ZiFiSense

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℃~+60℃. Suitable for industrial and chemical scenarios.

2. Applications

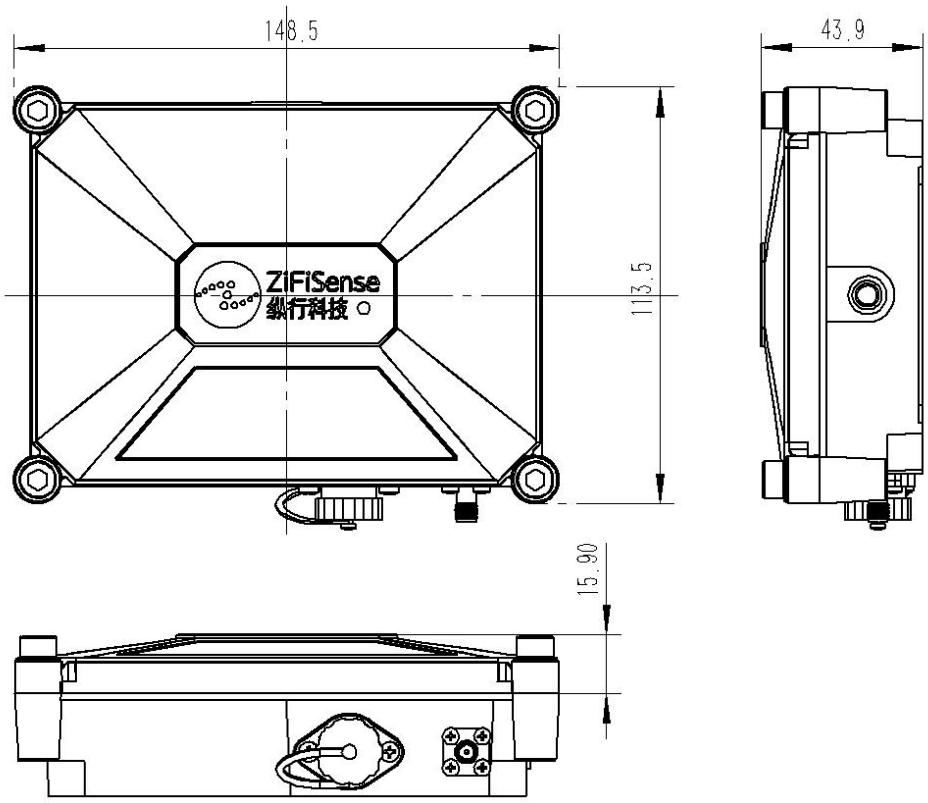
ZETA network device, connect other ZETA modules to the ZETA AP, incresing single AP coverage area.

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)


148.5
43.9
113.5
15.90
ZiFiSense
纵行科技

5. Product parameters

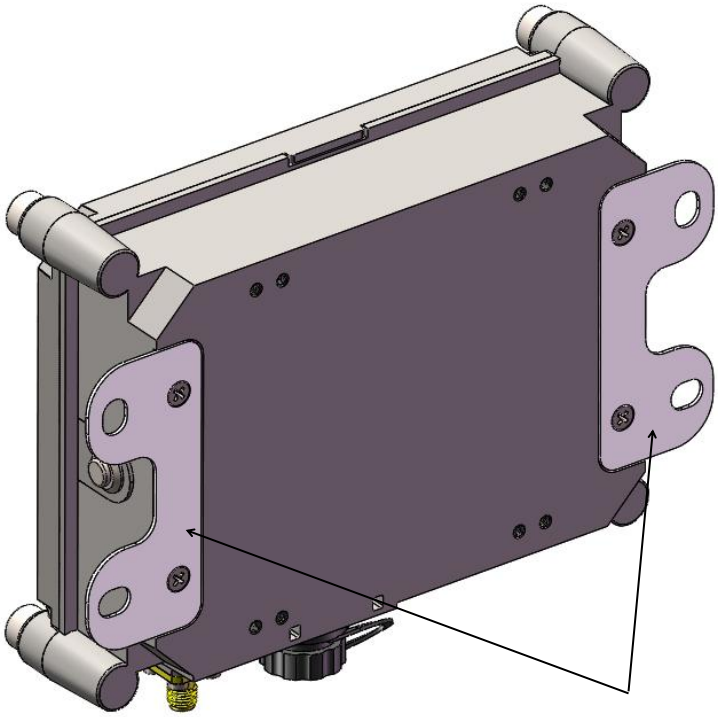
Product No.	MTZT-IN01	
Electrical Features	Power supply	DC 5V / Battery:2*ER34615
	Battery capacity	2*19000 mAh
	Stand-by current	≤ 10 μA
	Working current	≤ 70 mA
Physical Features	Weight	0.6kg
	Size	148.5*113.5*43.9mm
	Enclosure material	ADC12 Aluminum alloy
	Antenna	FRP Antenna
Environment Specification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

