KiweeBroadband

# MoCA 2.5 Adapter

## with 4 × 2.5GbE Ethernet Ports

**Model KB-M3-05**



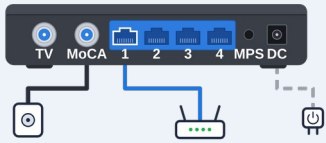

**Up to 2.5 Gbps over coax** | **4 × 2.5GbE built-in switch** | **AES encryption with MPS**

# User Guide

Coax-to-Ethernet · Up to 2.5 Gbps over your existing coax · English

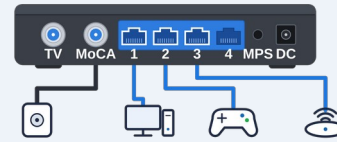
# Quick Start

### 1 Adapter A at the router



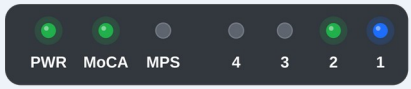

Wall outlet → **MoCA**, router → any port **1–4**, then power.

### 2 Adapter B in another room



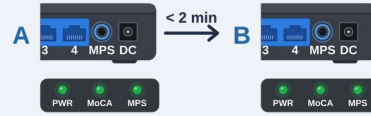

Wall outlet → **MoCA**, your devices → ports **1–4**, then power.

### 3 Wait about a minute




● PWR and ● MoCA on: you're online. Port LEDs: ● 2.5GbE device, ● 1GbE or slower.

### 4 Secure it (recommended)




Turn on encryption on A, then press **MPS** on A and on B within 2 min (section 7).

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# 1 Welcome

Thank you for choosing the Kiwee Broadband **KB-M3-05** MoCA 2.5 Adapter with four 2.5GbE Ethernet ports.

The KB-M3-05 turns the coax cable that is already in your walls — the same cable used for cable TV and cable internet — into a fast, stable wired network. Plug one adapter into your router, another in any room with a coax outlet, and up to four devices in that room get a wired connection — no new cables, no drilling, no Wi-Fi dead zones.




## Highlights

**4 × 2.5GbE ports**
Built-in switch for a PC, console, NAS and Wi-Fi access point.

**Up to 2.5 Gbps over coax**
MoCA 2.5 with low latency for gaming and 4K streaming.

**Cable TV and internet friendly**
TV pass-through port (5–1002 MHz); DOCSIS 3.1 setup included.

**Easy encryption**
128-bit AES, copied to every adapter with the MPS button.

**Speed-coded port LEDs**
Blue for a 2.5GbE device, green for 1GbE or slower.

**Up to 16 MoCA devices**
Works with band-D MoCA devices, e.g. Kiwee KB-M3-02 and KB-M3-03.

> **New on the KB-M3-05: the MPS LED**
>
> A dedicated **MPS** (MoCA Protected Setup) LED shows at a glance whether each adapter is secured: ● **solid green** when a MoCA security password is active, **off** when the adapter is not encrypted (factory default). No need to open the web page to check your pairing — just look at the LEDs (section 7).

# 2 Before You Start

## In the box



**2 ×** KB-M3-05 adapter



**2 ×** power adapter
12 V DC, 2 A



**2 ×** coax cable



**2 ×** Ethernet cable



**1 ×** user guide

Missing or damaged item? Contact info@kiwee-broadband.com before installing. Please read the safety information (section 13) first.

## You will also need

- A coax wall outlet in each room where you install an adapter, all connected to the same coax wiring.
- A power outlet near each adapter.
- Devices with an Ethernet port. For best results, use 2.5GbE devices and Cat5e cable or better.
- Splitters rated **5–1675 MHz** (or higher) between your outlets. Older 5–1000 MHz splitters block MoCA signals.

