



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. Two-way communication, ultra-wide coverage, multiple security, ultra-low power consumption, battery-powered, easy installation and support for null port upgrade. The product complies with IEC 60079 intrinsically safe explosion-proof standard, the explosion-proof mark is Ex ia IIC T4 Ga, and the operating environment temperature is -20°C~+60°C. Suitable for industrial and chemical scenarios.

2. Applications

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

3. Features

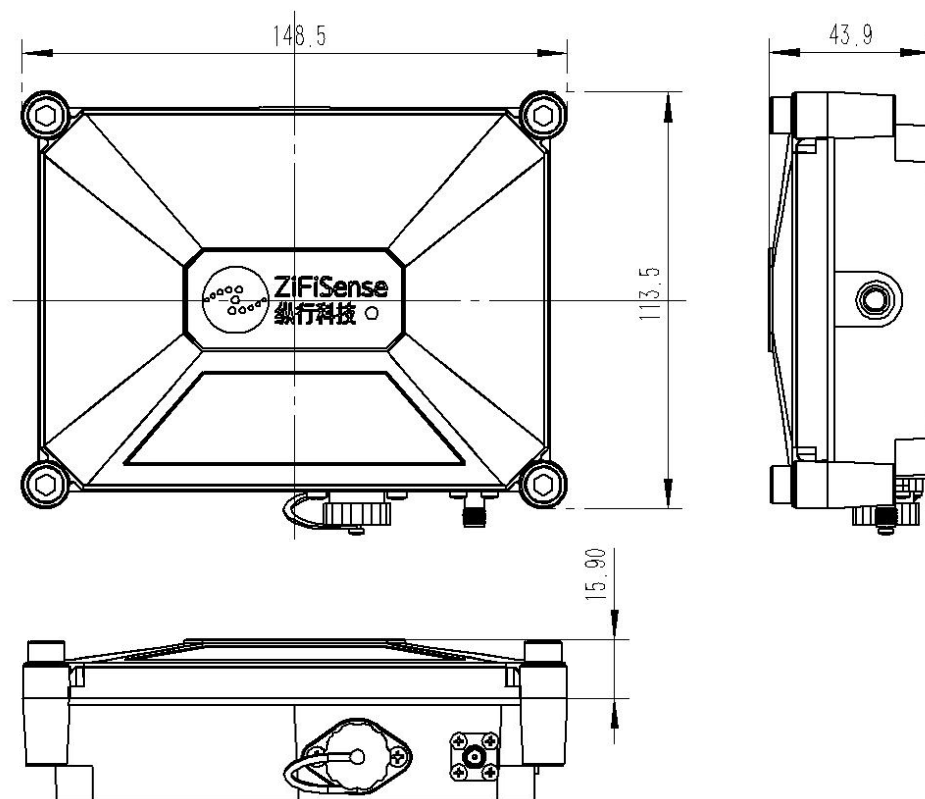
- ✓ Two-way communication, super wide coverage
- ✓ Extreme capacity, multiple safety
- ✓ Multi-hop networking, multiple protocols
- ✓ Battery powered, low power consumption
- ✓ Adjustable bandwidth and spectrum

4. Appearance and size



L148.5mm * W113.5mm * Th43.9mm
(Excluding mounting bracket dimensions)

