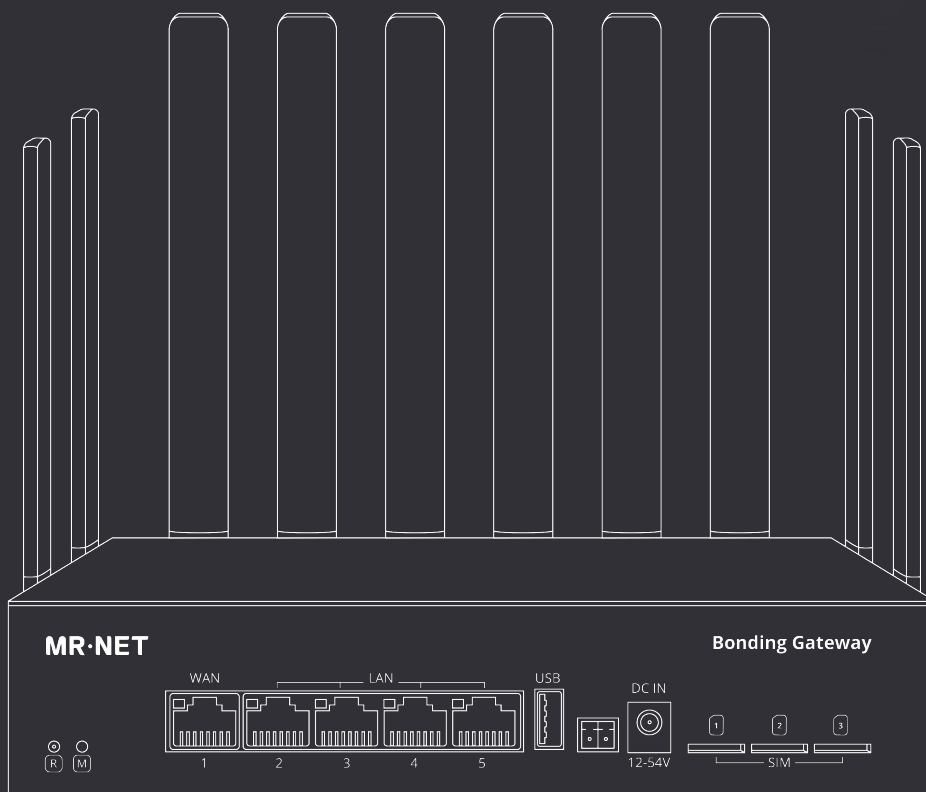


Cellular Bonding Gateway

Simple | Unbreakable | Wireless

- Manual guide
- User guide
- How it works
- Technical specifications



MR-NET

MODEL: 006 PLUS

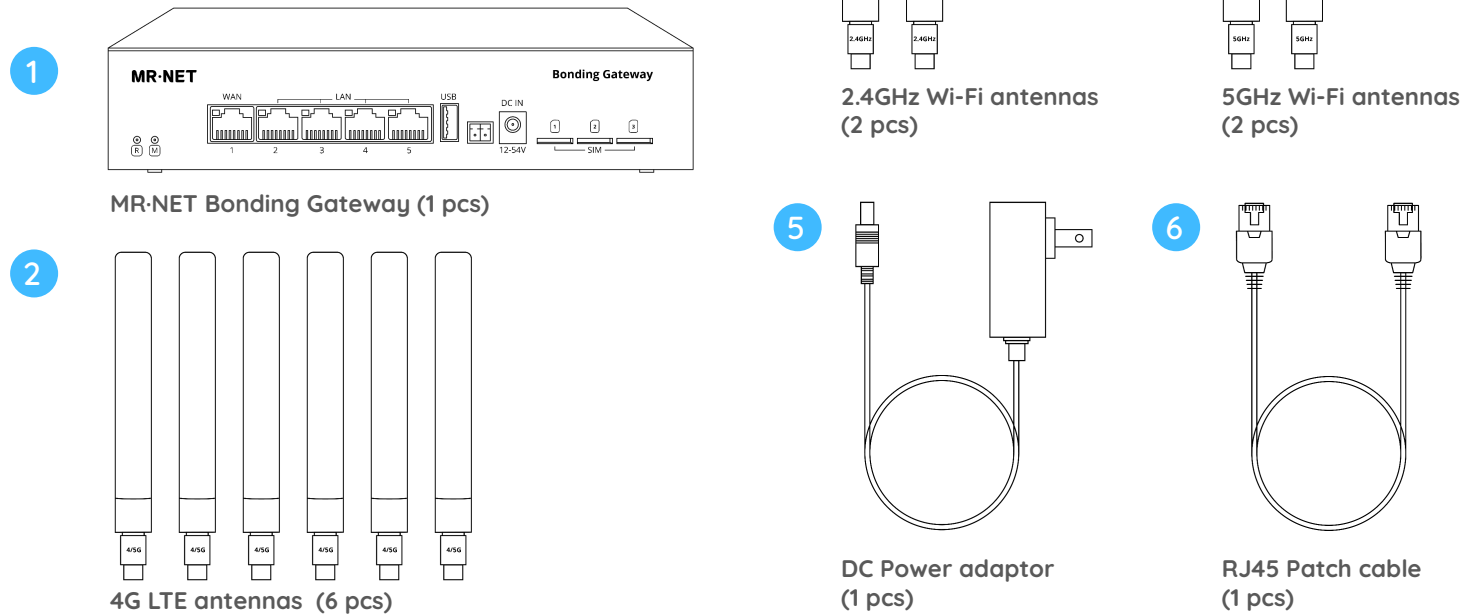
Content:

Manual guide	1. Package contents	2
	2. Main elements	2
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User guides	4. Operation and configuration	
	4.1. - Assemble the Bonding Gateway	4
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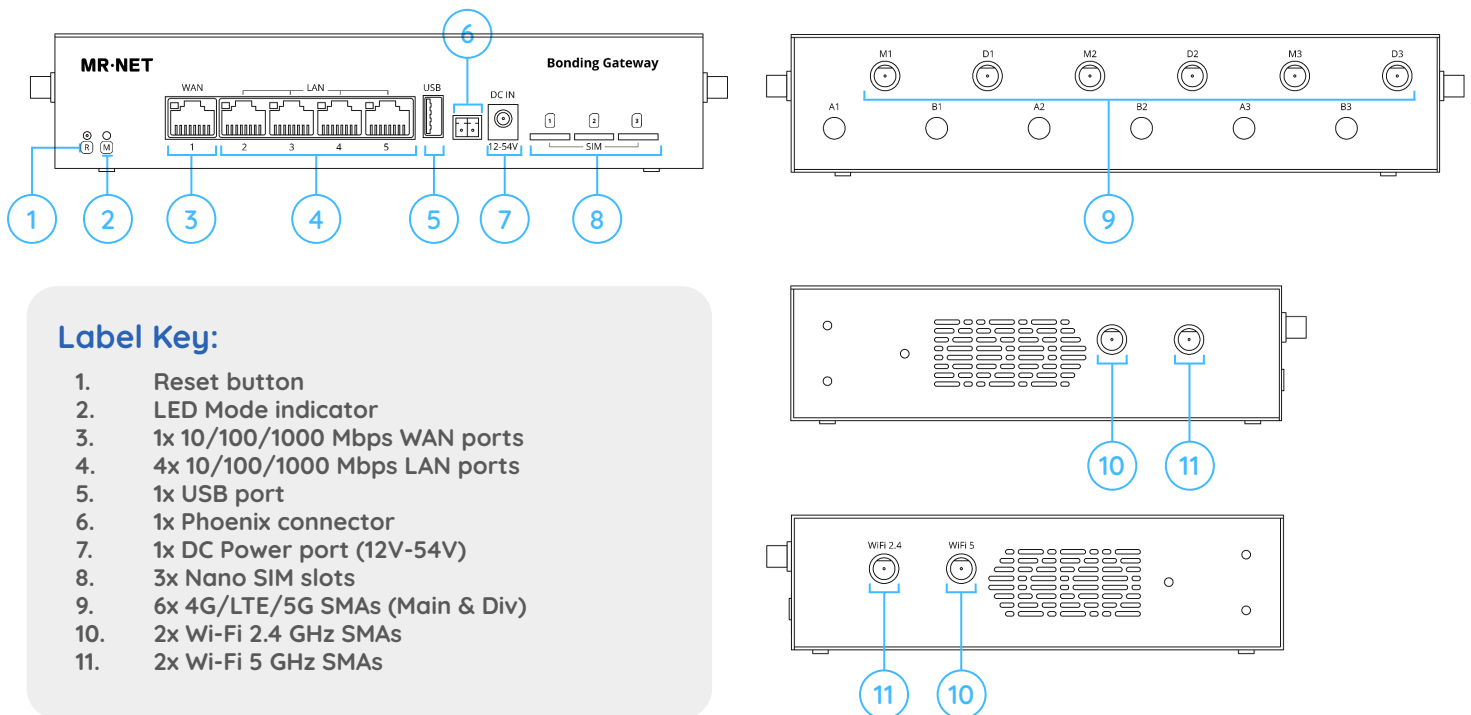


