

Smart Electric Vehicle Product WD-325



WD-325 is a smart device for e-bikes, it supports 485/ UART communication and Bluetooth communication. Through it, the users can control their e-bike by 4G LTE-CAT1/CAT4. Besides, the device supports GPS real time positioning, vibration detection, anti-theft alarm and so on. Through LTE and Bluetooth, WD-325 interacts with the background and mobile phone APP to control the e-bike, and upload the real-time status of the e-bike to the server.

Functions:

Lock/unlock by proximity sensor

Start the e-bike by button

Cockpit lock

Cushion sensor

Smart voice broadcast

Anti-theft

Specifications:

Unity machine parameters			
Dimension	(91.67±0.5)mm × (73.8±0.5)mm × (25.5±0.5)mm	Input voltage range	12V-72V
Waterproof level	IP66	Internal battery	Rechargeable lithium battery: 3.7V, 550mAh
Sheathing material	ABS+PC,V0 fire protection grade	Working temperature	-20 °C ~ +70 °C
Working humidity	20 ~ 95%	SIM Card	Dimensions: Medium card (Micro-SIM card)
Network performance			

Support model	LTE-FDD/LTE-TDD/WCDMA/GSM		
Maximum transmit power	LTE-FDD/LTE-TDD: 23dBm	Frequency range	LTE-FDD:B1/B3/B5/B8
	WCDMA:24dBm		LTE-TDD:B34/B38/B39/B40/B41
	EGSM900:33dBm;DCS1800:30dBm		WCDMA:B1/B5/B8
	GSM:900MH/1800MH		
GPS performance			
Positioning	Support GPS,Beidou	Tracking sensitivity	< -162dBm
Start time	Cold start 35s, hot start 2s	Positioning accuracy	10m
Speed accuracy	0.3m/s	Base station location	Support, positioning accuracy 200 meters (related to base station density)
Bluetooth Performance			
Bluetooth version	BLE4.1	Receiving sensitivity	-90dBm
Maximum receiving distance	30 m, open area	Loading Receiving Distance	10-20m, depending on installation environment

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Functional Description :

Function list	Features
Positioning	Real-time positioning
Lock	In lock mode, if the terminal detects a vibration signal, wheel motion signal, and ACC signal.it generates a vibration alarm, and when the rotation signal is detected, a rotation alarm is generated.
Unlock	In unlock mode, device won't detect the vibration, but the wheel signal and the ACC signal are detected. No alarm will be generated.
433M Remote	Support 433 M remote, can adapt to two remotes.
Uploading data in real-time	The device and the platform are connected through the network to transmit data in real time.
Controller (UART/485)	Through UART/485 to communication with controller,get controller running state and control.
Vibration detection	If there is a vibration, device would send out a vibration alarm, and buzzer speak-out.

Wheel rotation detection	The device supports the detection of wheel rotation. When the E-bike is in lock mode, the wheel rotation is detected and the alarm of wheel movement will be generated. At the same time, the e-bike won't be locked when the wheeling signal is detected.
ACC detection	The device supports detection of ACC signals. Real-time detection of the vehicle's power-on state.
Lock motor	The device send a command to the controller to lock the motor.
BMS (UART/485)	The BMS information, battery level and etc. could be catch by 485/ UART communication
Lock/unlock by proximity sensor	The users can lock/unlock the e-bike by proximity sensor via APP.
Start the e-bike by button	The users can start the e-bike by the button of the device.
Cockpit lock	It supports lock/unlock the cockpit lock of the e-bike.
Cushion sensor	It supports to detect the cushion sensor.