MTZT-IN01



5. Product parameters

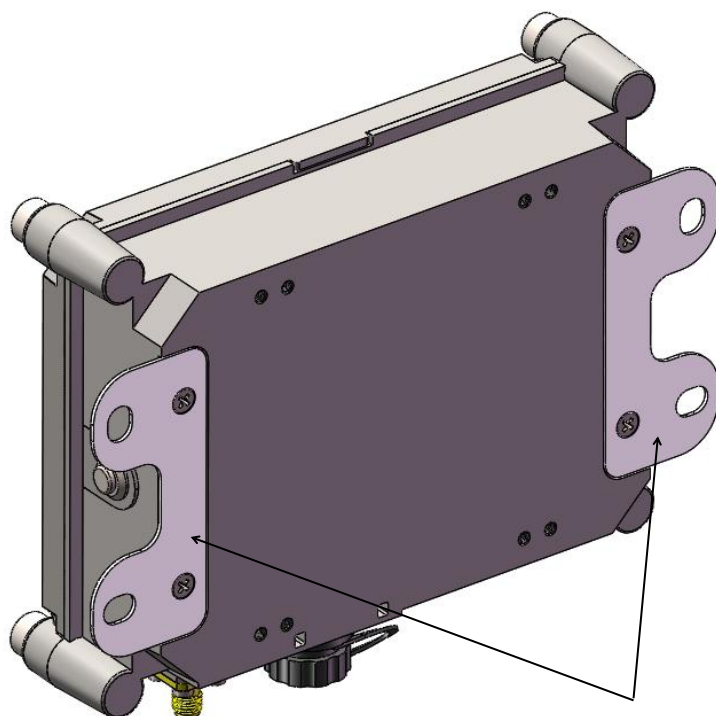
Product No.	MTZT-IN01	
Electrical Features	Power supply	DC 5V / Battery:2*ER34615
	Battery capacity	2*19000 mAh
	Stand-by current	≤ 10 μA
	Working current	≤ 70 mA
Physical Features	Weight	0.6kg
	Size	148.5*113.5*43.9mm
	Enclosure material	ADC12 Aluminum alloy
	Antenna	FRP Antenna
Environment Specification	Operating temperature	-20℃~+60℃
	Storage temperature	-30℃~+85℃
	Ingress protection	IP65
	Hazardous environment	Ex ia IIC T4 Ga