Cellular Bonding Gateway designed to provide a simultaneous aggregated (bonded) network connection to an endpoint via several independent wired / wireless feeds

1. Package contents



2. Main elements





3. Installation steps

Setup Guide: Follow these steps to set up your device quickly and easily

1. Unpack the Box

Open the box and remove the Bonding Gateway (Device) and all other items from the package contents (antennas, DC adapter, RJ45 cable).

3. Attach the Wi-Fi Antennas

Screw the four Wi-Fi antennas into the designated ports, two on the left side and two on the right side of the Bonding Gateway.

5. Connect the Power Supply to the Device

Insert the power supply adapter into the DC connector on the Bonding Gateway. Do not plug it into an electrical outlet yet.

7. Power On the Device

Plug the DC power adapter into a 110V electrical outlet. The device will automatically turn on, and a green light will appear, indicating the unit is powered.

9. Connect Your Equipment

Link your equipment to the Bonding Gateway via LAN ports or Wi-Fi.

2. Attach the 4G/5G Antennas

Gently screw all six 4G/5G antennas into the SMA ports on the back of the Bonding Gateway. Ensure they are threaded straight and secure.

4. Adjust the Antennas

Position each antenna at a 90-degree angle for optimal signal reception.

6. Place the Device in the Best Signal Area

Position the Bonding Gateway where cellular signal is strongest, such as near a window or elevated spot. Avoid metal barriers or obstructions.

8. Wait for Connection

Allow 2-3 minutes for setup. The mode light will turn solid blue when your internet connection is established.

It's done!

You are ready to roll

If you encounter any issues, feel free to reach out via our [website's online chat](#), or email.



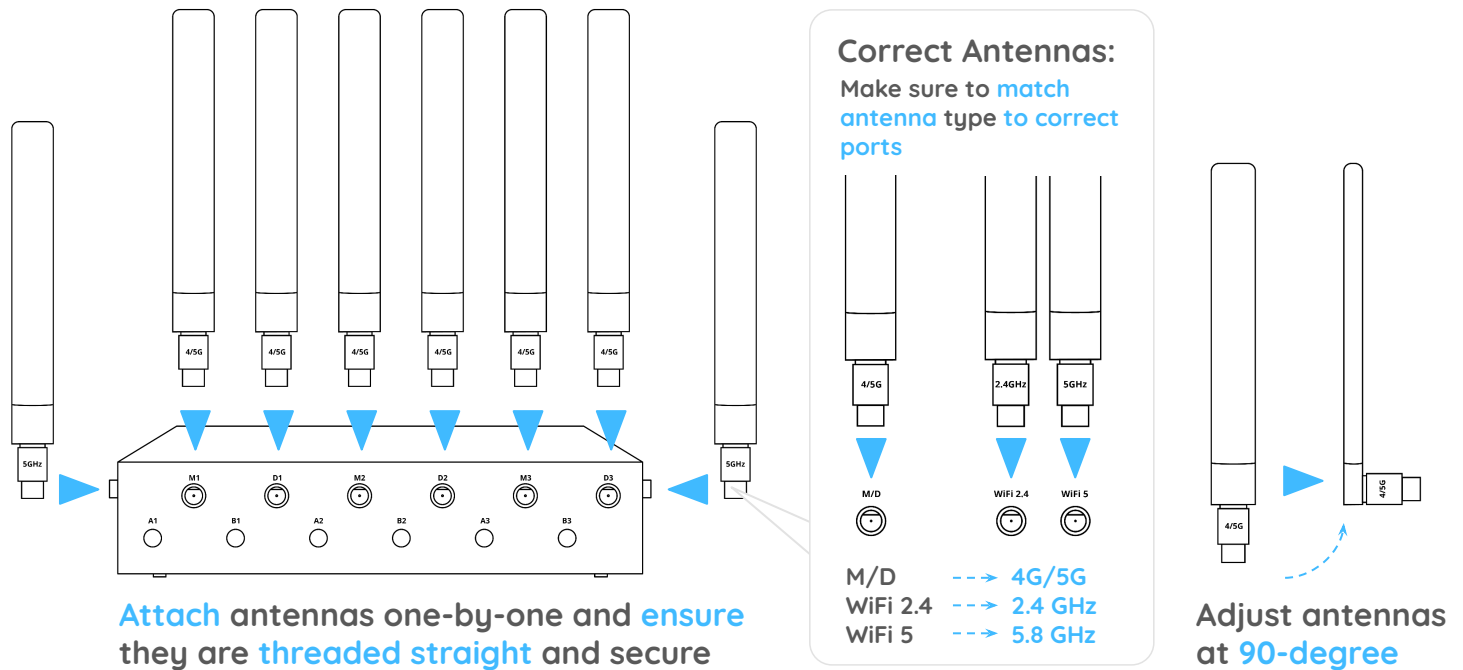
Contacts:

- online chat
- support@mrnet.us
- <https://mrnet.us/>



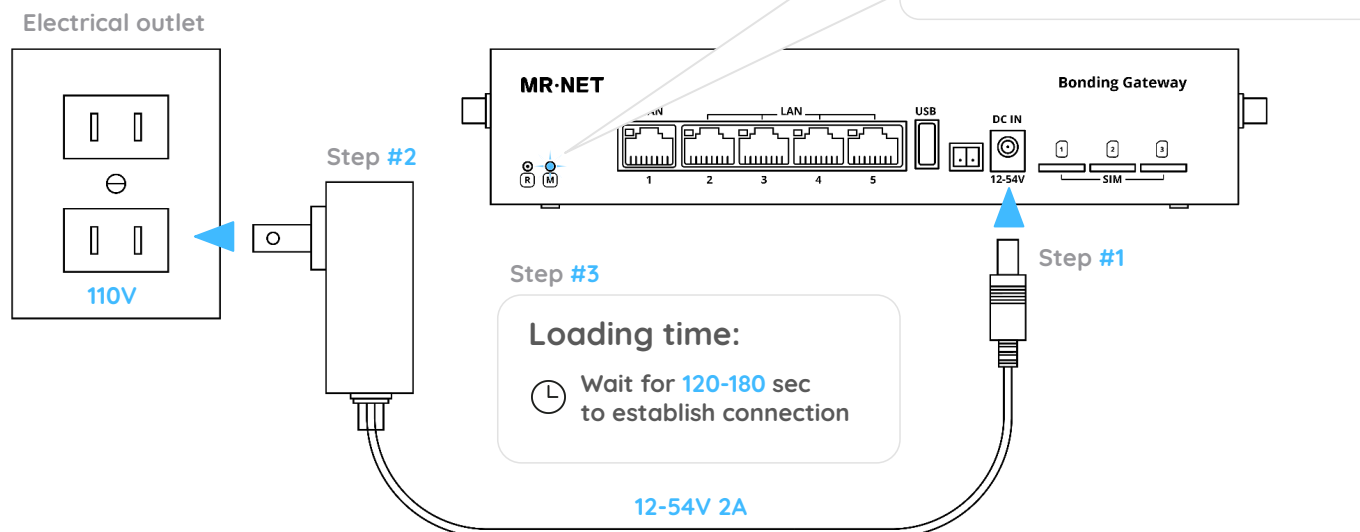
4. Operation and configuration

1 - Assemble the Bonging Gateway



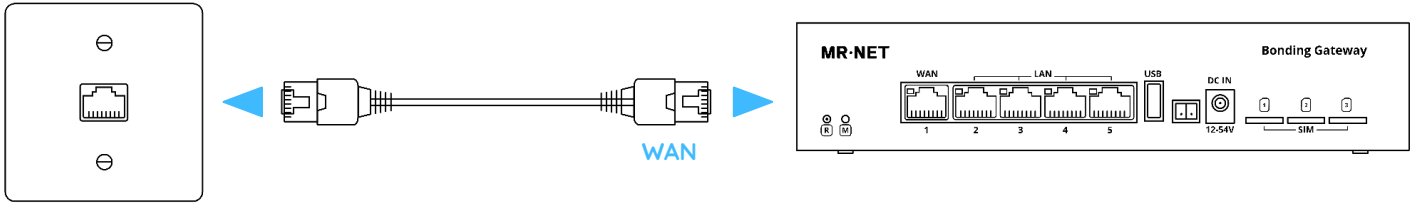
2 - Power up equipment and wait for a blue light