## 2-minute compatibility check

**Works with**

- Cable internet (DOCSIS 3.0 / 3.1) and cable TV on the same coax
- Over-the-air antenna TV
- Fiber or DSL homes with coax wiring
- Other band-D MoCA adapters (MoCA 2.5, 2.0, 1.1)
- Any device with an Ethernet port

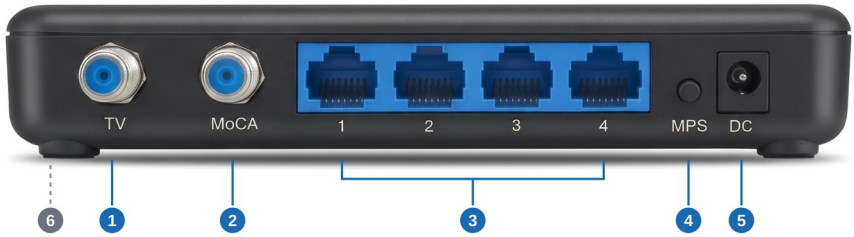
**Not compatible with**

- Satellite TV (e.g. DIRECTV, DISH) on the same coax
- E-band MoCA adapters (e.g. Kiwee KB-M3-02E)
- G.hn coax adapters (different technology)

Have satellite TV? Choose our G.hn Wave 2 adapter **KB-G3-05** instead.

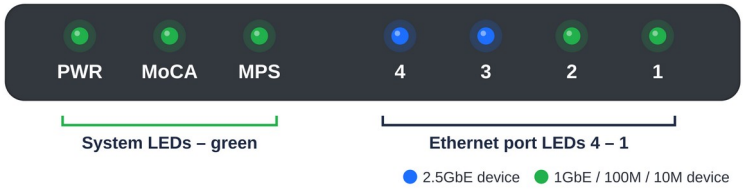
# 3 Get to Know Your Adapter

## Rear panel




| | Port / button | What it does |
|---|---|---|
| 1 | **TV** | To a TV, set-top box or DOCSIS 3.0 modem (5–1002 MHz pass-through). |
| 2 | **MoCA** | To the coax wall outlet. Carries the network (1125–1675 MHz). |
| 3 | **Ethernet 1–4** | 2.5GbE ports for your router or devices (also 1G, 100M, 10M). |
| 4 | **MPS** | Copies encryption settings to other adapters (section 7). |
| 5 | **DC** | 12 V DC, 2 A input. Use only the supplied power adapter. |
| 6 | **Reset (underside)** | Hold for 10 seconds to restore factory settings. |

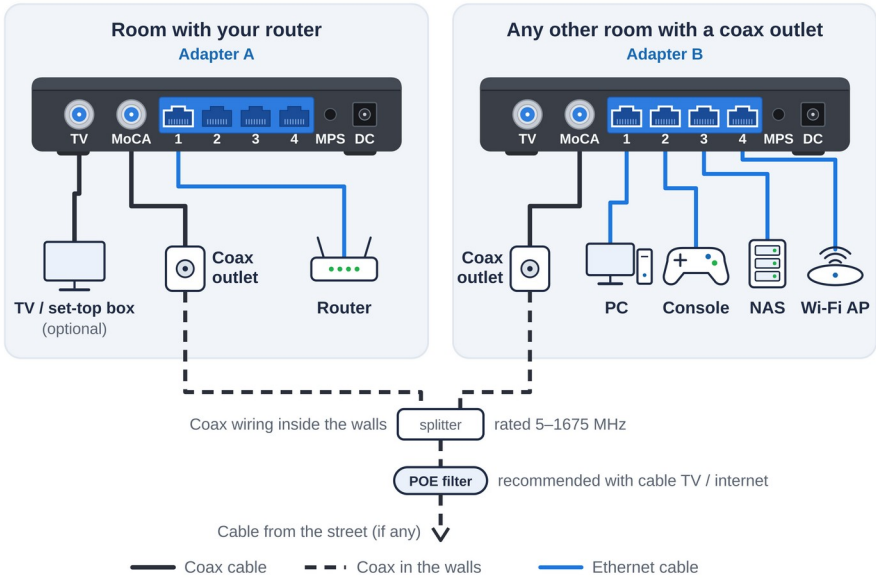
## LED indicators (top panel)




