

# Wireless Vehicle Detector Communications Relay User Manual

Release Date	Version	Author
2016.03	1.0	Jiangshuai Ding Shihe Liu

## 1. Application

- Traffic data collection
- Vehicle flow detection, Vehicle speed detection, Traffic occupancy, Analysis of Vehicle Type

## 2. Product Description

The Wireless Vehicle Detector Communications Relay is a low-power ZigBee device . There is one or more Wireless Vehicle Detector beyond the receiving range of the latest Wireless Vehicle Detector Receiver,we can use the Wireless Vehicle Detector Communications Relay to increase the transmission distance, or change the direction of transmission.The device is used for bidirectional transmission between The Wireless Vehicle Detector Receiver and The Wireless Vehicle Detector. Convenient installation, quick, stable function. It uses 3.6V Li / SOCI2 battery, no external power supply. ( Key Features See Table 1. )

Key Features			
Radio Frequency Band	2.4GHz	Max Output Power	0dBm
Transmission Rate	250kbps	Receiver Sensitivity	-95dBm
Number of Channels	16	Protection Class	IP67
Antenna Beamwidth	±60°	Operating Temperature	-40℃ ~ +85℃
Channel Bandwidth	5MHz	Relative Humidity	≤95% (Non Condensing)
Detection sensitivity	0~15 Level	Operating Life	≥5 years
Antenna Type	Ceramic Antenna	Power	Li/SOCI2 Battery 3.6V, 57Ah

Table 1.

## 3. Wireless Vehicle Detector Communications Relay Installation Guide

Radiation area to space with 120 degree in the geometric center of the center surface of the device is used as the coverage angle of the Wireless Vehicle Detector Communications Relay.The coverage angle of The Wireless Vehicle Detector Communications Relay make ensure cover the coverage area of the Wireless Vehicle Detection Receiver and the radiation area of the Wireless vehicle detector in the installation process.The installation position should be in the installation position of the Wireless vehicle detector (Detector to the parking line for the front, the opposite direction for the rear), the installation height of 4~6 meters (depending on the site

conditions), but a minimum of not less than 4 meters.

The device has the function of signal amplification and transmission, which requires that there is no any shelter between the wireless vehicle detector and the wireless vehicle detection receiver, and the installation quantity depends on the field environment. (See Figure 1.)

Notice: The Wireless vehicle detector communications relay needs to record the location of its installation and ID number.



Figure 1.

# CE2200

## 4.MeritPlusDta Technical Support

Internet: <http://www.meritplusdata.com/>

WeChat Public Number:



### Technical Support

NO.40,Beiyuan Road,Chaoyang District,Beijing,P.R.C

Phone:+86(10)-8899-8881/3-201

FAX : +86(10)-88998882-204

Email: [support@Meritplusdata.com](mailto:support@Meritplusdata.com)

### Marketing Support

NO.40,Beiyuan Road,Chaoyang District,Beijing,P.R.C

Phone:+86(10)-8899-8881/3-102

FAX : +86(10)-88998882-204

Email: [sales@Meritplusdata.com](mailto:sales@Meritplusdata.com)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and

NO.40,Beiyuan Road,Chaoyang District,Beijing,P.R.C Tel : +86(10)-88998881

can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.