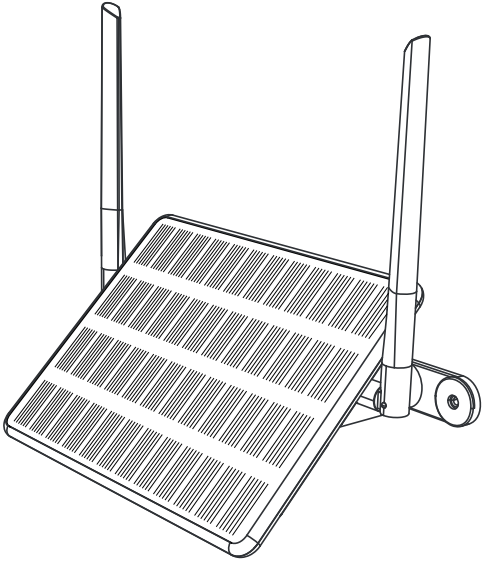
ThinkNode

ThinkNode M6 Meshtastic Device



User Manual

FCC ID: 2BDNA-TNM6-ELE

Product Safety Information

Fire Warning: Observe safety instructions and compliant operation, otherwise it may cause fire, electric shock or other injuries.

Choking Warning: The product or gadgets inside the package present a risk of causing or contributing to asphyxiation.

The product has some waterproof function and is suitable for outdoor use. However, the product does not support underwater use, in order to prevent electric shock exposure:

- Do not immerse the solar panel underwater;
- Do not spill food or drink on the solar panel;
- Do not put oil or corrosive liquid in contact with the solar panel;
- Do not place the solar panel in an extremely humid environment;
- Do not use external heating equipment to dry the solar panel;
- Do not use a high-pressure water gun to rinse the solar panel;
- Do not use or touch the solar panel in lightning or thunderstorms;
- If your solar panel is damaged or cracked, stop using it immediately.
- Please use the accessories supplied with the product or those designed specifically for this product. The use of other third-party accessories may affect the performance of the device.
- If you want to use third-party accessories, please be sure to read all product warnings before using them.

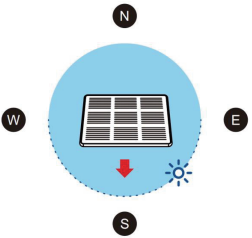
For information on compatibility of your device, please consult our information channels or contact our specialized technicians.

Preparation for installation

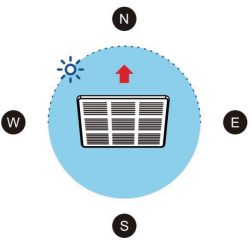
Please refer to the following recommendations before installation, so that the solar panels can work more efficiently.

- **a:** Choose a suitable orientation for installation.

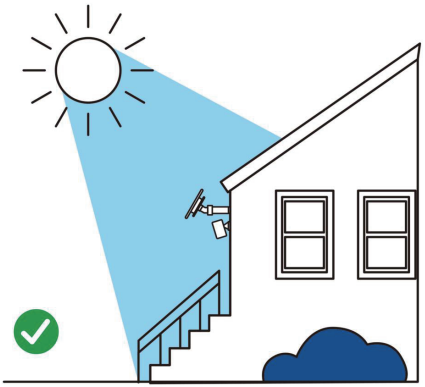
If you are in the Northern Hemisphere, install the solar panels facing south.

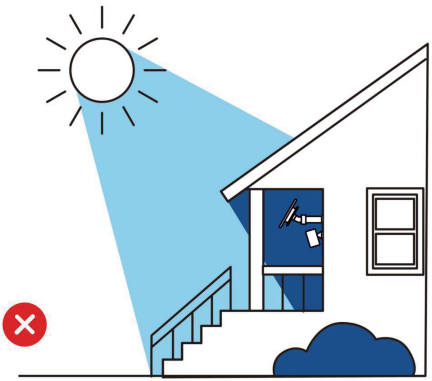


If you are in the Southern Hemisphere, install the solar panel facing north.



• **b:** Do not install the solar panels in an environment where there are objects covering the solar panels, so as not to affect the conversion of the solar panels.

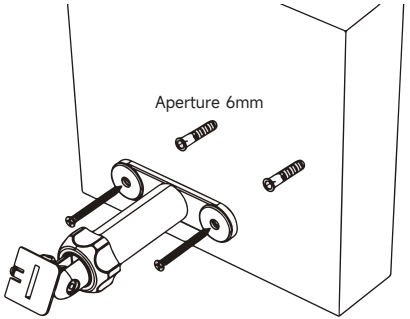




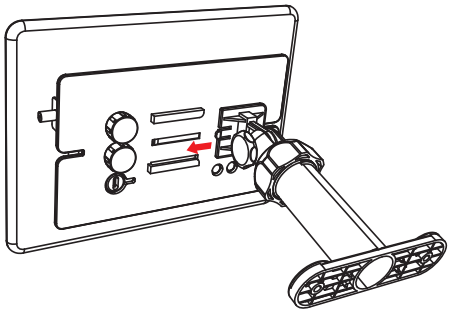
Installation of Solar Panels

• **a:** Bracket fixing

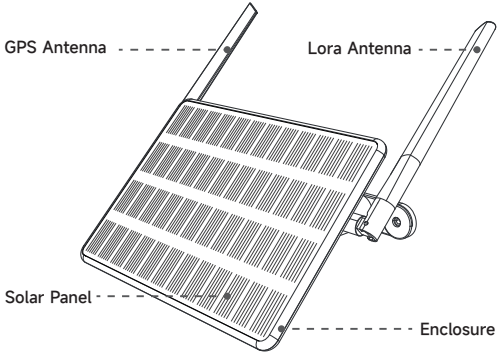
Select the appropriate tool to securely fasten the bracket to the wall at the desired installation location.