| LED | Status and meaning |
|---|---|
| **PWR** | • **Solid green** – powered on • **Off** – no power |
| **MoCA** | • **Solid green** – connected to at least one other MoCA adapter<br>• **Blinking green** – data on the coax • **Off** – no other adapter found |
| **MPS** | • **Solid green** – a MoCA security password is active: encrypted (128-bit AES)<br>• **Off** – encryption off (factory default). All adapters must match. |
| **1–4** | • **Solid blue** – 2.5GbE device • **Solid green** – 1GbE or slower device<br>• **Blinking** – data being transferred • **Off** – nothing connected, or device off |

# 4 Plan Your Network

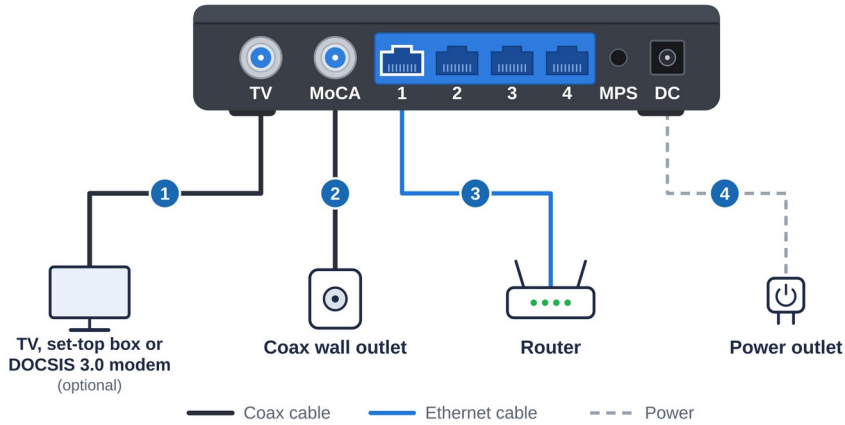
You need at least two adapters: one next to your router (Adapter A) and one in each room where you want a wired connection (Adapter B, C…). All adapters must be connected to the same coax wiring.




## Good to know

- **Any port, any device.** All four Ethernet ports are identical.
- **Local traffic stays local.** Devices on one adapter talk at full speed without using the coax.
- **The coax link is shared.** Up to 2.5 Gbps for all adapters (up to 16 MoCA devices); actual speed depends on cables, splitters and distance.
- **Check your splitters.** Use splitters rated 5–1675 MHz or higher between adapters; avoid amplifiers unless they are MoCA-compatible.
- **Add a POE (Point-of-Entry) filter.** With cable TV or internet, a MoCA POE filter where the cable enters your home keeps your network private (DOCSIS 3.1: use a model rated for it).
- **One path only.** Connect each adapter to your network through a single cable path — a second cable to the same router or switch creates a loop that can stall your network.

# 5 Install the First Adapter (at the Router)




1. **TV port (optional).** If a TV, set-top box or DOCSIS 3.0 cable modem uses this outlet, disconnect its coax cable from the wall and plug it into the adapter's **TV** port. A modem stays connected to your router as before.
2. **Coax.** Connect the supplied coax cable from the wall outlet to the **MoCA** port. Hand-tighten both ends.
3. **Router.** Connect the supplied Ethernet cable from a LAN port on your router to any Ethernet port (**1–4**) on the adapter.
4. **Power.** Plug in the power adapter. The **PWR** LED lights green; the port LED lights **blue** if your router has a 2.5GbE port, or **green** if it is 1GbE or slower.