6. Packing List

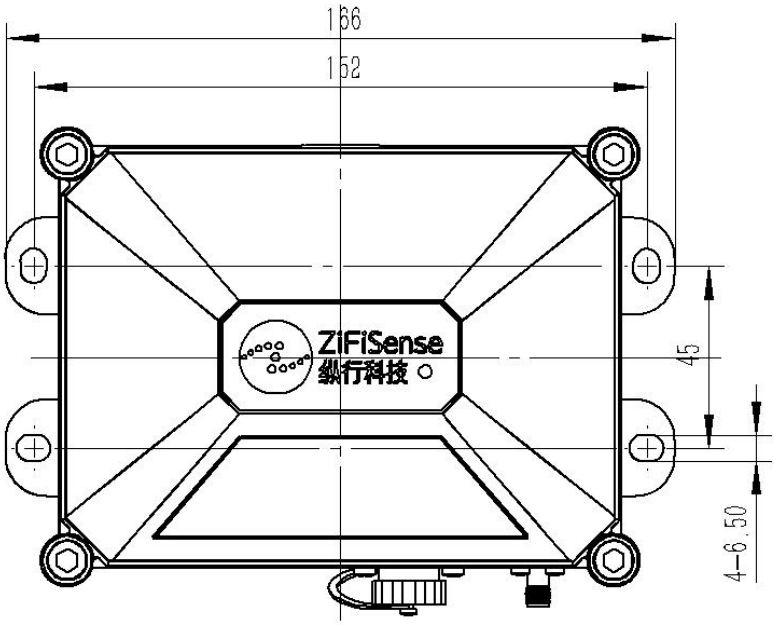
ZETA Mote	1
0.4m FRP Antenna	1

7. Installation

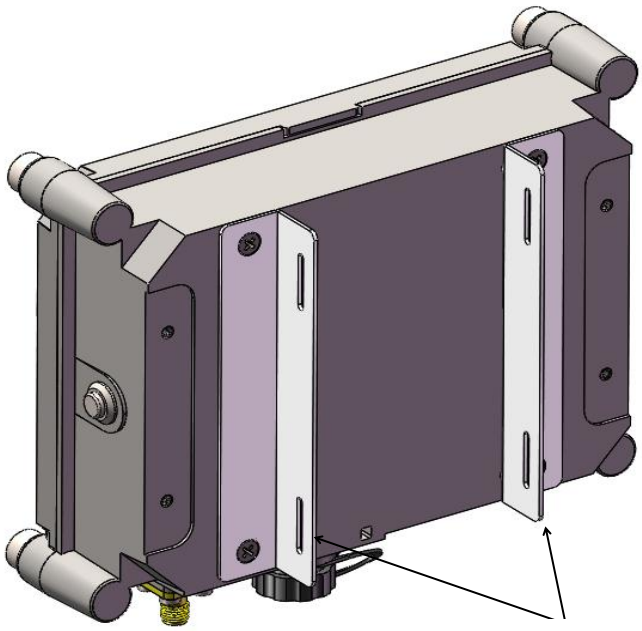
7.1. Wall mounting



Mounting brackets