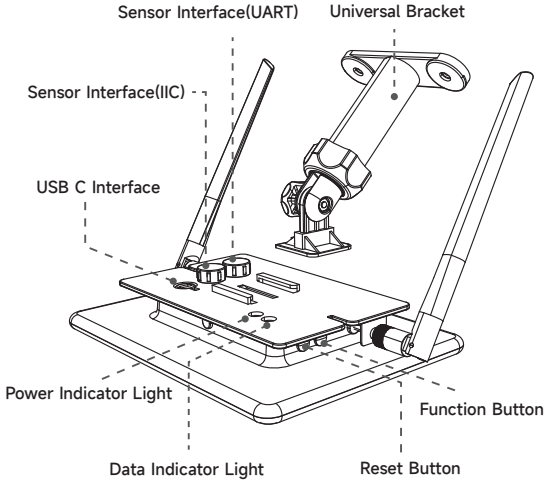


• **b:** Mating solar panels to racking.



Function Description





Function Key

Function	Operation / State	LED & Behavior
Power On/Off	Power On	Briefly press the Function Key for 1 second to power on: ①Red LED dims with rapid flashing; blue LED blinks slowly for 20 sec — device enters Bluetooth discovery mode. ②After power-on, red LED remains dimly lit with rapid flashing — device is in working mode.
	Power Off	Hold the Function Key for 5 seconds, then release — device powers off; red and blue LEDs turn off.
Bluetooth Pairing	Pairing	Blue LED stays solid.
	Pairing Successful	Blue LED stays solid for 30 seconds, then turns off.
	Bluetooth Disconnected	Blue LED blinks slowly for 30 seconds, then turns off.
LoRa Data Reception /Transmission	Data Transmission	No LED change.
	Data Reception	Blue LED blinks slowly 4 times (default).
Charging Status	Charging (USB / Solar)	Red LED blinks slowly and continuously.
	Charged	Red LED stays solid.

Function Key

Function	Operation / State	LED & Behavior
Firmware Flash Mode	Enter Flash Mode	Double-click Reset — Red and Blue LEDs turn off.
	Exit Flash Mode (no flash done)	Single-click Reset — device restarts.
	Flash Complete	Device restarts automatically after firmware is written successfully.
Low Power Mode	Hold Function Key for 5 sec	Device powers off and enters low-power mode.
GPS	Enable / Disable GPS	Triple-click Function Key to toggle GPS on/off; no LED change.
	Update Location	Double-click Function Key to update current node/device position; no LED change.
	Real-time Coordinates	Device supports positioning and real-time GPS coordinate reporting; coordinates can be viewed in the Meshtastic app.
Reset	Single-click Reset Key	Device restarts.
Low Battery Alert	Auto-triggered	Red LED flashes rapidly 5 times, then turns off for 28 seconds — repeats until device powers off.

Product Specifications

Module: nRFLR1262

Bluetooth: Bluetooth Low Energy/Bluetooth 5.4

LoRa: US 915MHz/EU 868MHz (External Antenna)

Battery Type: 18650 Li-ion Battery

Battery Capacity: 7000mAh

Dimensions: 210 x 156 x 42mm (excluding antenna & bracket)

Net Weight: 533.1g

Protection Rating: IP65

Operating Temperature: -20°C to +60°C

Storage Temperature: -30°C to +70°C

Main Board Input: 5V ⎓ 1A

Solar Panel Output: Rated power 6W output

Packing List

Solar Panel(M6) × 1

Bracket × 1

Screw Pack × 1

USB-A to USB-C × 1

LoRa Antenna × 1

GPS Antenna × 1

User Manual × 1

Frequently Asked Questions

1: Why do solar panels charge slower and slower after a period of normal use?

-- Solar panels are suitable for outdoor installation, after a period of time the surface of solar panels may be covered with dust, debris, etc. will affect the efficiency of solar energy conversion. Please clean the surface of the solar panel regularly.

2: Are solar panel products waterproof?

-- The equipment is suitable for outdoor, is with certain waterproof function, but not suitable for use underwater, also can not use high-pressure water gun rinse equipment, avoid some corrosive liquid or material touch.

3: What is the purpose of these two sensor interfaces?

-- Two SP11 model sensor interfaces are reserved, allowing users to connect external sensors for UART and IIC sensor communication.

Note: After using the sensor interface and USB interface, please remember to cover the waterproof cap to prevent water from entering the device and affecting its use.

Customer Support

If you have any questions, customer support is always standing by.

info@elecrow.com techsupport@elecrow.com

For more technical details, please visit the relevant webpage.

FCC WARNING

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 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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.

ELECROW

Manufacturer: Elecrow

Made in China