### Good to know

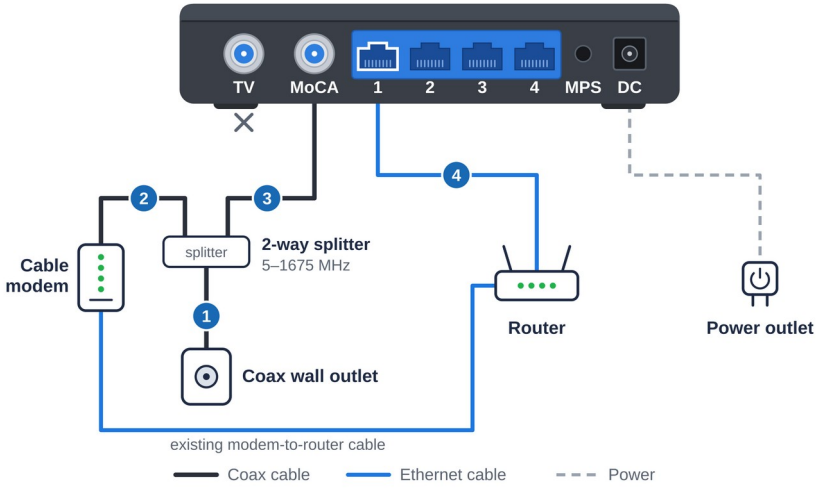
**Cable modem?** Check the DOCSIS version on its label. DOCSIS 3.0: use the TV port (step 1). **DOCSIS 3.1: do not use the TV port** – follow the setup on the next page.

The **MoCA** LED stays off until a second adapter is connected and powered on.

The three free ports work like a switch: connect a NAS, a game console or a streaming box near your router.

## Cable internet: DOCSIS 3.1 modem

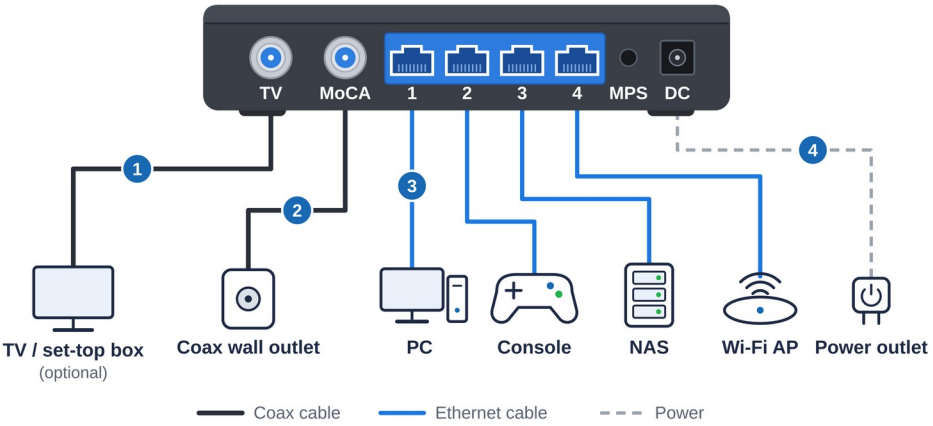
DOCSIS 3.1 can use frequencies above 1 GHz: the adapter's **TV** port does not pass them (it stops at 1002 MHz), and they come close to the MoCA band. With a DOCSIS 3.1 modem, connect the modem through a **splitter** – not the TV port – and set your adapters to the **high D-band**.




1. **Splitter.** Connect the coax wall outlet to the input of a 2-way splitter rated 5–1675 MHz.
2. **Modem.** Connect one splitter output to your modem's coax input.
3. **Adapter.** Connect the other splitter output to the adapter's **MoCA** port. Do not use the **TV** port for the modem.
4. **Router and power.** Keep the modem connected to your router, connect a router LAN port to any adapter port (**1–4**), then plug in the power adapter.
5. **High D-band.** In the web page of **every** adapter (section 8), set the MoCA frequency range to the high D-band, then save and reboot. All adapters must use the same band.

> **Good to know**
>
> In the high D-band, the maximum MoCA speed can be slightly lower. If you add a POE filter, choose one rated for DOCSIS 3.1 so that it passes all of your modem's signals.