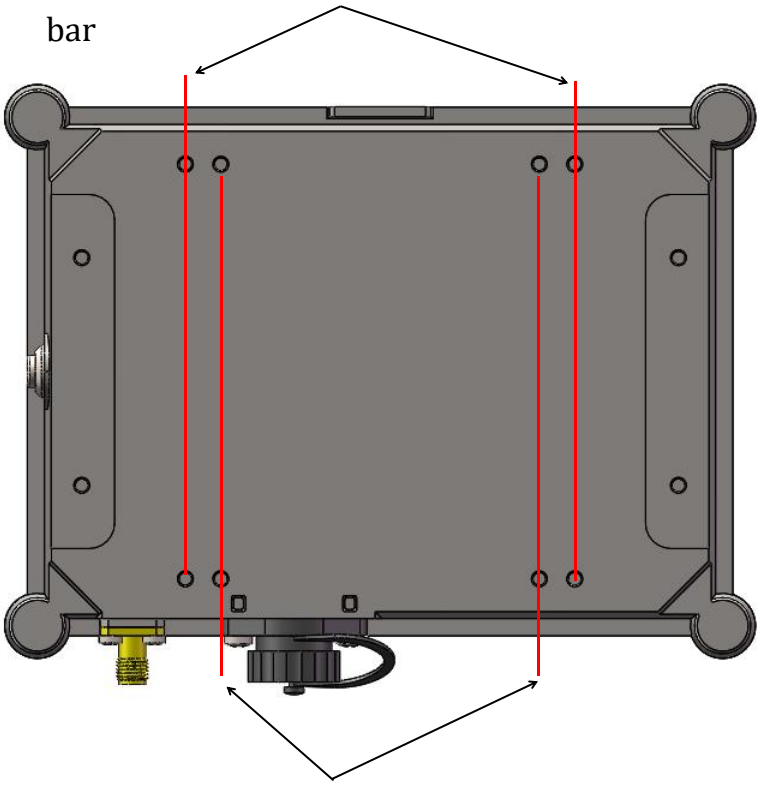


7.2. Hoop installation



Mounting brackets

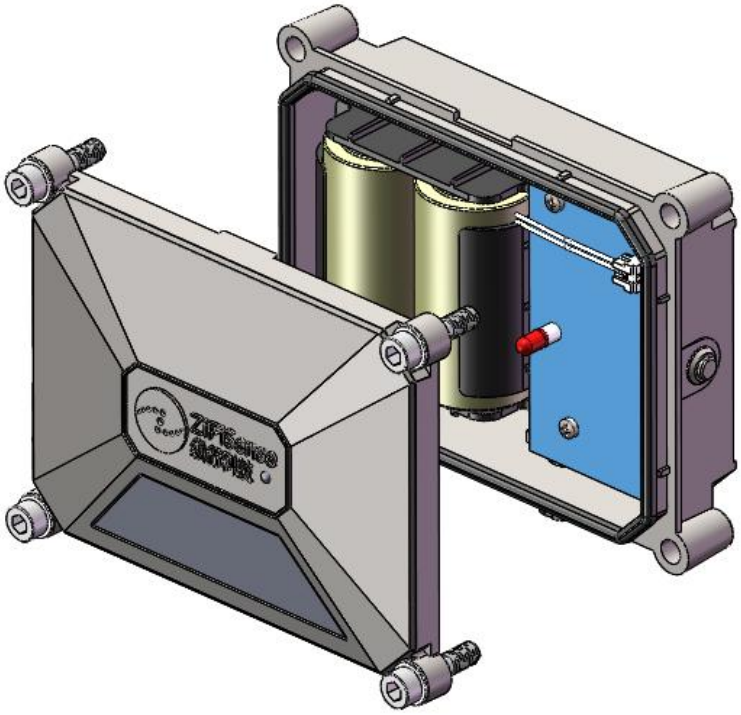
External threaded hole to match 75mm diameter holding bar