6. Packing List

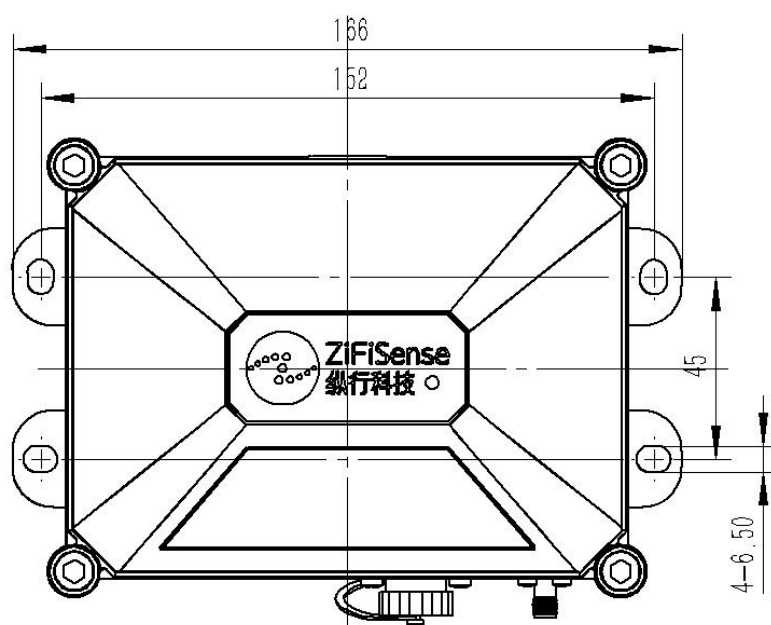
ZETA Mote	1
0.4m FRP Antenna	1

7. Installation

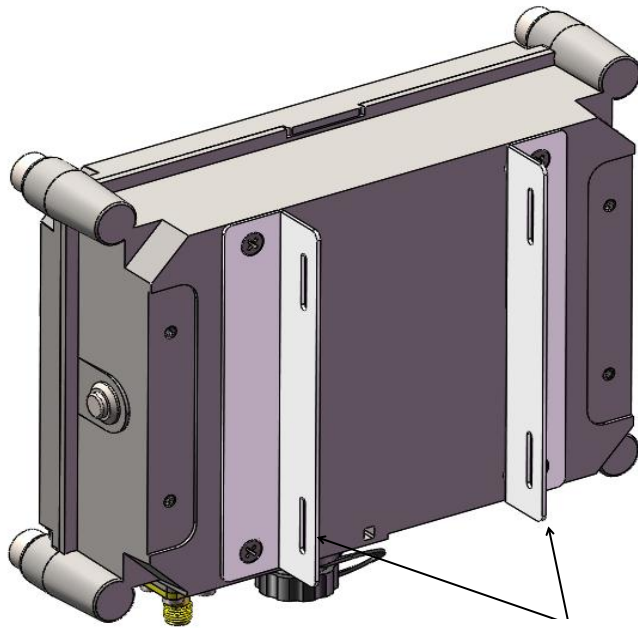
7.1. Wall mounting



Mounting brackets

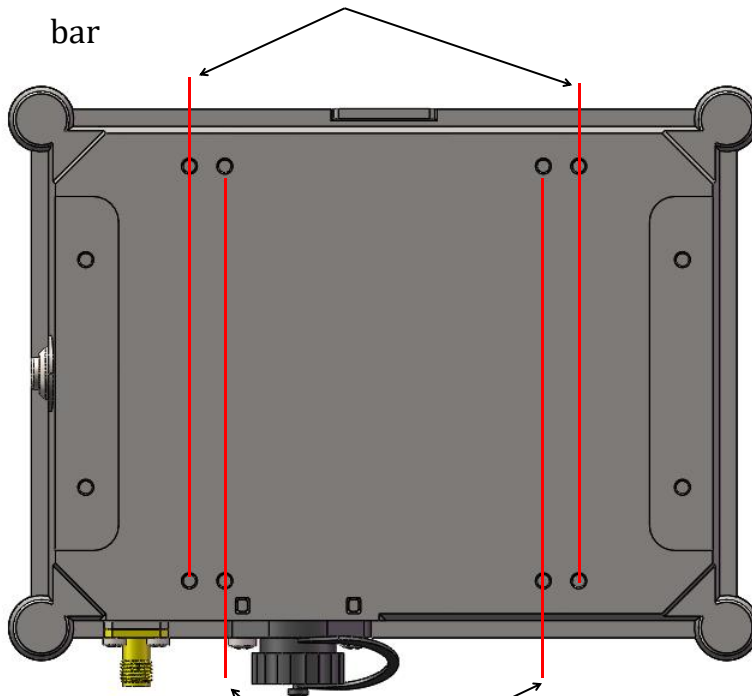


7.2. Hoop installation



Mounting brackets

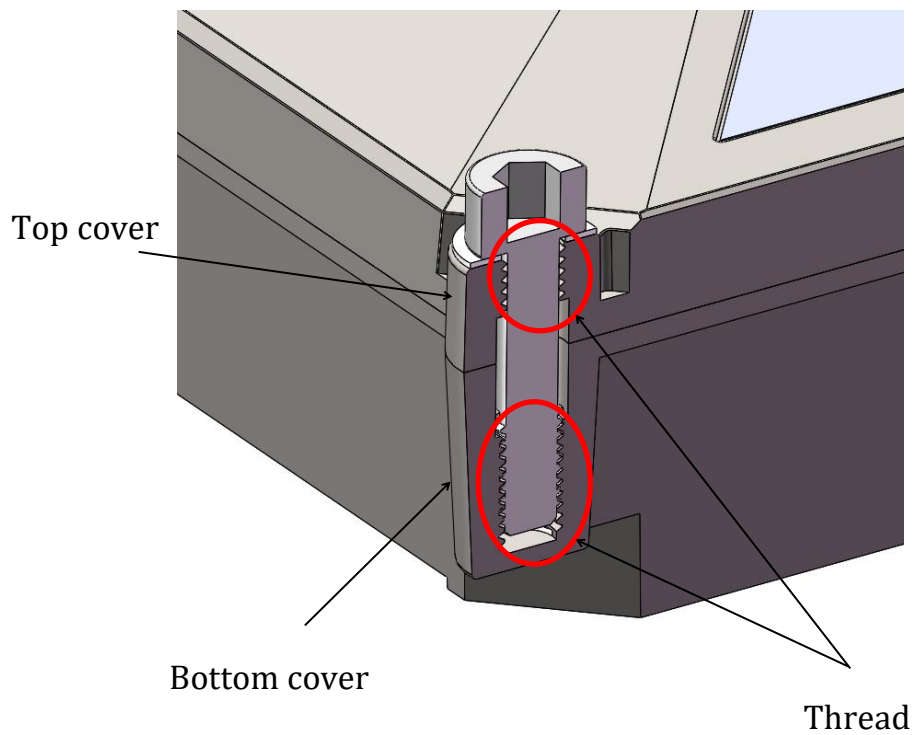
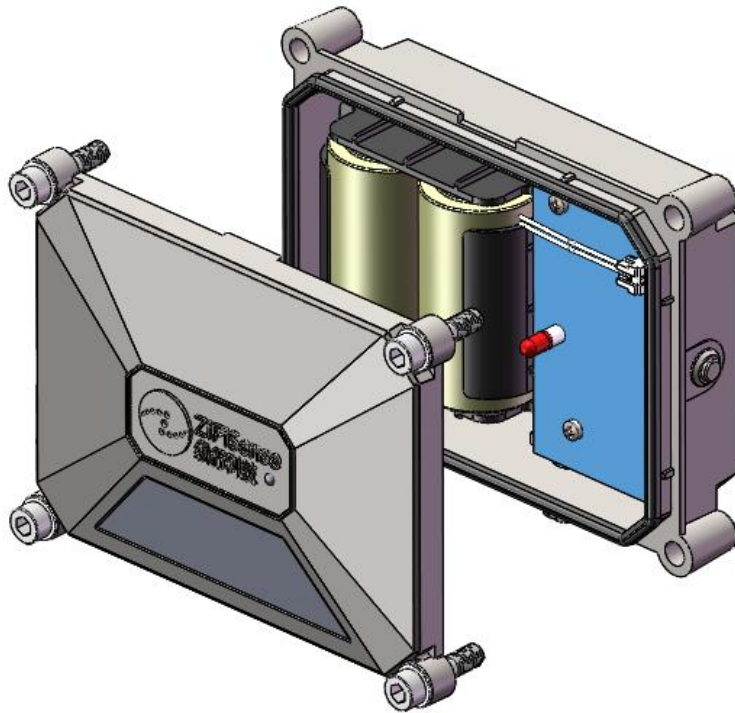
External threaded hole to match 75mm diameter holding bar