# 6 Install Additional Adapters




1. **TV (optional).** If a TV or set-top box uses the outlet, connect its coax cable to the **TV** port.
2. **Coax.** Connect the coax wall outlet to the **MoCA** port.
3. **Devices.** Connect up to four devices — PC, console, NAS, Wi-Fi access point — to ports **1–4**.
4. **Power.** Plug in the power adapter.
5. **Check the LEDs.** After about a minute: ● **PWR** green, ● **MoCA** green, and one port LED per connected device: ● **blue** = 2.5GbE device, ● **green** = 1GbE or slower device.

That's it — your devices are now online. Repeat these steps for each additional room.

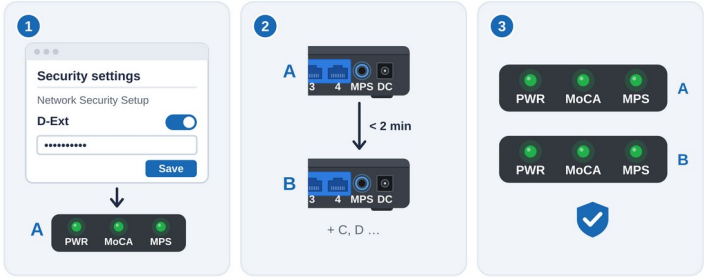
## What you should see




**A** (at the router) and **B** (in another room) when everything works: ● **PWR** and ● **MoCA** on, and one lit port LED per connected device (● 2.5GbE, ● 1GbE or slower). The **MPS** LED turns ● green once you secure your network (section 7).

# 7 Secure Your Network (Encryption and MPS)

MoCA encryption is **off by default**. Turn it on once on the first adapter (A), then copy its settings to your other adapters with the **MPS** button: your traffic is then protected with 128-bit AES. **Recommended** in apartment buildings, or wherever the coax wiring may be shared.




## Step 1 · Turn on encryption on adapter A

1. Open the web page of adapter A, the first adapter (section 8).
2. Go to the **Security settings** menu.
3. Under **Network Security Setup**, enable **D-Ext** and set your password.
4. Click **Save**, then reboot the adapter. Its ● **MPS** LED is now green: encryption is on.

## Step 2 · Copy the settings to your other adapters

1. Press the **MPS** button on adapter A.
2. Within **2 minutes**, press the **MPS** button on each of your other adapters (B, C…).
3. The adapters pair automatically and copy adapter A's settings. An adapter is secured when its ● **MPS** and ● **MoCA** LEDs are green.

> **Check your network at a glance**
>
> All adapters must show the same **MPS** state: all ● green = secured; all ● off = not encrypted (factory default).
>
> An adapter whose MPS LED stays off cannot connect (its **MoCA** LED is off): press **MPS** on adapter A, then on that adapter within 2 minutes.

**Add an adapter later.** Install it (section 6), press **MPS** on adapter A, then on the new adapter within 2 minutes.

**Turn encryption off.** Restore the factory settings of every adapter (section 10); their MPS LEDs turn off.

# 8 Web Management

Each adapter has a built-in web page. You only need it to turn on encryption (section 7) or, with a DOCSIS 3.1 modem, to select the high D-band (section 5).

| | |
|---|---|
| **IP address** | 192.168.144.200 (the same on every adapter) |
| **Username** | admin |
| **Password** | maxlinear |

## Open the web page

1. Give your computer's wired network a fixed IP address: **192.168.144.100**, subnet mask **255.255.255.0**.
2. Connect the computer directly to one of the adapter's Ethernet ports.
3. Open a web browser and go to **http://192.168.144.200**.
4. Log in with **admin** / **maxlinear** to check the link status or change settings such as frequency range, transmission rate and IP configuration.
5. When you are done, set your computer back to obtain an IP address automatically.

**Where to set a fixed IP address**

**Windows 11:** Settings › Network & internet › Ethernet › IP assignment › Edit › Manual

**macOS:** System Settings › Network › Ethernet › Details › TCP/IP › Configure IPv4: Manually

**Notice**

All adapters share this address. To reach one specific adapter, unplug the power of the others — or give each adapter its own address in its IP settings (e.g. 192.168.144.201, .202…).