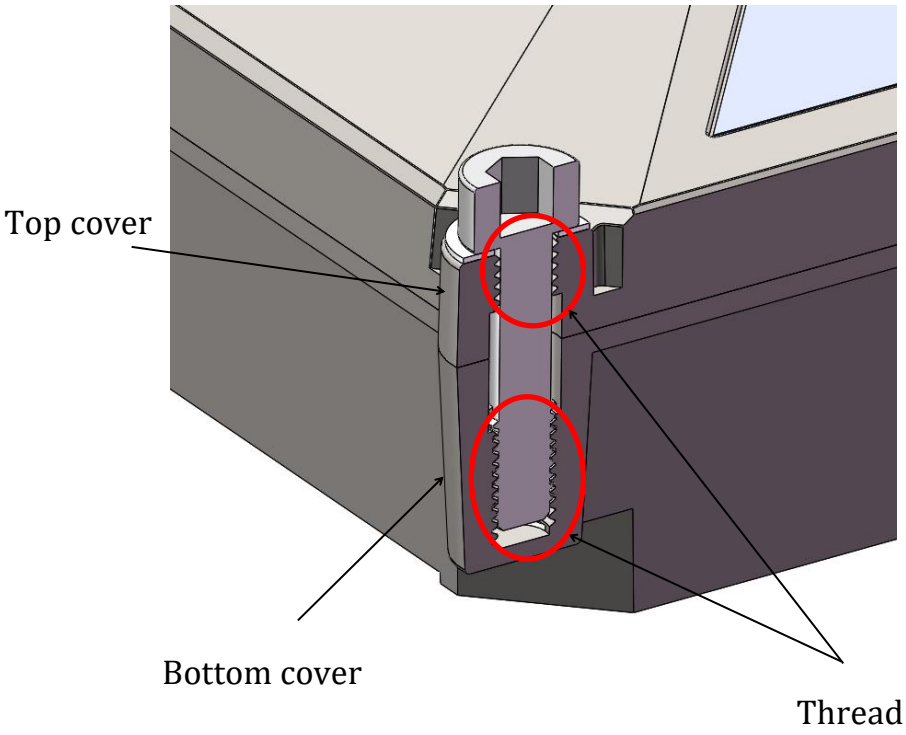


Inner threaded hole to match 50mm diameter holding bar

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

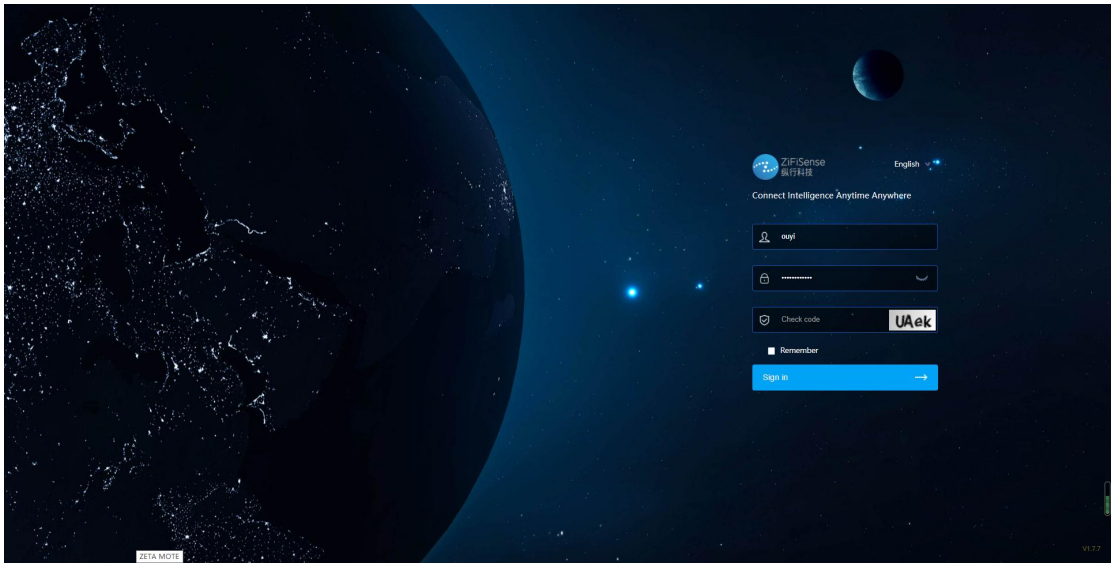
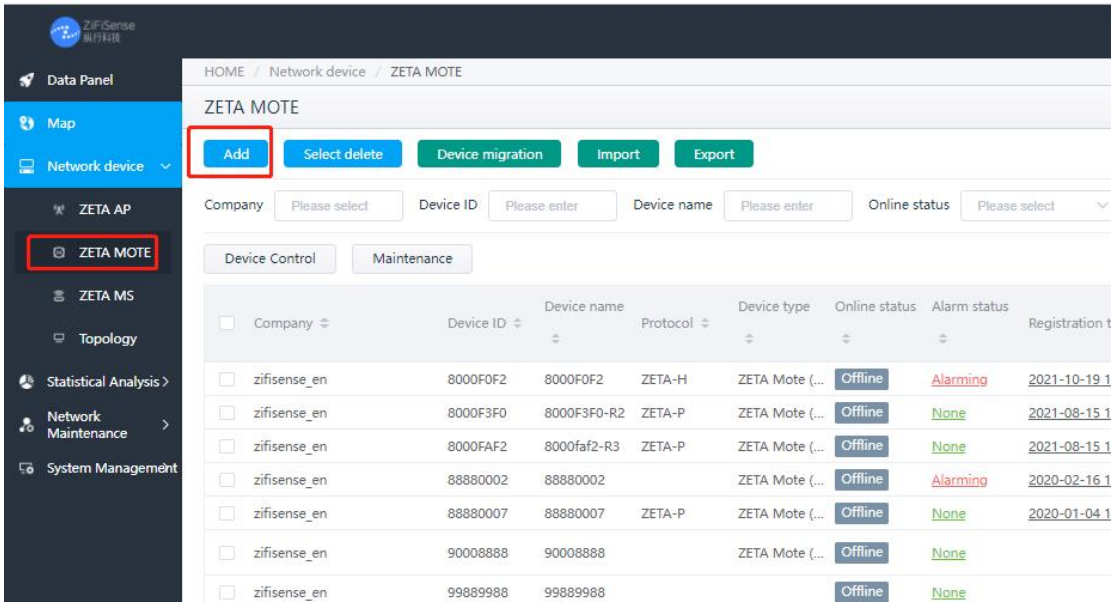