Plug into power outlet and wait up to 2-3 minutes for a blue light



3 - Additional internet source via WAN

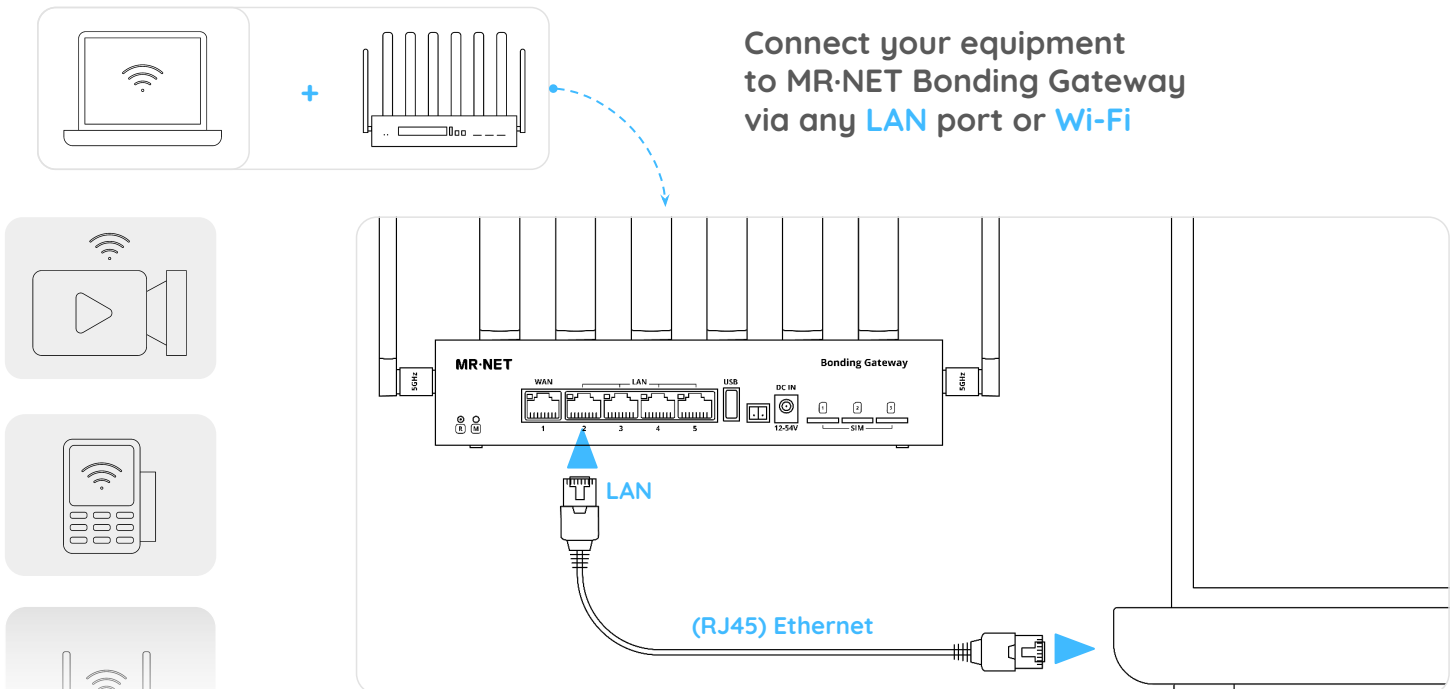
Internet Source (A)



Internet Source (B)



4 - Connect your equipment via LAN or Wi-Fi

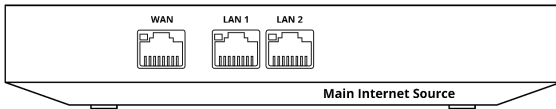


Prefer wired **LAN** for for more **stable** connection



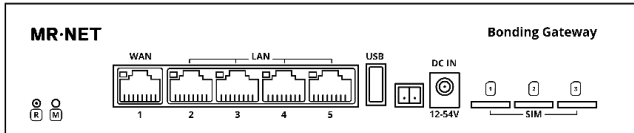
5 - Failover mode

Main Internet Source

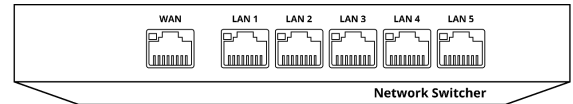


To enable failover mode please use your web management portal at <https://client.mrnet.us/>

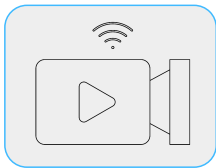
Bonding Gateway (in failover mode)



Network Switch



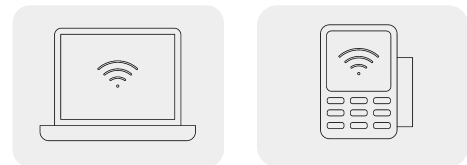
Mission critical equipment



Failover mode

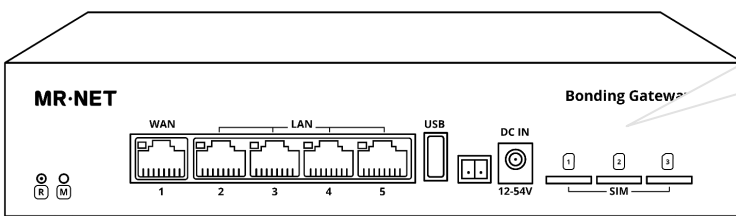
- Default connection
- Failover mode
- - - Signal outage

Second tier network

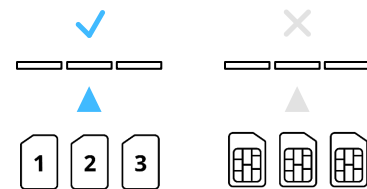


6 - SIM card switching

Pre-installed SIMs



SIM cards installation:



Each MR-NET Bonding Gateway comes with a pre-installed high-cap SIM cards



Please note:

Do not use supplied SIM cards in third-party equipment

If you prefer to use your own SIM cards, contact us to update your network settings; otherwise, they will not work correctly



5. Daily Use

Important Tips: Follow these guidelines to ensure safe and optimal performance



1. Use Certified Power Adapters Only

Avoid non-certified power supply adapters, as they could damage the device. Use only adapters rated 12-54V. Contact us if you are unsure which power supply is suitable for your equipment.

2. Compliance with Equipment

The device must be used only in strict compliance with client equipment operating, energy, and safety requirements.

3. Don't Mix 4G/5G and Wi-Fi Antennas

Do not confuse 4G/5G antennas with 2.4 GHz & 5 GHz Wi-Fi antennas. Each antenna has engravings indicating its type.

4. Avoid Metal Obstructions and High-Power Appliances

Do not place the equipment near metal constructions, as they can block cellular signals. Make sure to place the unit at least several feet away from high-power appliances.

5. Prefer Wired LAN Connection for Best Performance

Use wired LAN connections for your equipment whenever possible. Wi-Fi is an option but inherently less reliable, especially in crowded areas.

6. Distinguish WAN and LAN Ports

Don't confuse WAN and LAN ports. The WAN port is for adding optional extra internet sources from other providers to the bonded connection. LAN ports are for connection your equipment which needs internet access.