All adapters must keep the same MoCA frequency settings (for example, all on the high D-band) to see each other. If in doubt, restore factory settings (section 10).

# 9 Advanced Uses

## Wired backhaul for mesh Wi-Fi

Connect a mesh node or Wi-Fi access point to any port of an adapter. Its port LED shows the link speed (● blue = 2.5GbE). If your mesh system asks, enable “Ethernet backhaul” in its app: each node then gets a stable wired link instead of a wireless hop.

## Fiber in another room (ONT-to-router link)

If your fiber box (ONT) is far from where you want your router, a pair of adapters can carry the internet connection:

1. Connect the ONT to any port of Adapter A.
2. Connect your router’s WAN (Internet) port to any port of Adapter B.

> ⚠ **Use a dedicated pair**
>
> Here the adapters sit before your router: any other device or MoCA adapter on the same coax would be on the internet side of your router.

## Measure the coax link speed

Internet speed tests measure your internet plan, not the coax link. To measure the link itself, connect a computer to each adapter and use the free tool iperf3 with parallel streams — the method we use in our lab:

Computer 1 (server): `iperf3 -s`

Computer 2 (client): `iperf3 -c <IP of computer 1> -w 1m -P 20 -i 10 -t 5`

Add **-R** to the client command to measure the other direction. A single stream, such as a file copy, usually shows less than the link can carry.

# 10 Troubleshooting

| Problem | Try this |
|---|---|
| **PWR LED is off** | • Check that the power adapter is firmly plugged into the adapter and the wall outlet.<br>• Try another power outlet. Use only the supplied power adapter. |
| **MoCA LED is off** | • Make sure at least two adapters are powered on.<br>• Check that the wall cable goes to the **MoCA** port, not the TV port.<br>• **Direct test:** connect two adapters with a short coax cable (MoCA port to MoCA port). If both MoCA LEDs turn green, the adapters work — the problem is in your coax wiring.<br>• Replace old splitters with models rated 5–1675 MHz and remove amplifiers between adapters.<br>• Try another outlet and tighten all connectors. Some outlets are not connected, especially in homes without cable service.<br>• Compare the MPS LEDs: all adapters must show the same state (section 7).<br>• Changed the frequency band? Every adapter must use the same band (section 5). |
| **MPS LED stays off after pairing** | • Check that encryption is on in adapter A: its MPS LED must be green (section 7).<br>• Press MPS on adapter A, then on this adapter within 2 minutes.<br>• Still off? Restore this adapter's factory settings and pair it again. |
| **MPS LEDs green, but one MoCA LED is off** | • That adapter may hold different encryption settings. Restore its factory settings, then pair it again with MPS (section 7). |
| **Speed is lower than expected** | • The coax link carries up to 2.5 Gbps, shared by all adapters. Real-world throughput depends on your wiring.<br>• With a 1GbE device (green port LED), the maximum is about 1 Gbps.<br>• Internet speed tests show your internet plan, not the coax link — see section 9.<br>• Remove unnecessary splitters, cover unused splitter outputs with 75 Ω terminators and tighten all connectors. |
| **Port LED is off** | • Check that the device is on and the cable clicks into place.<br>• Try another port or another Ethernet cable. |

| Problem | Try this |
|---|---|
| **Port LED is green, not blue** | • Green means the device is connected at 1GbE or slower. This is normal for devices without a 2.5GbE port.<br>• If the device does have a 2.5GbE port: use a Cat5e or better cable and set its network speed to “Auto”. |
| **Port LED is lit but no internet** | • Check that the MoCA LED is green on both adapters.<br>• Make sure Adapter A is connected to a LAN port on your router.<br>• Restart the device (or unplug and reconnect its cable) to get a new IP address. |
| **Network slow, unstable or dropping** | • **Loop check:** each adapter must reach your router through one cable path only — remove any second cable to the same router or switch.<br>• Tighten all coax connectors, replace damaged cables and use splitters rated 5–1675 MHz.<br>• Keep the adapter ventilated and use the supplied power adapter. |
| **Cable modem, TV or set-top box stops working** | • **DOCSIS 3.1 modem:** connect it through a splitter, not the TV port, and set every adapter to the high D-band (section 5).<br>• Other devices: connect them to the adapter’s **TV** port, or through a 2-way splitter rated 5–1675 MHz.<br>• Install a MoCA POE filter where the cable enters your home (DOCSIS 3.1: a model rated for it). |
| **You have satellite TV** | • MoCA adapters cannot share the coax with satellite TV. Choose the Kiwee G.hn Wave 2 adapter **KB-G3-05** instead. |
| **Cannot open the web page** | • Check your computer’s IP settings and go to http://192.168.144.200 (section 8). |

