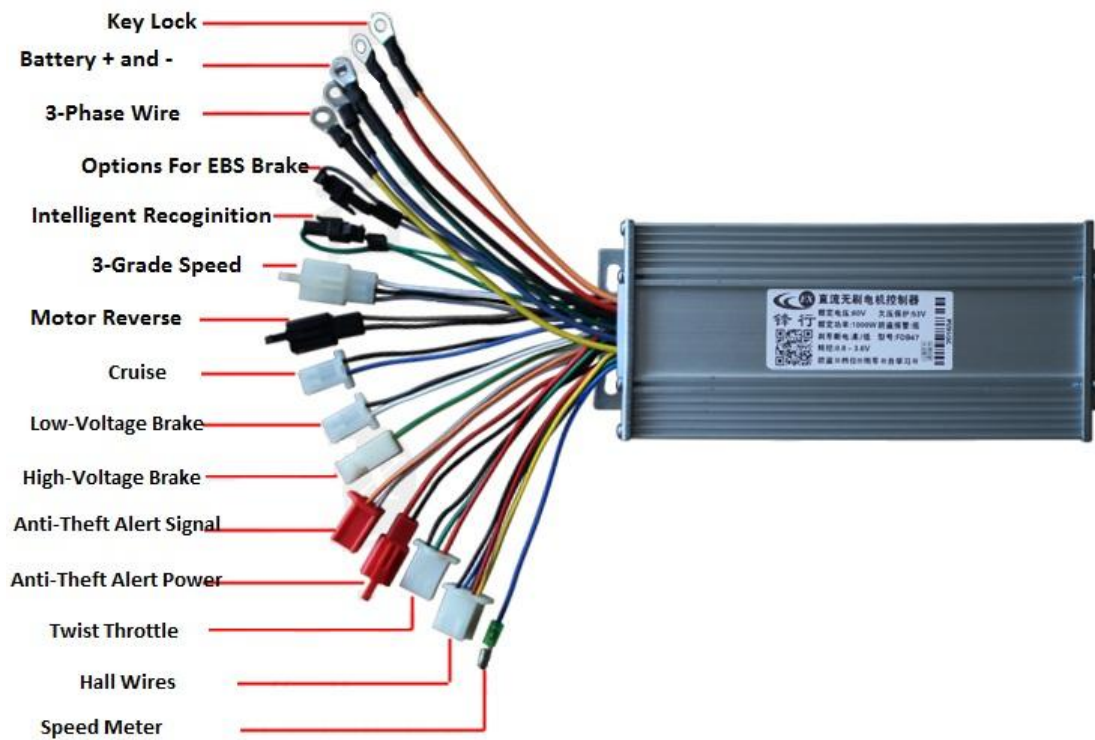
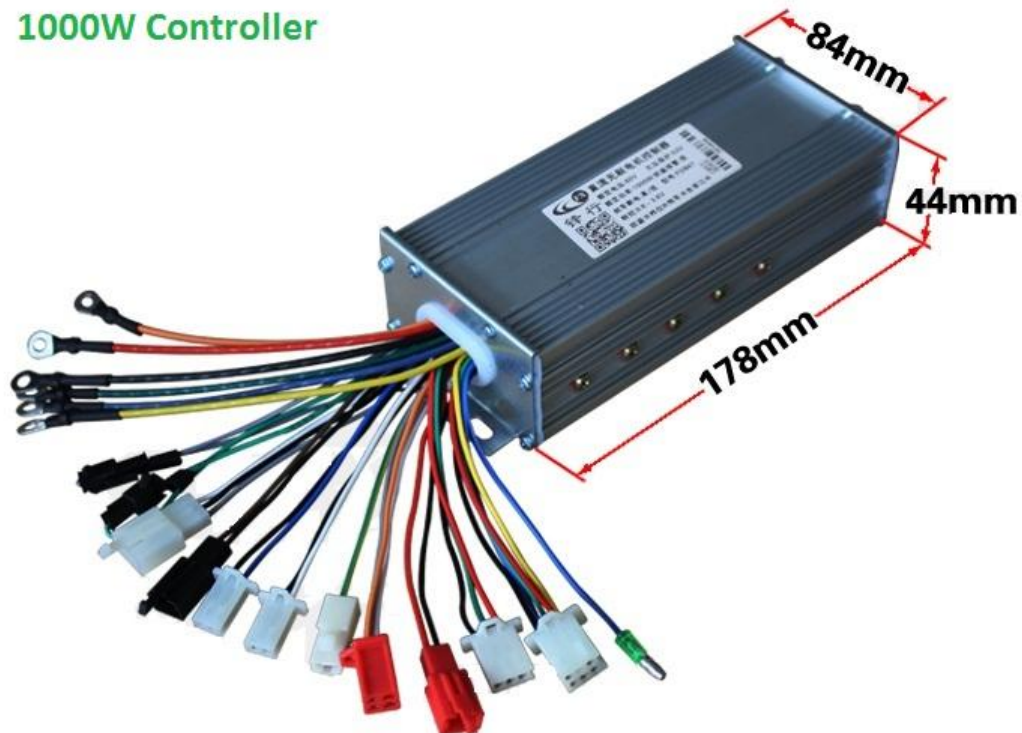


