

## Smart Electric Vehicle Product WP-101



WP-101 is an intelligent IOT for electric bikes. This product integrates the functions of instrument and central control, and can realize the functions of vehicle information display and control by mobile phone.

### **Functions of smart IOT for electric bikes:**

Electric bicycle instrument

control by mobile phone

Bluetooth unlocking

Shake detection

A key to start

Electromagnetic induction lock interface

## Specifications:

Dimension	164mm×94mm×3 1.54mm	Working Voltage	30V-90V
Waterproof level	IP55 (Top half)	Material	ABS+PCV0 fire rating
Bluetooth receiving sensitivity	-90dBm	Working temperature	-20 °C ~ +70 °C
Working humidity	20 ~ 85%	Bluetooth version	BLE4.1
Maximum receiving distance	30m, Open area		

## Functional Description:

Instrument function	Real time display of Electric bicycle speed, power, fault information and light status Real time detection of electric battery voltage with error less than 0.5V The communication protocol for communication with the controller is SIF , which receives the speed and fault information reported by the controller.
Output port	Provides power to the controller and supports a maximum 2A output.
Switch detection	Real time detection of whether the vehicle is powered on
<b>Motor lock</b>	Alarm on , when the instrument detects vibration or wheel movement, it will send the motor locking command to the controller, so that the controller can perform the motor locking operation.
433MRemote control (Optional)	The remote control can lock, unlock and start the electric bicycle .
Two way communication function (Optiona)	The instrument supports 485 UART communication and communication with the controller and BMS.
Electromagnetic lock interface (Optiona)	It can drive 5V-2-core electromagnetic lock, and APP controls to open the electromagnetic lock or touch the key for more than 3s to open the electromagnetic

	lock;Attention! Opening and closing current of 5V electromagnetic lock shall not exceed 500MA, 5V.
Shake detection	The instrument has a vibration sensor. When the electric bicycle is in the alarm on state, the vehicle vibration is detected, and a vibration alarm will be generated, and the buzzer will give an alarm sound.

**Installation:**

Connect the power interface of the instrument with the electric bicycle power interface, and connect the interface of the instrument end with the interface of the controller instrument.