

# OCCOM ROUTER GUIDE

CHECK WITH OUR ROUTERS 21/07/2022 (KATHY)

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# CHANGE LOG

Date	Content	Page	Follower
21/07/2022	- update the form	All pages	Kathy
21/04/2022	- Netgear Orbi Mesh is off shelf.	3	Kathy
21/04/2022	- Tplink C20 (AC750) is back.	3	Kathy
21/04/2022	- Netgear AC750 (6020) is for pre-installation only.	3	Kathy

# 1. ROUTER LIST

## NETGEAR

(Main Promotion)

<p><b>Netgear AX2400 (RAX30)</b> <b>*NEW*</b></p>		<p><b>Performance:</b> 1G Ethernet Port <b>Compatible for:</b> FTTP, HFC, FTTC, FTTR, Fixed Wireless <b>✗Not compatible:</b> FTTB, FTTN</p> <p><b>\$260</b></p> <p><b>Recommended plans:</b> 100M, 250M, 1G <b>Compatible plans:</b> 12M, 25M, 50M, 100M, 250M, 1G</p> <p>Discount: <b>MAX \$20</b> (no matter what kind of situation)</p>
<p><b>Netgear AC750 (6020)</b> - from 10/3/2022: for pre-installation only - will be off-shelf after that</p>		<p><b>Performance:</b> 100M Ethernet Port <b>Compatible for:</b> FTTP, FTTR, FTTC, HFC, Fixed Wireless <b>✗Not compatible:</b> FTTB, FTTN</p> <p><b>\$80</b></p> <p><b>Recommended plans:</b> 12M, 25M, 50M, 100M <b>Compatible plans:</b> 12M, 25M, 50M, 100M <b>✗Not compatible:</b> 250M, 1G</p> <p>Discount: check <b>1</b></p>
<p><b>Netgear AC1200 (6120)</b> <b>OFF SHELF</b></p>		<p><b>Performance:</b> 100M Ethernet Port <b>Compatible for:</b> FTTP, FTTR, FTTC, HFC, Fixed Wireless <b>✗Not compatible:</b> FTTB, FTTN</p> <p><b>\$140</b></p> <p><b>Recommended plans:</b> 50M, 100M <b>Compatible plans:</b> 12M, 25M, 50M, 100M <b>✗Not compatible:</b> 250M, 1G</p> <p>Discount: check <b>1</b></p>



Ports: **Internet**, **LAN1**, **LAN2**, **LAN3**, **LAN4**

Buttons: power, reset (pips out)

**No DSL Port**

Netgear  
AX4200  
(RAX42)

**OFF SHELF**



\$380

Performance: 1G Ethernet Port

Compatible for: FTTP, FTTR, FTTC, HFC, Fixed Wireless

✗ **Not compatible: FTTB, FTTN**

Recommended plans: 100M, 250M, **1G**

Compatible plans: 12M, 25M, 50M, 100M, 250M, 1G

Discount: check **\*1**



Ports: **Internet**, **LAN1**, **LAN2**, **LAN3**, **LAN4**

Buttons: power, reset (pips in)

**No DSL Port**

Netgear  
AX1800  
Mesh (Orbi-  
RBK 352) (2  
Pack)

**OFF SHELF**



\$360

Performance: 1G Ethernet Port

Compatible for: FTTP, FTTR, FTTC, HFC, Fixed Wireless

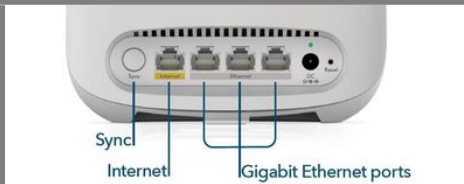
✗ **Not compatible: FTTB, FTTN**

Recommended plans: 100M, 250M, **1G**

Compatible plans: 12M, 25M, 50M, 100M, 250M, 1G

Discount:

MAX \$20 (no matter what kind of situation)



Ports: **Internet**, **LAN1**, **LAN2**, **LAN3**

Buttons: power, reset (pips in)

**No DSL Port**

Netgear AX  
1800  
(MK62)

**OFF SHELF**



\$340

Performance: 1G Ethernet Port

Compatible for: FTTP, FTTR, FTTC, HFC, Fixed Wireless

✗ **Not compatible: FTTB, FTTN**

Recommended plans: 100M, 250M, **1G**

Compatible plans: 12M, 25M, 50M, 100M, 250M, 1G

Discount:

MAX \$20 (no matter what kind of situation)



**Ports:** Ethernet, Internet (WAN)  
**Buttons:** power, reset (pins in)  
**No DSL Port**



**Netgear  
 AX1800  
 (RAX 10)**  
**OFF SHELF**

**\$190**

**Performance:** 1G Ethernet Port  
 Dual Band Router  
**Compatible for:** FTTP, FTTR, FTTC, HFC,  
 Fixed Wireless

**✗ Not compatible:** FTTB, FTTN

**Recommended plans:** 100M, 250M, 1G  
**Compatible plans:** 12M, 25M, 50M, 100M,  
 250M, 1G

About discount: check \*1



**Ports:** Internet, LAN1, LAN2, LAN3,  
 LAN4

**Buttons:** power, reset (pins in)  
**No DSL Port**



**TP-Link  
 AC1200  
 (VR400)**  
**\*NEW\***

**\$160**

**Performance:** 1G Ethernet Port  
**Compatible for:** FTTP, HFC, FTTC, FTTR,  
 Fixed Wireless, FTTB, FTTN

**Recommended plans:** 25M, 50M, 100M,  
 250M


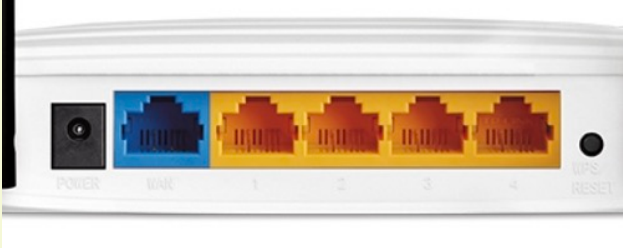



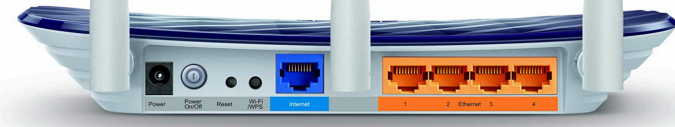
**Compatible plans:** 12M, 25M, 50M, 100M,  
 250M, 1G

**Special remark:** not that recommend for 1G  
 although it is compatible with 1G




**Ports:** LAN4/WAN, LAN1, LAN2, LAN3  
**DSL**

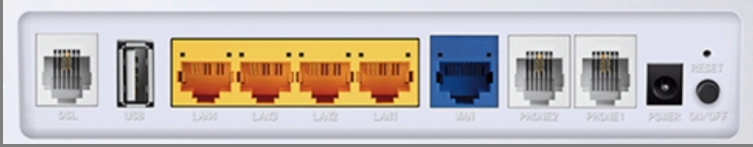
**Buttons:** power, reset (pins out)

<p><b>Tplink N300 (841)</b> 50% of the pre-installation projects using this router</p>		<p><b>Performance:</b> 100M Ethernet Port <b>Single Band Router</b></p> <p><b>Compatible for:</b> FTTP, FTTR, FTTC, HFC, Fixed Wireless</p> <p><b>\$60</b></p> <p>✗ <b>Not compatible:</b> FTTB, FTTN</p> <p><b>Recommended plans:</b> 12M, 25M <b>Not recommend for 50M or above</b></p> <p><b>Compatible plans:</b> 12M, 25M, 50M</p> <p>✗ <b>Not compatible:</b> 250M, 1G</p>
		<p><b>Ports:</b> WAN, LAN1, LAN2, LAN3, LAN4</p> <p><b>Buttons:</b> reset (pips out)</p> <p><b>No DSL Port</b></p>
<p><b>Tplink AC750 (C24)</b> <b>Only for Preinstallation</b></p>		<p><b>Performance:</b> 100M Ethernet Port</p> <p><b>Compatible for:</b> FTTP, FTTR, FTTC, HFC Fixed Wireless</p> <p>✗ <b>Not compatible:</b> FTTB, FTTN</p> <p><b>\$80</b></p> <p><b>Recommended plans:</b> 12M, 25M, 50M, 100M</p> <p><b>Compatible plans:</b> 12M, 25M, 50M, 100M</p> <p>✗ <b>Not compatible:</b> 250M, 1G</p>
		<p><b>Ports:</b> WAN, LAN1, LAN2, LAN3, LAN4</p> <p><b>Buttons:</b> reset/wps (pips out)</p> <p><b>No DSL Port</b></p>
<p><b>Tplink AC750 (C20)</b> <b>BACK ON SHELF</b></p>		<p><b>Performance:</b> 100M Ethernet Port</p> <p><b>Compatible for:</b> FTTP, FTTR, FTTC, HFC, Fixed Wireless</p> <p>✗ <b>Not compatible:</b> FTTB, FTTN</p> <p><b>\$80</b></p> <p><b>Recommended plans:</b> 12M, 25M, 50M, 100M</p> <p><b>Compatible plans:</b> 12M, 25M, 50M, 100M</p> <p>✗ <b>Not compatible:</b> 250M, 1G</p>
		<p><b>Ports:</b> Internet, LAN1, LAN2, LAN3, LAN4</p> <p><b>Buttons:</b> power, reset (pips in)</p> <p><b>No DSL Port</b></p>