7. Avoid Misplacing SIM Cards

Do not use pre-installed SIM cards in third-party equipment. If you want to use your own SIM cards, contact our support team to update device settings for them to work correctly.

8. Protect from the Elements

The device's enclosure is made of a durable metal. IP50 Class of the protection. Protected from limited dust ingress. No liquid protection.

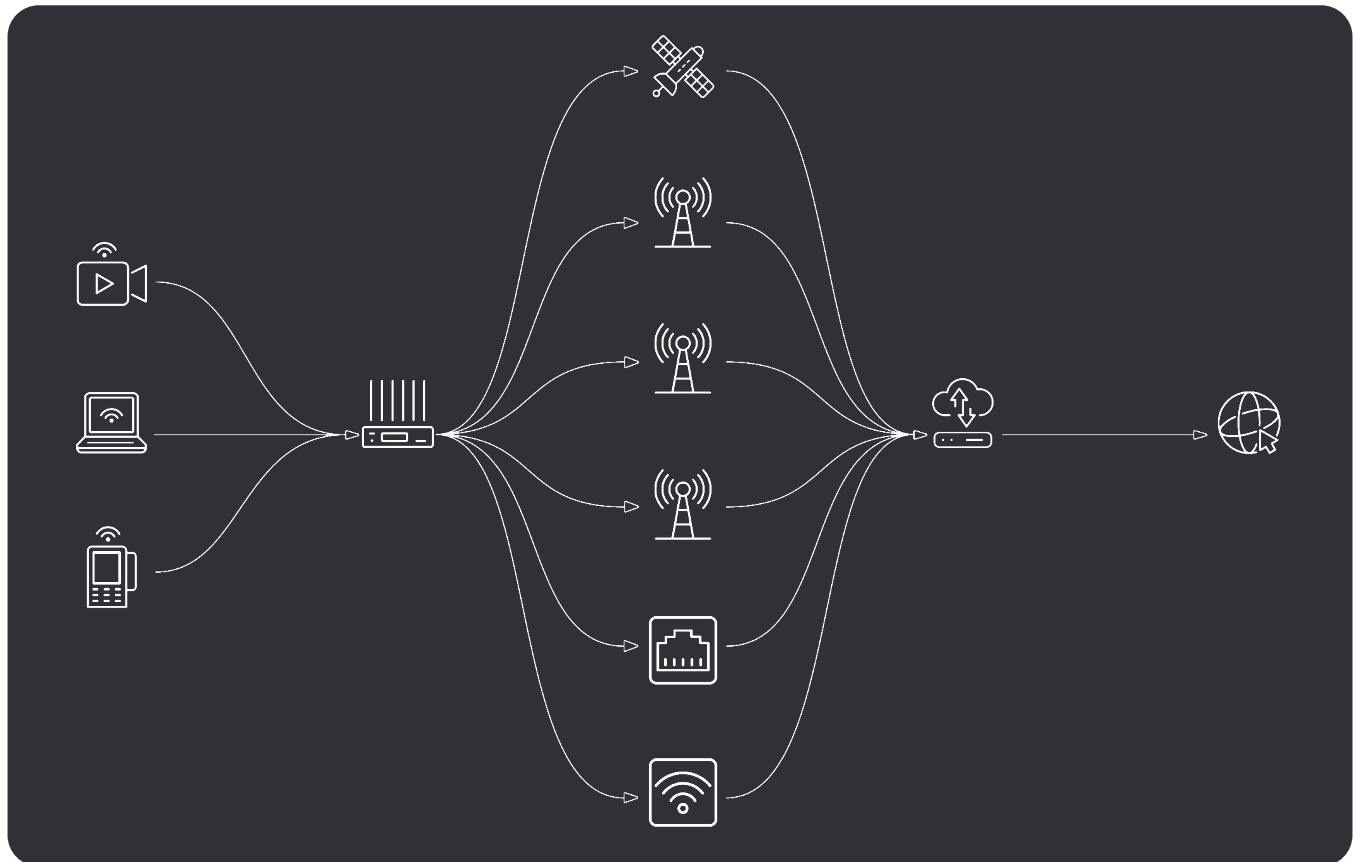


6. Bonding Technology

MR-NET Bonding Gateway is designed to provide simultaneous aggregated (bonded) network connection to an endpoint via several independent wired / wireless Internet access channels



How it works:



Plug & Play

Installation in under
120 seconds

Up to 6

Independent internet
sources

Secure

Cloud infrastructure
management

Wi-Fi 6

2.4/5 GHz for optimum
performance

3 SIMs

Pre-installed SIMs
(third-party SIMs optional)

Highest priority data

No throttles, no caps,
always on



7. Technical specifications

MRNET 006 PLUS MODEL



Specification:

LTE support:

- 4G LTE-A CAT6 modems (Quectel EM060K-GL)

Supported carriers:

- Verizon, T-mobile, AT&T & other

SIM Slots:

- 3 with pre-installed SIMs

Ports:

- 4x 10/100/1000Mbps RJ45 LAN Ethernet ports
- 1x 10/100/1000Mbps RJ45 WAN Ethernet ports
- 1x Phoenix port
- 1x USB-A port

Wi-Fi:

- Wi-Fi 6 (802.11ax)
- Operating Frequency 2.4GHz / 5GHz

Buttons:

- Reset button

Operating conditions:

- Voltage: 12V-54V
- Power consumption: ~24 W
- Operating temperatures: 32-104° F
- Air humidity: up to 90%

Device Dimensions:

- Net Weight: 2.9 lbs (Gateway only)
- Dimensions: 8.3" x 6.3" x 1.9" (W x D x H)

Package Dimensions:

- Gross Weight: 4.6 lbs
- Package Dimensions: 13.6" x 11.8" x 3.3" (W x D x H)

Operating bands:

LTE-FDD:

- B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71;

LTE-TDD:

- B34/38/39/40/41/42/43/46 (LAA)/48 (CBRS);

Up to 2 xCA:

- B2+B2/5/12/13/29;B4+B4/5/12/13/29;B5+B5/7/25/30/66; B7+B7/12/26; B12+B12/25/30/66; B13+B66; B25+B25/26; B30+B29; B66+B29/66; B41+B41;

WCDMA:

- B1/2/3/4/5/6/8/19

Features:

Routing / Switching Protocols

- IPv4/IPv6, Session persistent failover, NAT, Port Forwarding

IP Applications

- DDNS, DNS Proxy, DHCP / DHCPv6

Security

- Firewall, e2e encryption for each individual gateway

Warranty:

General terms

- 1 Year Standard Warranty



End

8. Contacts

Important Tips: Follow these guidelines to ensure safe and optimal performance:



MR-NET® is a registered trademark of MOTIONRAY Inc.



1. Unpack your box and get the Device

Open the box and get your Bonding Gateway.
Unpack it from wrapping paper.

3. Plug-in power supply into MR·NET Bonding Gateway

Take the power supply adapter and insert it into the power DC connector. Do not plug power supply adaptor into electrical outlet yet.

5. Plug DC power adaptor into 110v socket

Plug in the power supply, flip the power switch into the "ON" position. A green light appears when the unit is powered on.

7. Install Wi-Fi dongle

To install WI-FI, insert included dongle into the USB 3 (for example) slot located on the back of your device.

WI-FI login info is available in your online portal, which was provided to you in the set-up email. Feel free to change login information to whatever ssid and password you prefer.

9. It's done! You are ready to roll.

If you have any trouble, please feel free to let us know by calling the number listed above, or through the chat box function on our [website](#).

2. Gently screw all antennas into the Bonding Gateway

Screw all six antennas onto the input ports on the back side of the Bonding Gateway. Be sure that all antennas are threaded straight and solidly. Then adjust all antennas to a 90 degree angle one by one.

4. Put MR·NET Bonding Gateway in best signal area

Find a place where you expect the cell signal in your location to be the best - usually by a window, up high, etc. Avoid metal barriers.

6. Wait up to 120 seconds for connection to be established

1-2 minutes later you should see the mode light turn solid blue, which means your Internet connection is established.