## Factory reset

Press and hold the **reset button on the underside** of the adapter for **10 seconds**, for example with a straightened paper clip. All settings return to factory defaults — encryption is turned off and the **MPS** LED goes off.

# 11 Frequently Asked Questions

**Do I need an adapter next to my router?**

Yes. MoCA needs at least two adapters: one connected to your router, and one in each room where you want a wired connection. A router with built-in MoCA on band D can replace adapter A.

**Will it affect my cable TV or internet?**

Normally not: MoCA uses its own frequency band (1125–1675 MHz), above most cable TV and internet signals. With a DOCSIS 3.1 modem, use the setup in section 5.

**Is my network encrypted out of the box?**

No, encryption is off by default. Turn it on once on adapter A, then copy it to your other adapters with MPS (section 7). A green MPS LED shows each encrypted adapter.

**Can I mix it with other MoCA adapters?**

Yes, with MoCA 2.5, 2.0 and 1.1 devices that use band D — as most MoCA adapters do — such as Kiwee KB-M3-02 and KB-M3-03. A link with an older device runs at that device's speed.

**Does it work without cable TV service?**

Yes. MoCA only needs the coax wiring. Make sure your outlets are connected to each other, usually through a splitter.

**How fast will it be?**

The coax link carries up to 2.5 Gbps, shared by all adapters; real-world speed depends on your wiring. A device on a green (1GbE) port is limited to about 1 Gbps. To measure the link itself, see section 9.

**Can I connect more than four devices?**

Yes. Connect a network switch to any of the four ports.

**Do I have to configure anything?**

Usually not: the adapters find each other automatically. Use the web page only to turn on encryption (section 7) or, with a DOCSIS 3.1 modem, to select the high D-band (section 5).

# 12 Specifications

| | |
|---|---|
| **Model** | KB-M3-05 |
| **Technology** | MoCA 2.5 |
| **Compatibility** | Backward compatible with MoCA 2.0 and 1.1 devices on band D |
| **Coax data rate** | Up to 2.5 Gbps |
| **MoCA port** | F-type (75 Ω), extended band D (1125–1675 MHz); high D-band selectable |
| **TV pass-through port** | F-type (75 Ω), 5–1002 MHz |
| **Ethernet ports** | 4 × RJ45 2.5GbE (auto-negotiation 2.5G / 1G / 100M / 10M), built-in switch |
| **Max. devices per network** | 16 MoCA devices |
| **Security** | 128-bit AES encryption (off by default), MoCA Protected Setup (MPS) |
| **LED indicators** | PWR, MoCA, MPS (green); Ethernet 1–4 (blue = 2.5GbE device, green = 1GbE / 100M / 10M device) |
| **Buttons** | MPS (rear), Reset (underside) |
| **Management** | Web page, default IP 192.168.144.200 |
| **Power input** | 12 V DC, 2 A (supplied power adapter) |
| **Recommended cables** | RG6 coax; Cat5e or better Ethernet |
| **Certifications** | FCC, CE |
| **Operating temperature** | 0 °C to 40 °C (32 °F to 104 °F) |
| **Storage temperature** | −20 °C to 85 °C (−4 °F to 185 °F) |
| **Operating humidity** | 10 % to 85 % non-condensing |
| **Storage humidity** | 5 % to 90 % non-condensing |

Specifications are subject to change without notice. The data rate is the maximum MoCA 2.5 network rate; actual throughput depends on your wiring and environment.

