



ZETA[®] Low-Power Wide Area Networks

ZETA Mote

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1. Product Description

ZETA Mote is a low power mesh layer relay which can build up to four layers of tree type networking, effectively increasing single-station coverage, with signal blind area coverage, preventing data congestion, etc.

2. Applications

ZETA network device, connect other ZETA modules to the ZETA AP, increasing single AP coverage area.

3. Appearance



4. Features

- ✓ Two-way communication, super wide coverage
- ✓ Extreme capacity, multiple safety
- ✓ Multi-hop networking, multiple protocols
- ✓ Battery powered, low power consumption
- ✓ Adjustable bandwidth and spectrum

5. Product parameters

Product No.	MTZT-G001	
Wireless Features	Transmission protocol	ZETA
	Frequency band	920-925 MHz
	Output power	20±3 mW
Electrical Features	Power supply	Battery, 2*ER34615
	Battery capacity	2*19000 mAh
	Stand-by current	≤ 10 μA
	Working current	≤ 70 mA
Physical Features	Weight	0.4kg
	Size	120*120*86 mm
	Enclosure material	ABS
	Waterproof level	IP67
	Antenna	FRP Antenna
Working Environment	Operating temperature	-20℃~+75℃
	Storage temperature	-30℃~+85℃

6. Packing List

ZETA Mote	1
0.4m FRP Antenna	1

7. Installation

7.1. Installation accessories

Hoop screw	4
Hoop	1
Antenna accessories	1
Wrench (#10)	1
Waterproof tape	1
Waterproof clay	1
Electrician knife	1

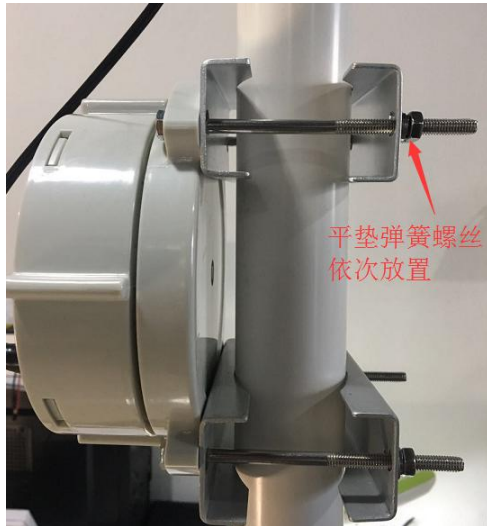
7.2. Installation steps

7.2.1. Install of Mote

- Before installing Mote, make sure to install the battery first.
- Take care to place the seal and tighten the lid
- Take out the installation kit
- Take 2 screws to pass through the hoop as shown below



- Install the relay to the pole: Hold the other piece of hoop on the other side of the pole and tighten the upper screw; install the same on the other side.



7.2.2. Antenna installation

7.2.2.1. U-ring fixing

This method is suitable for scenes with a pole diameter less than 5 cm:

- 1) Take out the antenna U-shaped fitting and disconnect the antenna fitting screw
- 2) The antenna and the feeder are connected in advance and the lightning protection and waterproof measures are taken according to the specifications;
- 3) Close the antenna to the pole and use the U-ring in the accessory to clamp and tighten the screw as shown:



7.2.2.2. Hoop fixing

This method is suitable for scenes with a pole diameter greater than 5 cm:

- 1) Remove the mounting back plate at the lower end of the antenna;
- 2) The antenna and the feeder are connected in advance and the lightning protection and waterproof measures are taken according to the specifications.
- 3) According to the diameter of the pole, buy a suitable size hoop in advance
- 4) Use the spiral hoop to fix the antenna on the pole



7.2.3. Equipment waterproof

The equipment antenna interface should be waterproofed before installation.

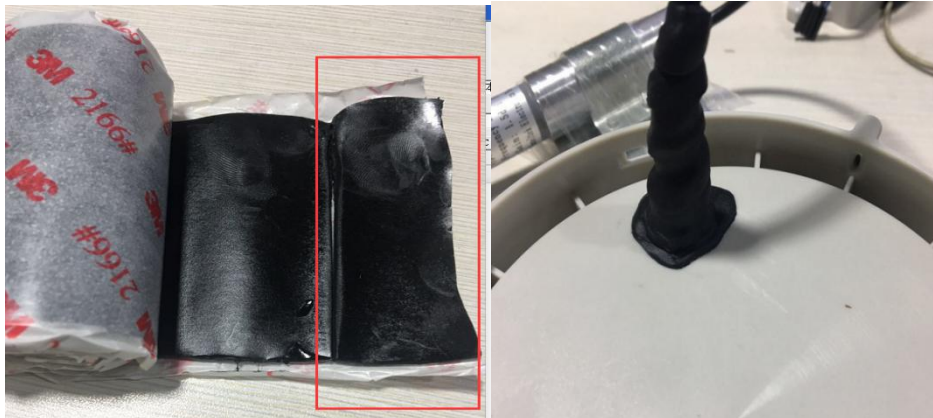
- Three layers of protection, from the inside to the outside: tape - clay -

tape

- Remove the decorative cover



- Winding with a waterproof tape at the interface
- Cut a piece of waterproof clay and stretch it along the RF port, and compact the RF port as much as possible.



- Use a waterproof tape and wrap it once again to cover the decorative cover.



Note: The antenna should not be too close to the operator's antenna. It is forbidden to install on the front of the operator antenna

8. Common faults and handling

- Ensure ZETA signal coverage
- Check the power supply to ensure that the power supply is normal
- Check the antenna to see if the antenna is connected and the antenna interface is properly tightened.
- Check the device power, check whether the device is in low power state in the platform list data, or use the tool to measure whether the voltage is low or low.
- Please contact ZFiSense for additional help.

FCC Statement

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 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.

This device complies with FCC PART15 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.

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

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