8. Connect your equipment to LAN ports or via Wi-Fi

Connect any existing equipment through Wi-Fi or directly to your device to the LAN port on the Bonding Gateway.

Please pay attention:



Contacts:

✉ support@mrnet.us

🌐 mrnet.us

☎ +1(845) 666-0696

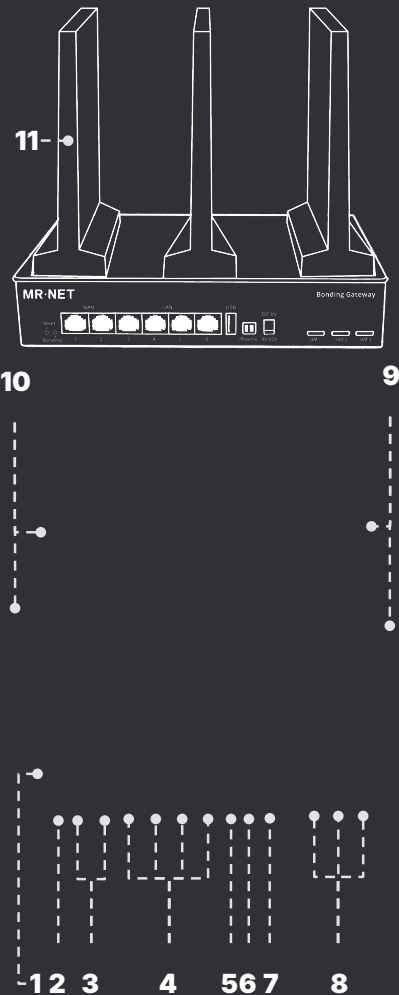
Certificates:



MR-NET® is a registered trademark of MOTIONRAY Inc.

Technical Specification

MR-NET 5G



Cellular Bonding Gateway

Designed to provide a simultaneous aggregated (bonded) network connection to an endpoint via several independent wired / wireless feeds

Label Key:

1. Reset button
2. LED indicator
3. 2x 10/100/1000 Mbps WAN ports
4. 4x 10/100/1000 Mbps LAN ports
5. 1x USB port
6. 1x Phoenix connector
7. 1x DC Power port (12V-60V)
8. 3x Nano SIM slots
9. 2x Wi-Fi 5.8 SMAs
10. 2x Wi-Fi 2.4 SMAs
11. 3x Removable 5G Antennas

5G 1 Gbps Wi-Fi 6

Up to three independent 5G connections

2x WAN 4x LAN

Wi-Fi IEEE 802.11 AX 2.4/ 5.8 Ghz

Contacts:

Certifications:

✉ support@mrnet.us

🌐 mrnet.us

☎ +1(845) 666-0696

FC

CC

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🌱

♻️

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Specifications:

- 5G support:**
- 5G modems (Quectel RM520N)
- Supported carriers:**
- Verizon, T-mobile, AT&T, Dish
- Ports**
- 4x 10/100/1000Mbps RJ45 LAN
 - 2x 10/100/1000Mbps RJ45 Ethernet ports
 - WAN Ethernet ports
 - 1x Phoenix port
- Operating conditions:**
- Voltage: 12V-60V
 - Power consumption: ~30 W
 - Operating temperatures: 32-104° F
 - Air humidity: up to 90%
- Weight & Dimensions**
- Gross Weight: 4.5 lbs
 - Net Weight: 3.2 lbs (body only)
 - Package Dimensions: 12" x 10" x 6"

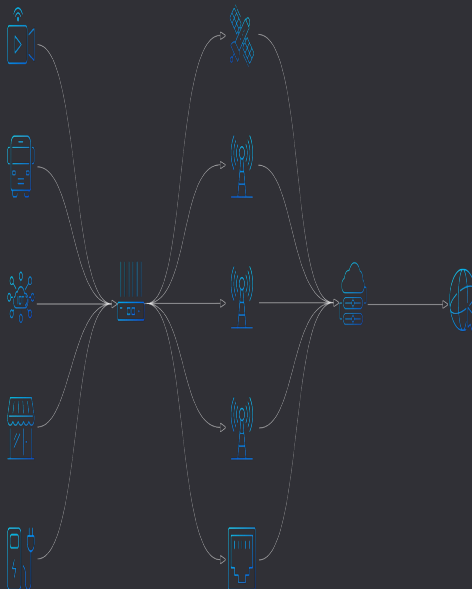
Operating bands: GL

- (Global)**
- 5G NR:**
- n1/2/3/5/7/8/12/13/14/18/20/25/26/28/29/30/38/40/41/48/66/70/71/75/76/77/78/ 79;
- LTE-FDD:**
- B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/ 26/28/29/30/32/66/71;
- LTE-TDD:**
- B34/38/39/40/41/42/43/48;
- LAA: B46;**
- WCDMA:**
- B1/2/4/5/8/19

Features:

- Routing / Switching Protocols**
- Pv4/IPv6, Session persistent failover, NAT, GRE, Port Forwarding
- IP Applications**
- DDNS, DNS Proxy, DHCP / DHCPv6
- VLAN & VPN**
- VLAN, IPSec, VPN Failover
- Security**
- Firewall, e2e encryption for each individual gateway

How it works:



Plug & Play

installation in under 120 seconds

Up to 5

independent internet sources

Secured

cloud infrastructure management

Please pay attention:

1. Use only power supplies with rated power. Contact us if you are unsure which power supply is suitable for your equipment. Using an unsuitable power supply may result in equipment failure.
2. The device's case is made of a durable metal. IP50 Class of the protection. Protected from limited dust ingress. **Not** protected from any liquids.

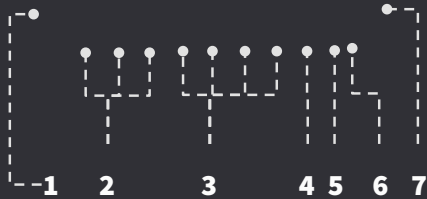
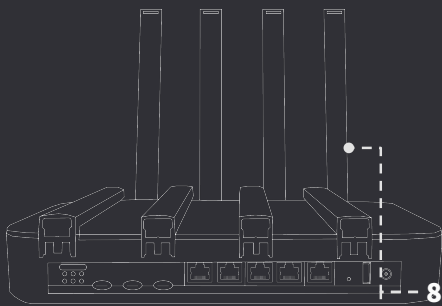
3. The device must be **only used in strict compliance** with client equipment operating, energy and safety requirements.
4. For the multiple-device network, large Wi-Fi coverage areas & best performance, **external Wi-Fi router** is recommended

MR-NET® is a registered trademark of MOTIONRAY Inc.

Technical Specification

MR-NET GO Cellular Bonding Gateway

Designed to provide a simultaneous aggregated (bonded) network connection to an endpoint via several independent wired / wireless feeds.



1. LED indicators
2. 3 Nano SIM slots
3. 4 LAN ports (RJ45 input)
4. 1 WAN port (RJ45 input)
5. 1 Reset button
6. 1 USB interface
7. 1 Power DC 12V, 2.5A
8. Built-in antennas



MR-NET® is a registered trademark of MOTIONRAY Inc.

3 LTE

Up to three independent LTE connections

4 WAN

External WAN Wi-Fi IEEE 802.11AC
100BASE-T DSL / Ethernet
Wave 2 Protocol standard
2.4GHz / 5GHz bands connections

2.4/5.8 GHz

Have a question?