<p><b>Tplink AC1350 (C60)</b> <b>OFF SHELF</b></p>		<p>\$120</p>	<p><b>Performance:</b> 100M Ethernet Port  <b>Compatible for:</b> FTTP, FTTR, FTTC, HFC, Fixed Wireless  <b>✗ Not compatible:</b> FTTB, FTTN</p> <p><b>Recommended plans:</b> 25M, 50M, <b>100M</b>  <b>Compatible plans:</b> 12M, 25M, 50M, 100M  <b>✗ Not compatible:</b> 250M, 1G</p> <p>Discount: check <b>*1</b></p>
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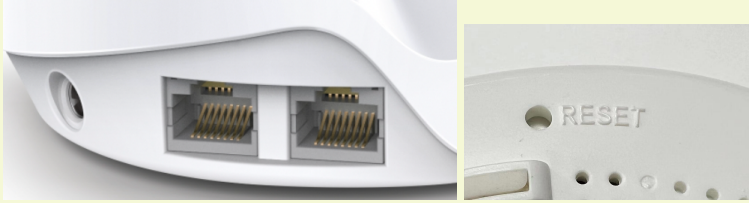
		<p><b>Ports:</b> <b>Internet, LAN1, LAN2, LAN3, LAN4</b></p> <p><b>Buttons:</b> power, wps, <b>reset</b> (pips in)  <b>No DSL Port</b></p>
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<p><b>Tplink AC1600 (VR1600)</b> <b>OFF SHELF</b></p>		<p>\$180</p>	<p><b>Performance:</b> 1G Ethernet Port  <b>Compatible for:</b> FTTP, FTTR, FTTC, HFC, FTTB, FTTN, VDSL Fixed Wireless</p> <p><b>Recommended plans:</b> 50M, 100M, 250M, <b>1G</b>  <b>Compatible plans:</b> 12M, 25M, 50M, 100M, 250M, 1G</p> <p>Discount: check <b>*1</b></p>
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		<p><b>Ports:</b> <b>WAN, LAN1, LAN2, LAN3, LAN4, DSL</b></p> <p><b>Buttons:</b> power, <b>reset</b> (pips in)</p>
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<p><b>Tplink AC1300 Mesh (Deco M5) 2 Pack</b></p>		<p><b>\$199</b></p>	<p><b>Performance:</b> 1G Ethernet Port  <b>Compatible for:</b> FTTP, FTTR, FTTC, HFC, Fixed Wireless</p> <p><b>Recommended plans:</b> 25M, 50M, 100M, <b>250M</b>  <b>Compatible plans:</b> 12M, 25M, 50M, 100M, <b>250M</b></p> <p>Discount:  <b>MAX \$20</b> (no matter what kind of situation)</p>
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		<p><b>Ports:</b> check the photo on the left  <b>Buttons:</b> power, reset (at the bottom) (pips in)</p>
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<p><b>Tplink AC1300 Mesh (Deco M5) 3 Pack</b></p>		<p><b>\$279</b></p>	<p><b>Performance:</b> 1G Ethernet Port  <b>Compatible for:</b> FTTP, FTTR, FTTC, HFC, Fixed Wireless</p> <p><b>Recommended plans:</b> 25M, 50M, 100M, 250M  <b>Compatible plans:</b> 12M, 25M, 50M, 100M, 250M</p> <p>Discount: <b>MAX \$20</b> (no matter what kind of situation)</p>
			<p><b>Ports:</b> check the photo on the left  <b>Buttons:</b> power, reset (at the bottom) (pips in)</p>
<p><b>Tplink N300 (9970) VSDL Router</b></p>		<p><b>\$100</b></p>	<p><b>Performance:</b> 100M Ethernet Port  <b>Compatible for:</b> VDSL, FTTB, FTTN, FTTP, FTTR, FTTC, HFC, Fixed Wireless</p> <p><b>Recommended plans:</b> 12M, 25M  <b>Compatible plans:</b> 12M, 25M, 50M, 100M  <b>Not compatible:</b> 250M, 1G</p> <p>Discount: check *1</p>
			<p><b>Ports:</b> LAN4/WAN, LAN1, LAN2, LAN3 DSL  <b>Buttons:</b> power, reset (pips out)</p>

