
  
36V350W  
  
Max torque 58N.m  
  
Max power 350W  
  
Max speed 25km/h  
  
Rated voltage 36V

**Spec. 3 :**  
  
24V250W  
  
Max torque : 42N.m  
  
Max power : 250W  
  
Max speed : 25km/h  
  
Rated voltage : 24V

**Spec. :**  
  
24V350W  
  
Max torque 49N.m  
  
Max power 350W  
  
Max speed 25km/h  
  
Rated voltage 24V

is not need to limit at 25km/h, 36V350W max  
speed 37km/h 36V250W motor max speed 33km/h.