## **Smart IOT for the sharing bikes -- WD-240**



WD-240 is an IOT for the sharing bikes. The terminal is equipped with 4G-LTE network remote control, GPS real-time positioning, Bluetooth communication, vibration detection, anti-theft alarm and other functions. Through 4G-LTE and Bluetooth, the IOT interacts with the background and mobile APP respectively to realize various business functions of sharing bikes.

## **Functions of WD-240:**

4G/Bluetooth communication

Set alarm/disarm

Vibration detection

Remote control

Voice broadcast

Charged by solar energy

Support matched with the rear wheel lock

## **Specifications:**

Parameters				
Dimension	(90±1)mm × (78.55±1)mm × (35±1)mm	Power consumption	IP67	
Working voltage	4.5V-20V	Waterproof level	ABS+PC,V0 level fireproof	
Charging current	800mA	Material of shell	-20 °C ∼ +70 °C	
Backup battery	Rechargeable lithium battery:3.7V,400 0mAh	Working temperature	20 ~ 95%	
SIM card	Micro-SIM card			
Network performance				
Network frequency band	LTE-CAT M1/CAT NB1; EGPRS 850/900/1800/19 00MHz	Frequency	LTE-FDD:B1/B3/B5 /B8	
			LTE-TDD:B34/B38/ B39/B40/B41	
			WCDMA:B1/B5/B8	
			GSM:900MH/1800 MH	
Maximum transmit power	LTE-FDD/LTE-T DD: 23dBm			
	WCDMA:24dBm			
	EGSM900:33dB m;DCS1800:30d Bm			
GPS perforn	nance			
Positioning	GPS and Beidou	Speed accuracy	0.3 meter/second	
Tracking s ensitivity	< -162dBm	AGPS	Support	
Start time	Cold start:35sHot start: 2S	Positioning conditions	Number of satellites found ≥ 4,and the signal-to-noise ratio >30dB	

Positioning accuracy	10 meters	Base station positioning	Support, positioning accuracy of 200 meters (related to base station density)	
Bluetooth performance				
Version	BLE5.0	Maximum receiving dista nce	30m in open area	
Sensitivity	-90dBm	Receiving distance inside the e-bike	10-20 meters, depending on the installation environment	

## **Installation:**

The device is connected to the corresponding ports of the solar and rear wheel locks according to the model of the wiring port. In the case of solar panel charging, the device will automatically turn on when it connected with the solar panel. There is a sticker with QR code in the front of the device, and there is a GPS antenna inside the device. The front of the device must be facing upwards, and there must be no metal shielding during installation. There are 4 screw posts on the bottom of the device for fixing to the frame of the bike; the horn area at the bottom is required to be hollowed out.