# D-Link

<p><b>Dlink AC2600 (DIR 882)</b>  <b>OFF SHELF</b></p>		<p><b>\$280</b></p>	<p><b>Performance:</b> 1G Ethernet Port  <b>Compatible for:</b> FTTP, FTTR, FTTC, HFC, FTTB, FTTN, VDSL, Fixed Wireless</p> <p><b>Recommended plans:</b> 50M, 100M, 250M, 1G  <b>Compatible plans:</b> 12M, 25M, 50M, 100M, 250M, 1G</p> <p>Discount: check *1</p>
			<p><b>Ports:</b> Internet, LAN1, LAN2, LAN3, LAN4, DSL  <b>Buttons:</b> power, reset (pips in)</p>



<b>Delivery</b>	<b>Normal Router</b>		The logistic team (Syd/Mel office) will deliver the router on the <b>upcoming working</b> day after they complete the first payment (lodge the DDR form in the registration email).
	<b>Expensive Router</b> Mesh router & Netgear AX2400 (RAX30)		The logistic team (Syd/Mel office) will deliver the router only after the system successfully charges the router's fee.  But it may take <b>2 working days</b> for the <b>system to charge a fee</b> . If the customer requests to send/get the router <b>earlier</b> , we could ask them to pay with <b>Bpay</b> and send us a <b>screenshot of the transaction</b> as payment evidence. So, we could deliver the router <b>earlier</b> .
	<b>Normal</b> (Australia post) 2-3 working days	<b>\$18</b>	Usually, this fee is applicable. If there is any further request from the EU, please check with your mentor.
	<b>Express</b> (Australia post) 1-2 working days	<b>\$20</b>	Only when the customer is <b>urgent</b> with the delivery.
	<b>Self pick-up</b>	<b>\$0</b>	Please mark down clearly in the <b>system/self-registration</b> page.

\*Check with our **Occom-Router's Guide** (monthly update) for the in-stock routers and the router's performance.

\*Check with our **Occom's Sales Manual** and Pre-installation project link [https://docs.google.com/spreadsheets/d/1tpk\\_DV8CM7gCfBO3FqwcYAjhgXNG\\_6sHB5pXRp9GTmI/edit#gid=0](https://docs.google.com/spreadsheets/d/1tpk_DV8CM7gCfBO3FqwcYAjhgXNG_6sHB5pXRp9GTmI/edit#gid=0) as some places may have pre-installed routers from Occom (pre-installation link), and may not need offer a router.

\*\*The router's fee will be charged manually when our operation team (syd/mel) delivers the router. You can just tell the EU; we will charge the router's fee (+delivery fee) on the delivery day.

- ▶ If the next day of the registration day is Weekday, then the router will be delivered on the next day. And the fee will be charged on next day. Meanwhile, we will send the email, including the tracking number and the post office.
- ▶ If the next day of the registration day is Weekend, then the router will be delivered on the upcoming Monday. And the fee will be charged on that day.