Inner threaded hole to match 50mm diameter holding bar

8. Battery replacement

Loosen the 4 M6 socket head cap screws (Lanyard) and open the top cover.



9. Operating Instructions

9.1. Platform login

Log in to ZETA network management platform, platform address <https://platforms.zifisense.com/network/#/login>

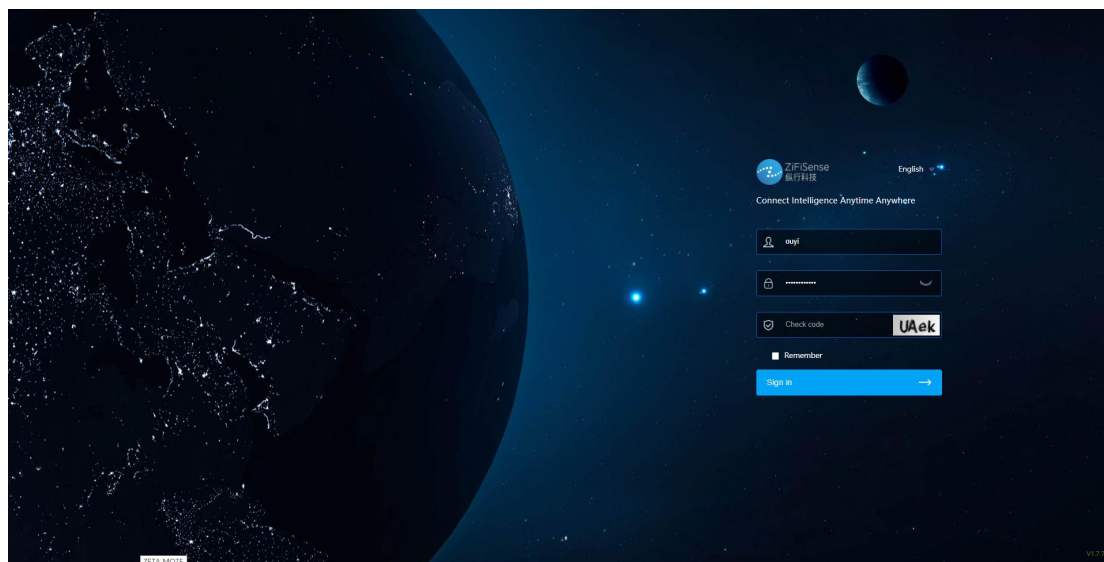


Figure: Platform login

9.2. Device configuration

After logging in, go to the Network Device - ZETA Mote page and click the Add button to add a new device.