✉ support@mrnet.us
🌐 mrnet.us
☎ +1(845) 666-0696

Specifications

on:

LTE support:

- 3 LTE-A cat4 modems (Quectel ec25-af)

Supported carriers:

- Verizon, T-mobile, AT&T

Operating bands:

- LTE-FDD: B2, B4, B5, B12, B13, B14, B66, B71
- WCDMA: B1, B4, B5

Ports

- 4* 10/100/1000Mbps RJ45 LAN Ethernet ports
- 1* 10/100/1000Mbps RJ45 WAN Ethernet port

Operating conditions:

- Voltage: 12V 2.5A
- Power consumption: ~30 W
- Operating temperatures: 32-104°F
- Air humidity: up to 90%

Weight & Dimensions

- Gross Weight: 1.6 lbs
- Package Dimensions: 13.4" x 1.4" x 6.4"

Feature

S:

Routing / Switching Protocols

- IPv4/IPv6, Session persistent failover, NAT, GRE, Port Forwarding

IP Applications

- DDNS, DNS Proxy, DHCP / DHCPv6

VLAN & VPN

- VLAN, IPSec, VPN Failover

Wi-Fi*

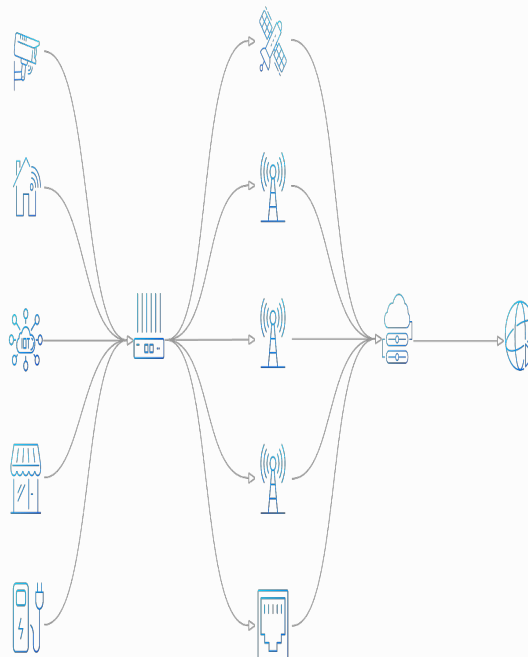
- Wi-Fi Hotspot, can be used as additional bonding input

Security

- Firewall, e2e encryption for each individual gateway

***Please note:** for the multiple-device network, large Wi-Fi coverage areas & best performance, external Wi-Fi router is recommended

How it works:



Plug & Play

installation in under 90 seconds

Up to 5

independent internet sources

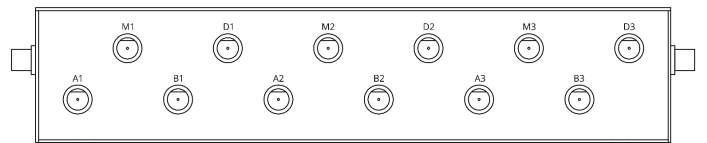
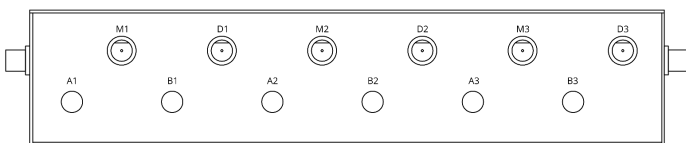
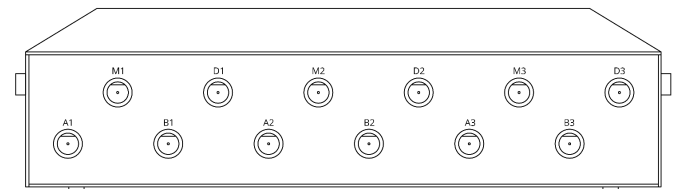
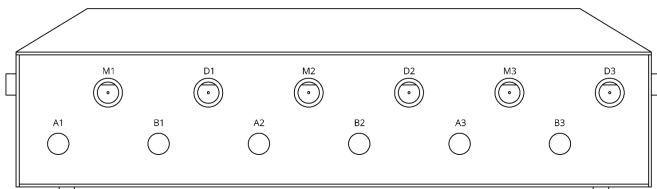
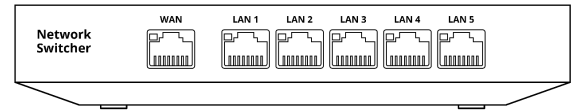
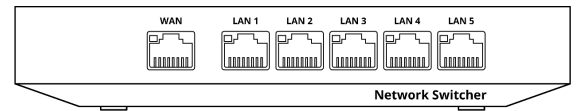
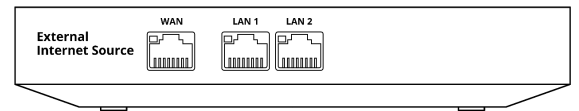
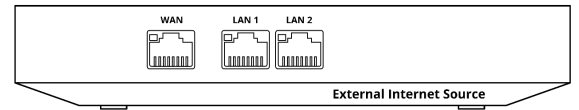
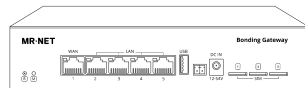
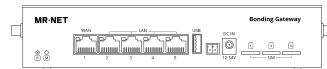
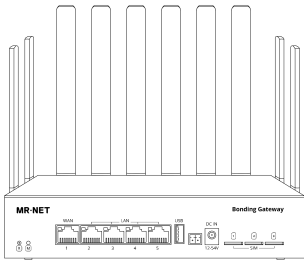
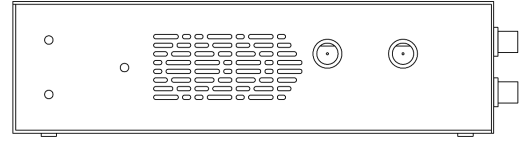
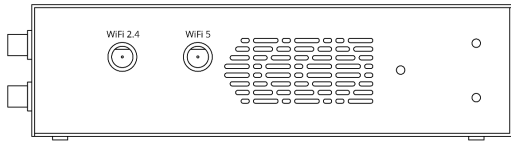
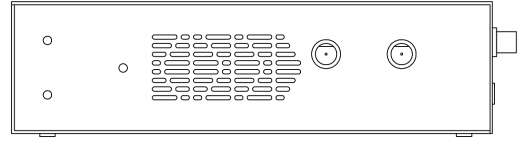
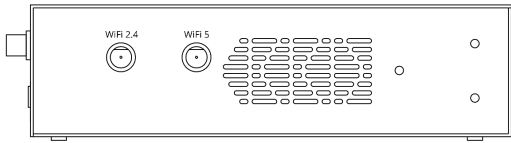
Secured

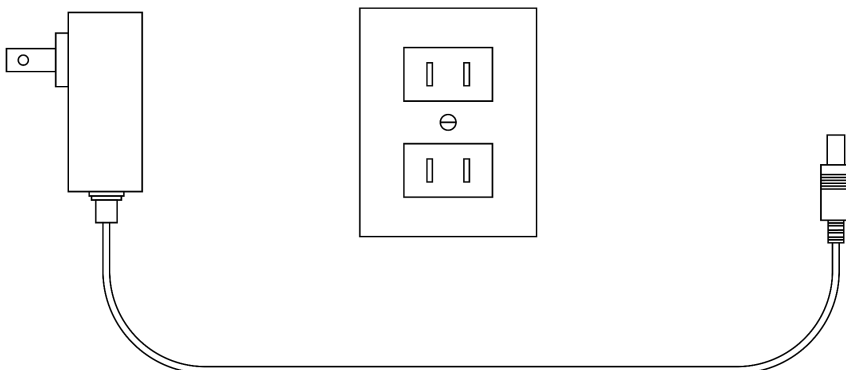
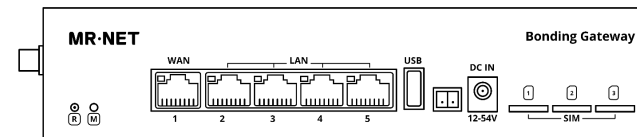
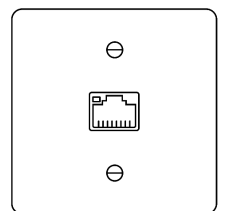
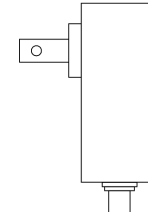
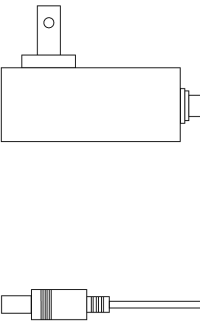
cloud infrastructure management