## 1000W Controller



# 15MOSFET 1000W E-BIKE CONTROLLER

**Rated Voltage Range:** 36V/48V/60V(Please note what voltage you need)

**Rated Power option:** 1000W

**Max Current option:**22A-40A(Tacitly35A)

**Low-Voltage Protection Point:** 20V/31V/42V/52V

**(We can also customize the low-voltage point if you needed)**

**Motor Phase Angle:** 60°/120°

## Application:

1. It can be powered by any battery at 24V,36V,48V OR 60v, the battery type can be Lithium battery ,Lead Acid battery....
2. It can be suitable to the general e-bike motor or brushless DC Hub Motor under 1000W
3. It is well matching varies of throttle, brake handle, power meter and related kit

## Advantage of the Controller:

1. Soft Low-Voltage: When the battery voltage become lower, the current will also become lower to keep normal running. It not only protect the battery and extend the battery life, but also increase the running distance.
2. Automatically recognize the motor phase angle and motor right spin direction. It can be conducted by the Self-Study wires.  
Operation Method: Firstly make sure the battery, Key lock, Motor, throttle are well connected, and also connected the two Self-Study wires. Then open the battery power and key lock, the motor will spin, if the motor spinning direction is correct, please disconnect the two Self-study wires, then study is accomplished.  
If the motor spin direction is reverse, firstly disconnect the Self-study wires, but connect them again at once, then the motor will spin on other direction. When the direction is right, disconnect the Self-Study wires, finished!
3. Start silently, balanced and constant power out-put, Mature Production technical of Controller and authentic quality.

## Functions of Controller

1. Throttle: Can be fitted general twist throttle, Potentiometer or Pedal Throttle. Stepless speed acceleration make the bike running stable.
2. Brake Power-off: Low-Voltage Brake connected to the brake handle wires. When the brake handle conducted, power-off signal input the controller, then the controller will cut the power
3. Adjustable Speed: To spin the button to change the motor max speed range(0-100%)
4. 1:1 Pedal Assistance: It is mainly applied to electric bike with pedals. The PAS installed on the middle shaft of Pedal, the controller will realize the signal from

the PAS sensor, then out-put the current. So the pedal driving will be much more easily and smooth

5. LCD Meter: The meter displays Battery power Level, Out-put power, Speed, PAS Grades, Single trip distance, Cruise, Failure indication, Total Trip Distance, Trip Time, Motor RPM.....
6. Intelligent Recoginiton: Firstly make sure the battery, Key lock, Motor, throttle are well connected, and also connected the two Self-Study wires. Then open the battery power and key lock, the motor will spin, if the motor spinning direction is correct, please disconnect the two Self-study wires, then study is accomplished.  
If the motor spin direction is reverse, firstly disconnect the Self-study wires, but connect them again at once, then the motor will spin on other direction. When the direction is right, disconnect the Self-Study wires, Study finished!

### **Controller Software Functions**

1. It can be fitted various of motors, like brushless DC motor, Geared Motor, Hub motor or PM Motor, or fitted two wheel, three wheel or four wheel motor
2. Over-heat protection, the controller will cut the power when the temperature is overtop, and restart if the temperature is normal.
3. Intelligent management of battery system, the controller will reasonable control the battery discharge, low-voltage protection function to extend the battery life.
4. Over-load protection. When overload of the bike to make the motor stall more than 2 seconds, the controller will cut off the current out-put to protect the motor and battery
5. Timely control the motor phase current, and protect the MOS
6. Over voltage and low voltage protection
7. Double-Mode, controller can check the motor hall sensor condition automatically. If the motor sensors are broken, controller will operate to None-Hall mode.
8. When the motor phase is failure, controller will protect it, avoid motor burned, and protect the battery at the same time.

### **Data Touchstone**

1. Battery wire: Measure value not below Low-Voltage point
2. Phase wire: 0V at static. The voltage can be 0-50% of the battery voltage when the motor spins, and 3 phase wires are same.
3. Throttle wire: Red wire 4.3V, Green wire 0.8V, Black wire 0V at Static  
Red wire 4.3V, Green wire 0.8V-3.7V, Black wire 0V at twisting the throttle
4. Hall Wires: Red 5V, Black 0V, Yellow, Green and Blue not fixed on 0V or 5V  
Red 5V, Black 0V, Yellow, Green and Blue 2.5V when motor spins
5. Key Lock wire: 0V when power off, voltage same as the battery when power on

**The motor sounds very clear voice when it works well. Motor under 1000W the no-load current about 1.5A, motor 1000W-2000W no-load current about 1.5A-3.5A, 3-10A for 2000W+ Motor**