



## Products description and application

FA231W is a wireless receiver, specially designed for large machinery, ports. It has unique design, durable and reliable, high interference resistant capacity, ease to mount.

## Features

- All NANHUA FA series current signal type wind sensors are compatible.
- Adopt strengthen ZIGBEE wireless technology, long transmitting distance
- Adopts 2.4G DSSS technology, strong interference resistant capacity
- Wireless repeater is available, extend the transmitting distance

## General Specifications

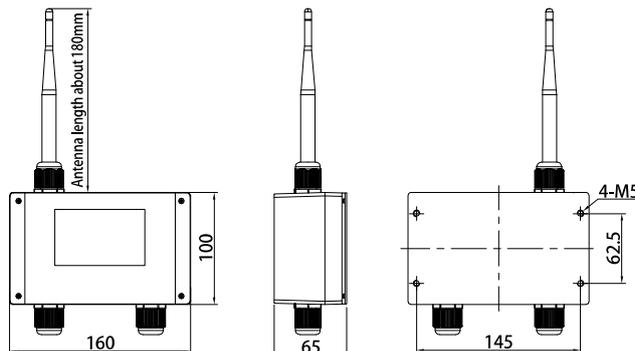
Electrical		Mechanical	
Rated voltage	DC24V	Housing material	Aluminum
Current	70mA	Humidity	0~100%RH
Baud rate	9600	Operating temperature	Ta-40℃ ~ +70℃
Interface	RS485	IP Rate	IEC60529 IP65
		Housing color	Black RAL9005
		Weight	1.0kg

Zigbee data	
Network	Star network
Antenna	2.4G SMA
Note type	Route
Antenna	Glue stick antenna RF:2.4G gain:5DBstanding wave:<<1.5 interface:SMA male
Transmitting power	25dbm
Radio frequency	2.4G ISM Band
Transmitting rate	Steady 250K
Receiving sensitivity	-105dbm
Transmitting distance	≤2000m

## Mounting dimensions

Unit: mm



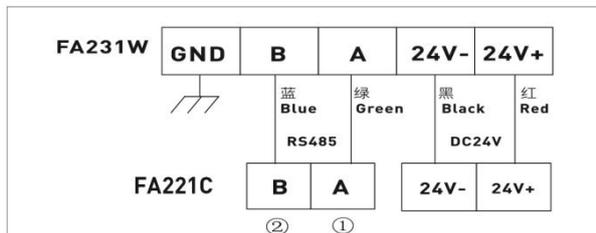
Installation:

Use 4nos M6(not provided) to mount the product.

Caution:

1. Ensure no obstruct objects between transmitter and display.
2. Keep transmitter and display at the same level.
3. Wireless products for same application must have same network and same radio channel, do not mix to use. (factory setted)
4. FA231W can be used as transmitter (when connect to FA220C) or receiver (when connect to FA221C).

## Wiring diagram



### FA231W+FA221C

It is recommended to use RVVP/4 core/0.5mm<sup>2</sup>/copper core/high and low temperature resistant shielding cable

### RS485 protocol

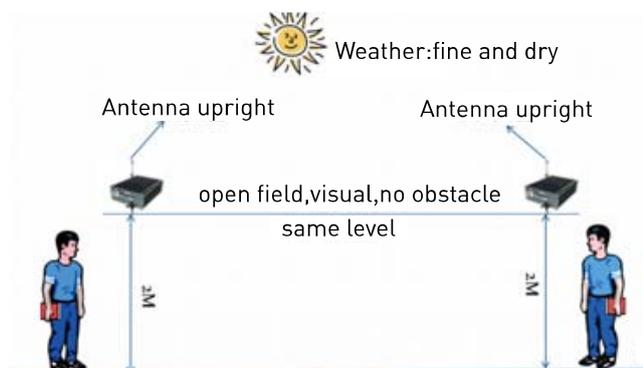
1. Baud rate: 9600 bit/s, 8 bit data, no parity check, one stop bit .
2. Data definition: auto-output a frame per 1s, total 7 bytes.

0xAA	0x04	0xXX	0xXX	0xZZ	0xZZ	checksum
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3. Byte definition: 0xAA is synchronous head, 0x04 is message length, next 0xXX bytes combine a word which indicate wind speed, the next two bytes combine a word which indicate wind direction, checksum = 0xXX+0xXX+0xZZ+0xZZ, indicate checksum.

4. For example 0xAA 0x04 0x01 0x6A 0x01 0x2C 0x98  
Indicate: Wind speed is 0x016A = 36.2m/s, wind direction is 0x012C =300°

### Best condition for transmitter and mounting



### Antenna place



## How to Order

P/N	Model	Rated voltage	Signal input	Mount
1000285-001	FA231W	DC24V	RS485	4-M5 thread hole, hole position 145×62.5mm

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