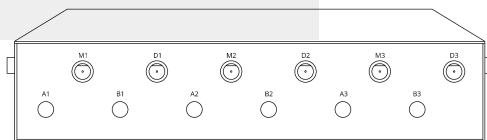
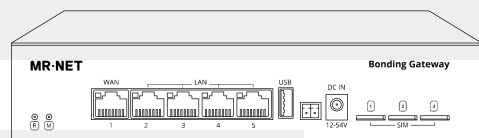
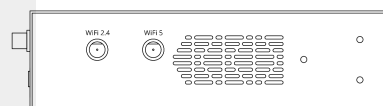
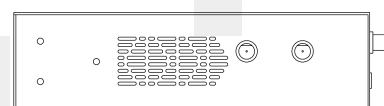
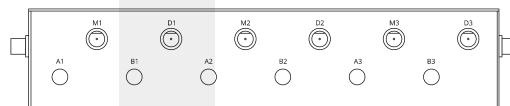
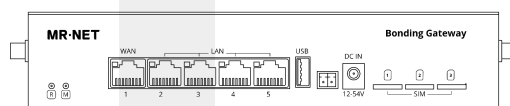
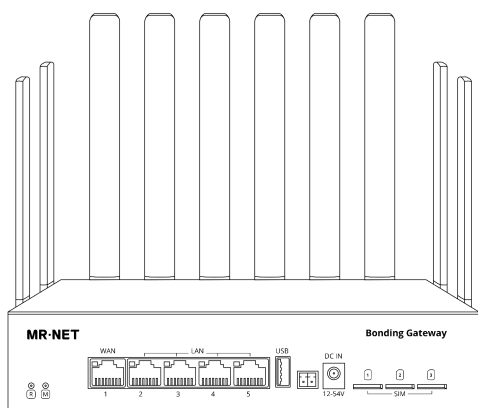
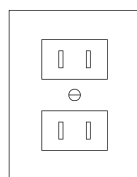
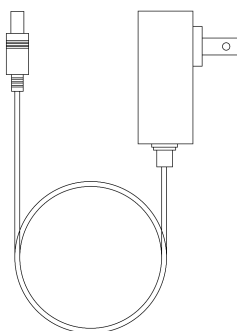
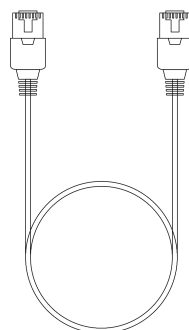
Please pay attention:

1. Use only power supplies with rated power. Contact us at support@mrnet.us or via **Online Chat** at <https://mrnet.us> if you are unsure which power supply is suitable for your equipment. Using an unsuitable power supply may result in equipment failure.

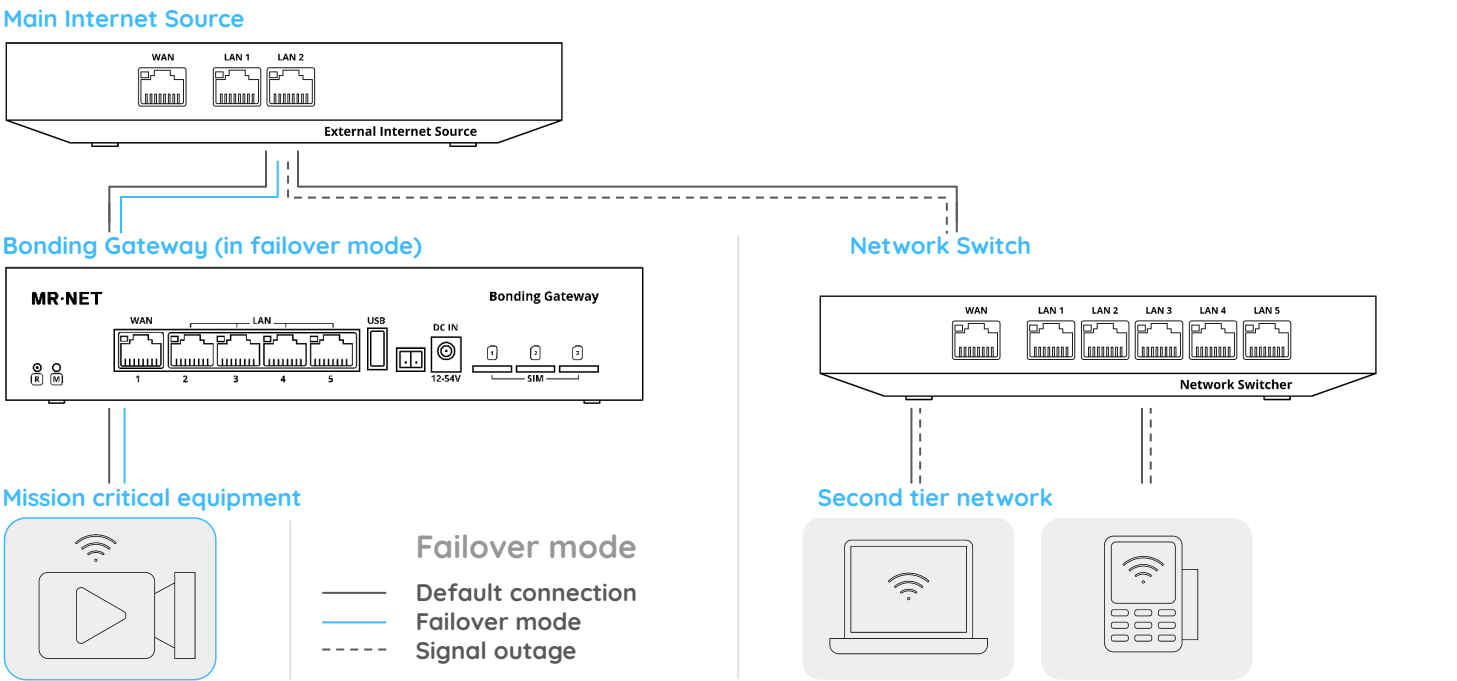
- 2. The device's case is made of a durable metal. IP50 Class of the protection. Protected from limited dust ingress. Not protected from any liquids.
- 3. The device must be only used in strict compliance with client equipment operating, energy and safety requirements.