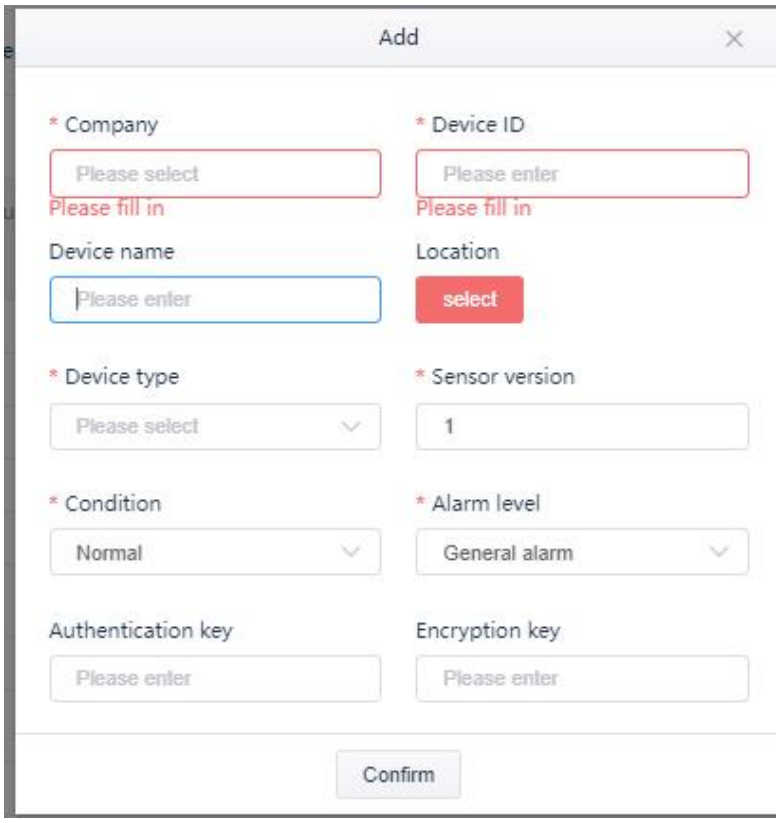
Figure: Platform login

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.

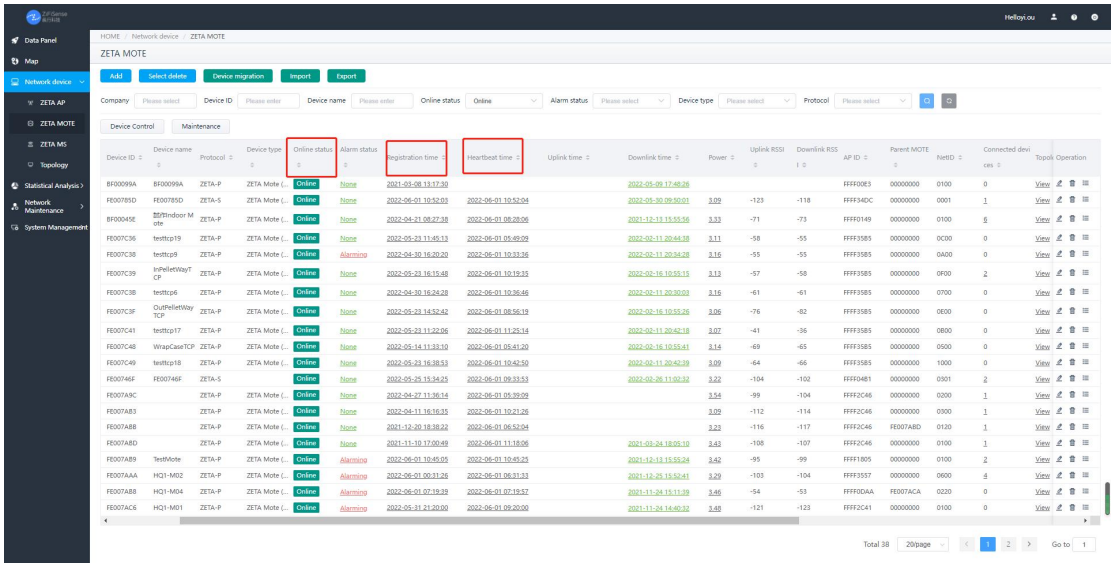
And add the Mote information in the pop-up window (see the actual device nameplate information for details).





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.



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	OUYI	2021.12.20	First edition
V1.0.1	ZETA Mote User Manual	OUYI	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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