# 13 Safety and Regulatory Information

## Safety

- For indoor use only. Keep the adapter dry, uncovered (do not block its ventilation openings) and away from heat sources.
- Use only the supplied 12 V DC, 2 A power adapter. Unplug it during lightning storms or when unused for long periods.
- Do not open the housing: there are no user-serviceable parts inside.
- Ground coax installations according to local regulations (in the USA: ANSI/NFPA 70, National Electrical Code).

## FCC (USA)

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.

**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.

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

## CE (EU)

This product complies with the EMC Directive 2014/30/EU and the RoHS Directive 2011/65/EU, and meets EN 55032 (emission) and EN 55035 (immunity).

## Disposal (WEEE)



This symbol of a crossed-out wheeled bin means the product must not be disposed of with household waste. Take it to a collection point for the recycling of electrical and electronic equipment. Proper disposal protects the environment and human health.

# 14 Words to Know

| | |
|---|---|
| **2.5GbE** | Ethernet at up to 2.5 Gbps. 2.5GbE ports also work with 1GbE, 100 Mbps and 10 Mbps devices. |
| **Backhaul** | The link between a mesh Wi-Fi node and the main router. A wired backhaul is faster and more stable than a wireless one. |
| **Band D / high D-band** | The frequency range MoCA uses on this adapter (1125–1675 MHz). The high D-band uses only its upper part, clear of DOCSIS 3.1 signals. |
| **Coax** | The round TV cable with screw-on F-connectors found in most homes. |
| **DOCSIS** | The technology used by cable modems. DOCSIS 3.1 can use frequencies above 1 GHz. |
| **Encryption** | Scrambles your data so that neighbors sharing the coax cannot read it. MoCA uses 128-bit AES. |
| **MoCA** | Multimedia over Coax Alliance: the standard that carries Ethernet over coax cable. |
| **MPS** | MoCA Protected Setup: the button that copies encryption settings from one adapter to another. |
| **ONT** | Optical Network Terminal: the box that brings fiber internet into your home. |
| **POE filter** | Point-of-Entry filter, fitted where the cable enters your home; it keeps MoCA signals inside. Not to be confused with PoE (Power over Ethernet). |
| **Splitter** | A passive device that divides one coax line into two or more. For MoCA, use models rated 5–1675 MHz. |
| **TV port** | The adapter’s pass-through port for a TV, set-top box or DOCSIS 3.0 modem (5–1002 MHz). |

# 15 My Network

Keep a record of your installation — handy for adding adapters later or when contacting support.

| Adapter | Room / location | Connected devices | MPS green |
|---|---|---|---|
| A | | | ☐ |
| B | | | ☐ |
| C | | | ☐ |
| D | | | ☐ |
| E | | | ☐ |
| F | | | ☐ |

## Notes (encryption password, Wi-Fi name, purchase date…)

**Before you contact support: a 1-minute check**

☐ ● **PWR** and ● **MoCA** are green on every adapter.

☐ All **MPS** LEDs show the same state — all green or all off (section 7).

☐ Every splitter between adapters is rated 5–1675 MHz; no amplifier in between.

☐ DOCSIS 3.1 modem? It is on a splitter and every adapter uses the high D-band (section 5).

☐ You tried the direct test with a short coax cable (section 10, “MoCA LED is off”).

KiweeBroadband

# Warranty and Support

Kiwee Broadband provides a **1-year limited hardware warranty** from the date of purchase.

## We're here to help

**info@kiwee-broadband.com**

**kiwee-broadband.com**

Bought on Amazon? Contact us from **Your Orders › Contact seller**.

Scan to visit kiwee-broadband.com

**To help us solve your issue quickly, please include:**

your model (KB-M3-05) and order number · the color of each LED on every adapter · your modem's DOCSIS version, if you have cable internet · a photo of how the adapters are connected

***Thank you for choosing Kiwee Broadband.*** *Enjoy your fast wired network!*



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