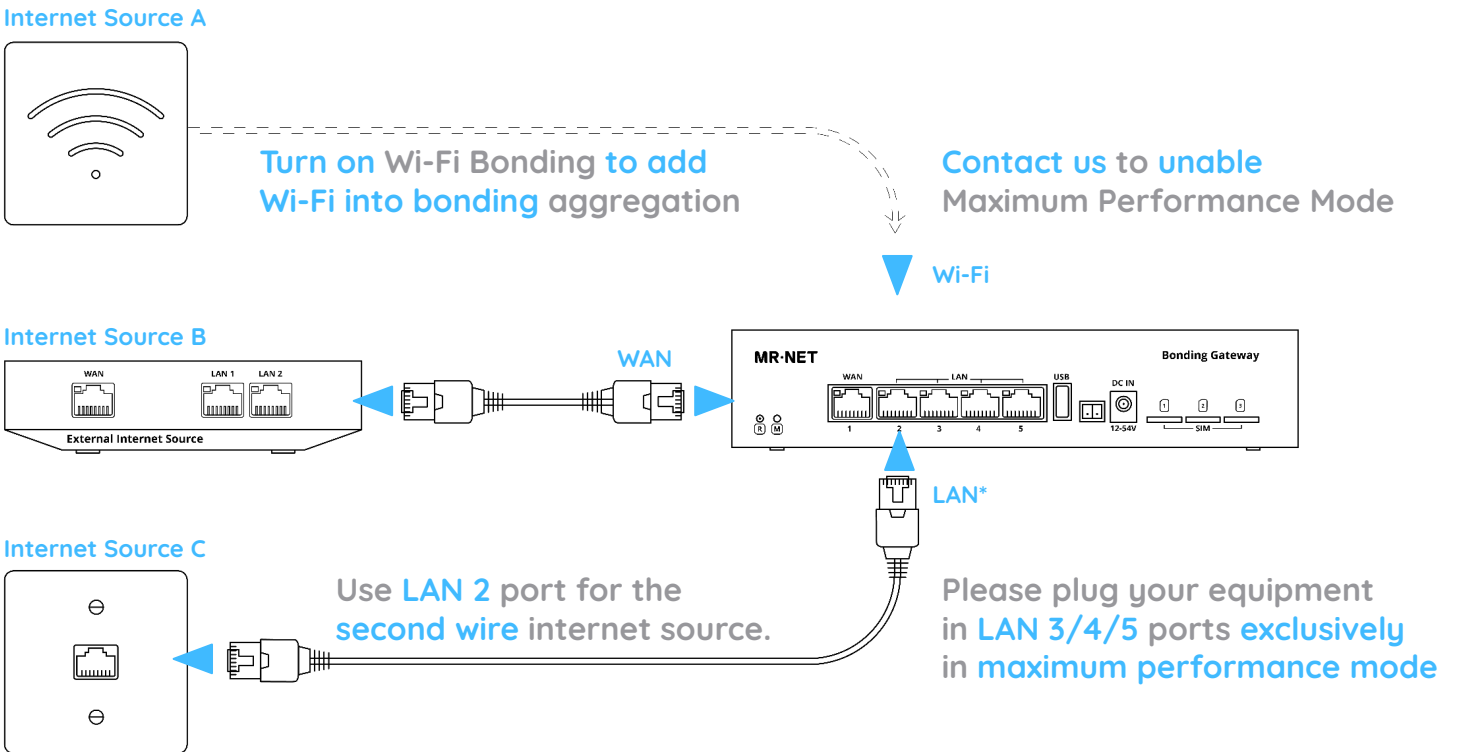




5 - Failover mode

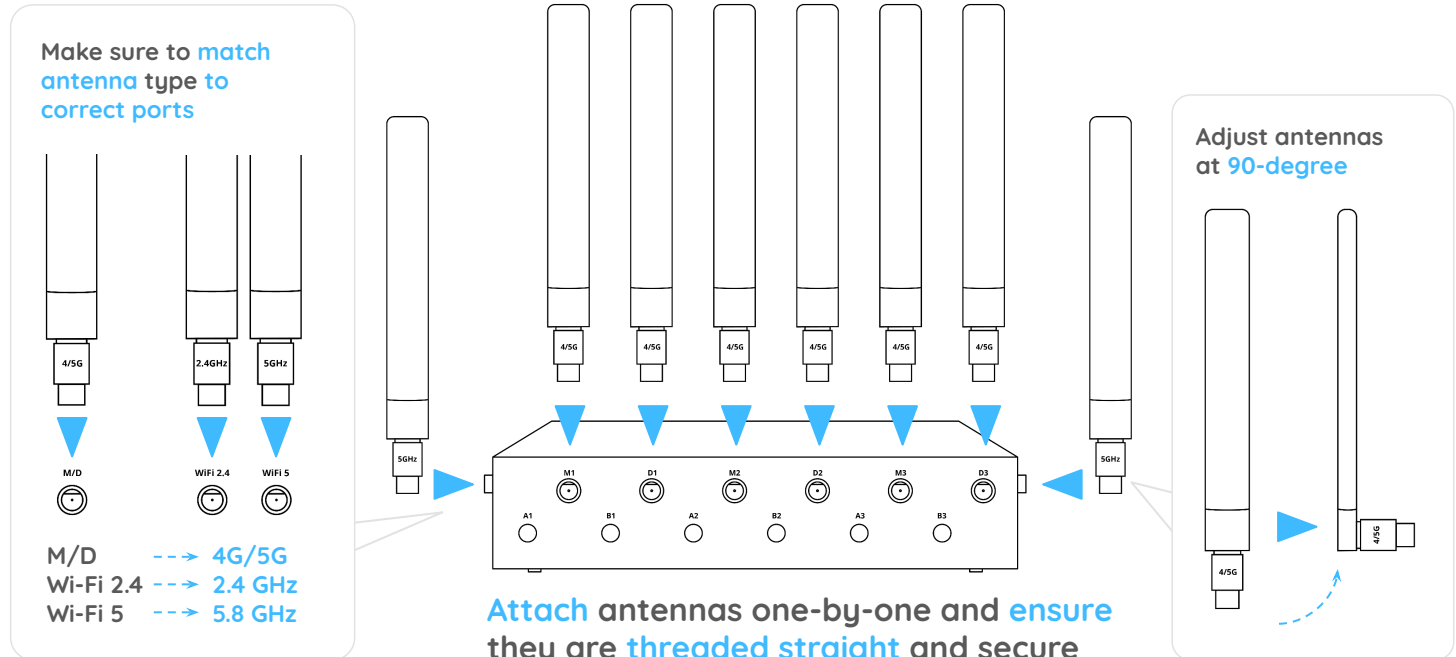


6 - Maximum performance



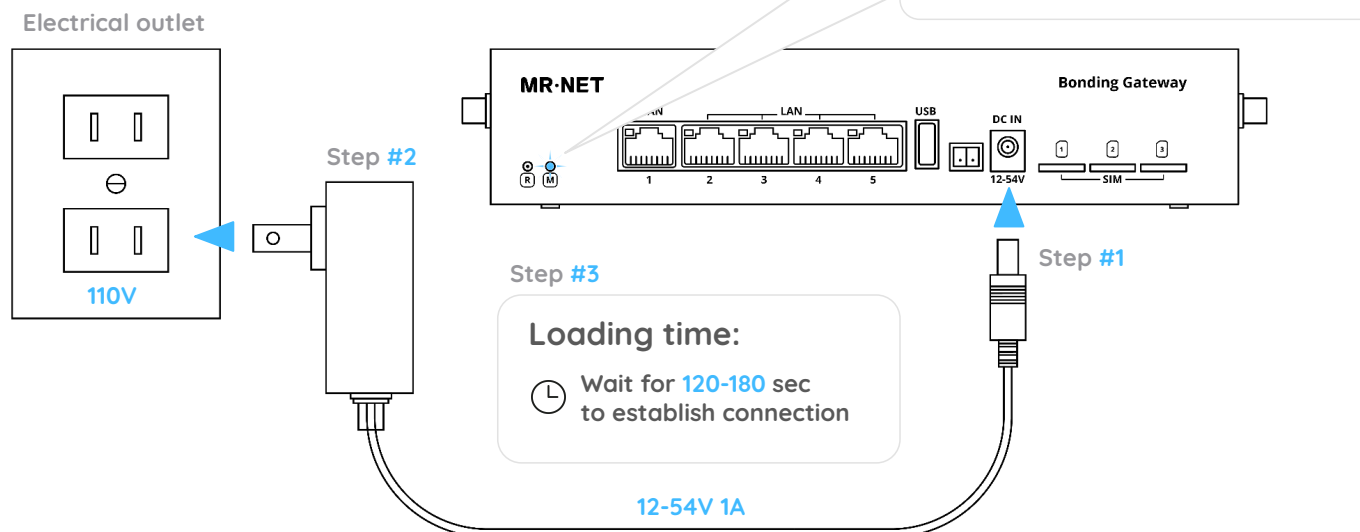
4. Operation and configuration

1 - Assemble the Bonging Gateway



2 - Power up equipment and wait for a blue light

Plug into power outlet and wait up to 2-3 minutes for a blue light



7. FAQ

Important Tips: Follow these guidelines to ensure safe and optimal performance:

1. Use certified power adapters only

Avoid uncertified power supply adapters, as they could damage the device. Use only adapters rated 9-54V, 1A. Contact us if you are unsure which power supply is suitable for your equipment.

2. Compliance with equipment

The device must be only used in strict compliance with client equipment operating, energy and safety requirements.

3. Don't mix 4G/5G and Wi-Fi antennas

Do not confuse 4G/5G antennas with 2.4 Ghz & 5 Ghz Wi-Fi antennas. Each antenna has engravings indicating its type.

4. Avoid metal obstructions

Do not place the equipment near metal constructions, as they can block cellular signals.

5. Prefer LAN for best performance

Use LAN connections for your equipment whenever possible. Wi-Fi is an option but less ideal, especially for high-bandwidth tasks like video streaming.

6. Distinguish WAN and LAN ports

Don't confuse WAN and LAN ports. The WAN port is for adding optional extra internet sources from other providers to the bonded connection (the main one is cellular). LAN ports are for hooking up your devices that need internet access.

7. SIM cards

Do not use our SIM cards in third-party equipment. If you want to use your own SIM cards, contact our support team to update device settings for the new SIM cards.

8. Metal Body

The device's case is made of a durable metal. IP50 Class of the protection. Protected from limited dust ingress. Not protected from any liquids.