And add the Mote information in the pop-up window (see the actual device nameplate information for details).

Company	Device ID	Device name	Protocol	Device type	Online status	Alarm status	Registration time
zifisense_en	8000F0F2	8000F0F2	ZETA-H	ZETA Mote (...)	Offline	Alarming	2021-10-19 1
zifisense_en	8000F3F0	8000F3F0-R2	ZETA-P	ZETA Mote (...)	Offline	None	2021-08-15 1
zifisense_en	8000FAF2	8000faf2-R3	ZETA-P	ZETA Mote (...)	Offline	None	2021-08-15 1
zifisense_en	88880002	88880002		ZETA Mote (...)	Offline	Alarming	2020-02-16 1
zifisense_en	88880007	88880007	ZETA-P	ZETA Mote (...)	Offline	None	2020-01-04 1
zifisense_en	90008888	90008888		ZETA Mote (...)	Offline	None	
zifisense_en	99889988	99889988			Offline	None	

Add ✕

*** Company**

Please select

Please fill in

Device name

Please enter

*** Device ID**

Please enter

Please fill in

Location

select

*** Device type**

Please select

*** Sensor version**

1

*** Condition**

Normal

*** Alarm level**

General alarm

Authentication key

Please enter

Encryption key

Please enter

Confirm

9.3. Check Status

After the device is added, you can view the data of the added device in the list. When the device is powered on, the online status will change from "offline" to "online", and the startup time, registration time and heartbeat time are updated.

7:28 PM

2025-05-23

Data Panel

Map

Network devices

ZETA AP

ZETA MOTE

ZETA MS

Topology

Statistical Analysis

Network Maintenance

System Management

HOME / Network device

ZETA MOTE

ZETA MOTE

Add

Select details

Device migration

Import

Export

Company

Please select

Device ID

Please enter

Device name

Please enter

Online status

Online

Alarm status

Please select

Device type

Please select

Protocol

Please select

TC

C

Device Control

Maintenance

Device ID	Device name	Protocol	Device type	Online status	Alarm status	Registration time	Heartbeat time	Uplink time	Downlink time	Power	Uplink RSSI	Downlink RSSI	AP ID	Parent MOTE	NetID	Connected devices	Topology	Operation
BF00099A	BF00099A	ZETA-P	ZETA Mote (L)	Online	None	2021-03-08 13:17:30			2022-05-09 17:48:26				FFFF00E3	00000000	0100	0	View	
FE00789D	FE00789D	ZETA-S	ZETA Mote (L)	Online	None	2022-06-01 10:52:03		2022-06-01 10:52:04	2021-05-30 20:30:01	3.09	-129	-118	FFFF34DC	00000000	0001	1	View	
BF00045E	BF00045E	ZETA-P	ZETA Mote (L)	Online	None	2022-04-21 08:27:38		2022-06-01 09:28:06	2021-12-13 15:55:56	3.33	-71	-73	FFFF0169	00000000	0100	5	View	
FE007C36	testtip19	ZETA-P	ZETA Mote (L)	Online	None	2022-05-23 11:45:13		2022-06-01 09:49:09	2022-05-11 20:44:38	3.11	-58	-55	FFFF3585	00000000	0C00	0	View	
FE007C36	testtip19	ZETA-P	ZETA Mote (L)	Online	Alarm	2022-04-30 16:20:20		2022-06-01 10:33:36	2022-05-11 20:54:28	3.15	-55	-55	FFFF3585	00000000	0A00	0	View	
FE007C39	InpelleWay7 CP	ZETA-P	ZETA Mote (L)	Online	None	2022-05-23 16:19:48		2022-06-01 10:19:31	2022-05-16 10:31:15	3.13	-57	-58	FFFF3585	00000000	0F00	2	View	
FE007C36	testtip6	ZETA-P	ZETA Mote (L)	Online	None	2022-04-30 16:24:28		2022-06-01 10:36:46	2022-05-11 20:30:03	3.15	-61	-61	FFFF3585	00000000	0700	0	View	
FE007C3F	OutpelleWay TCP	ZETA-P	ZETA Mote (L)	Online	None	2022-05-23 14:52:42		2022-06-01 08:56:19	2022-05-16 10:55:26	3.06	-76	-82	FFFF3585	00000000	0E00	0	View	
FE007C41	testtip17	ZETA-P	ZETA Mote (L)	Online	None	2022-05-23 11:22:06		2022-06-01 11:25:14	2022-05-11 20:42:18	3.02	-41	-36	FFFF3585	00000000	0800	0	View	
FE007C48	WspCaseTCP	ZETA-P	ZETA Mote (L)	Online	None	2022-05-14 11:33:10		2022-06-01 05:41:20	2022-05-16 10:55:41	3.14	-69	-65	FFFF3585	00000000	0500	0	View	
FE007C49	testtip18	ZETA-P	ZETA Mote (L)	Online	None	2022-05-23 16:38:53		2022-06-01 10:42:50	2022-05-11 20:42:39	3.09	-64	-66	FFFF3585	00000000	1000	0	View	
FE00746F	FE00746F	ZETA-S	ZETA Mote (L)	Online	None	2022-05-25 15:14:25		2022-06-01 09:33:53	2022-05-26 11:00:32	3.22	-104	-102	FFFF0481	00000000	0301	2	View	
FE007A9C		ZETA-P	ZETA Mote (L)	Online	None	2022-04-27 11:16:14		2022-06-01 09:39:09		3.54	-99	-104	FFFF2C46	00000000	0200	1	View	
FE007A83		ZETA-P	ZETA Mote (L)	Online	None	2022-04-11 16:16:35		2022-06-01 10:21:26		3.09	-112	-114	FFFF2C46	00000000	0300	1	View	
FE007A88		ZETA-P	ZETA Mote (L)	Online	None	2021-12-20 18:38:22		2022-06-01 06:52:04		3.23	-116	-117	FFFF2C46	FE007A8D	0120	1	View	
FE007A8D		ZETA-P	ZETA Mote (L)	Online	None	2021-11-10 17:00:49		2022-06-01 11:18:06	2021-03-24 18:05:19	3.43	-108	-107	FFFF2C46	00000000	0100	1	View	
FE007A89	TestMote	ZETA-P	ZETA Mote (L)	Online	Alarm	2022-06-01 10:45:05		2022-06-01 10:45:23	2021-12-12 15:55:24	3.42	-95	-99	FFFF1B05	00000000	0100	2	View	
FE007AAA	HQ1-M02	ZETA-P	ZETA Mote (L)	Online	Alarm	2022-06-01 00:31:26		2022-06-01 06:31:31	2021-12-25 15:52:41	3.29	-103	-104	FFFF3557	00000000	0600	4	View	
FE007A88	HQ1-M04	ZETA-P	ZETA Mote (L)	Online	Alarm	2022-06-01 07:19:39		2022-06-01 07:19:57	2021-11-24 15:11:39	3.46	-54	-53	FFFF00AA	FE007ACA	0230	0	View	
FE007AC6	HQ1-M01	ZETA-P	ZETA Mote (L)	Online	Alarm	2022-05-31 21:20:00		2022-06-01 09:20:00	2021-11-24 14:40:50	3.48	-121	-123	FFFF2C41	00000000	0100	0	View	

Total 3820/page12Go to

Total 38 20page 2 Go to 1

10. 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 ZifiSense for additional help.

11. Safety instructions

1. Avoid an ignition hazard due to impact or friction.
2. Potential electrostatic charging hazard: clean the antenna only with a damp cloth.
3. Only ER34615 lithium thionyl chloride battery produced by EVE Energy Co., Ltd. is allowed to be used as the power supply. Do not charge the battery. Do not replace battery when an explosive atmosphere is present.

12. Revision

Version	File name	Revised by	Date	Description
V1.0.0	ZETA Mote User Manual	OUI	2021.12.20	First edition
V1.0.1	ZETA Mote User Manual	OUI	2022.6.1	Add Operation instruction part

FCC Statement:

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

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.

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