## DISCOUNT ON ROUTER & ACTIVATION FEE

### ROUTER'S DISCOUNT

**\*1 Except MESH routers, how much discount we can offer to EU for other routers?**

If the router is the in the **"pre-installation project"** (check [https://docs.google.com/spreadsheets/d/1tpk\\_DV8CM7gCfBO3FqwcYAjhgXNG\\_6sHB5pXRp9GTmI/edit#gid=0](https://docs.google.com/spreadsheets/d/1tpk_DV8CM7gCfBO3FqwcYAjhgXNG_6sHB5pXRp9GTmI/edit#gid=0)), then customer can upgrade to a better router by paying the price difference. **(not including mesh)**

Customer doesn't need to post back the pre-installed router, we can ask customer to keep the original router in the apart when they move out.

Carrier	Speed Tier	Contract	Activation fee	Router's fee
NBN	12M	6/12 months	\$0	\$20
	25M	6/12 months	\$10-\$20	\$20-\$40
	50M or above	6/12 months	\$20-\$30	\$20-\$40
		No lock in contract	Maximum \$20	\$20-\$40
LBN/OT	12M	6/12 months	\$0	\$20
	25M	6/12 months	\$20	\$20-\$40
	50M or above	6/12 months	\$30	\$20-\$40
		No lock in contract	Maximum \$20	\$20-\$40

**If EU requests more discount, can check with Manager - Alex/Austin/Kathy.**

## 2. ROUTER'S KNOWLEDGE

### ROUTER'S KNOWLEDGE 1: WHAT IS TP-LINK N300 (841)

**N300:** shows the router's performance

**841:** model number under TP-Link

### ROUTER'S KNOWLEDGE 2: AC/AX VS. N

- AC/AX mean dual band router.
- N means single band router.

### ROUTER'S KNOWLEDGE 3: AC VS. AX

You can understand as AX (WiFi 6) is next level of AC (WiFi 5).

## The differences between 802.11ac and 802.11ax

The new wireless standard—802.11ax, also known as Wi-Fi 6—promises to introduce several technological advancements over its predecessor, 802.11ac, also known as Wi-Fi 5.

	802.11ac (Wi-Fi 5)	802.11ax (Wi-Fi 6)
AP CAPACITY	Single-user support (OFDM)	Multuser support (OFDMA)
AP SPATIAL STREAMS	4	8
BAND	5 GHz	2.4 GHz and 5 GHz
MAXIMUM DATA RATE	6.9 Gbps	9.6 Gbps
MAXIMUM MODULATION	256 QAM	1024 QAM
MU-MIMO	Downlink	Uplink and downlink

### ROUTER'S KNOWLEDGE 4: NUMBER AFTER AC

You can understand as AX (WiFi 6) is next level of AC (WiFi 5).

The **AC** refers to the wireless standard, while the number refers to the speed. For example, a router with a maximum link rate of 450Mbps on the 2.4GHz band and 1,300Mbps on the 5GHz band is considered an AC1750 (450 + 1,300) router. But no individual client device, like your Apple TV, uses all that bandwidth at the same time, and each device can only use one band or the other. Plus, for normal Wi-Fi usage, you only really need 50Mbps down consistently throughout your home.

**How to choose:** It's important to note that the speed advertised on most traditional router packages are theoretical maximums. The actual speed you'll see in your home depends on a variety of factors: your ISP connection, your modem, the layout and construction of your home, and much more. To choose a speed, consider your internet activity: for the average internet user, AC1200 routers are usually sufficient.

Reference: <https://blog.eero.com/5-important-router-specs-explained/>

Normally, for Occom,

- TP-Link AC750/Netgear AC750: suitable for 12M/25M/50M plan
- Netgear AC1200: suitable for 25M/50M/100M plan
- TP-Link AC1600: suitable for 50M/100M/250M plan
- Netgear AX1800: suitable for 100M/250M/1G plan

## ROUTER'S KNOWLEDGE 5: 100M VS 1G ETHERNET PORT

Basis For Comparison	Fast Ethernet 100M Ethernet Port	Gigabit Ethernet 1G Ethernet Port
Basic	Offers 100 Mbps speed.	Provide 1 Gbps speed.
Delay	Generate more delay.	Less comparatively.
Configuration	Simple	Complicated and create more errors.
Coverage	Can cover distance up to 10 km.	Has the limit of 70 km.
Relation	Successor of 10-Base-T Ethernet.	A successor of fast Ethernet.
Round trip delay	100-500 bit times	4000 bit times

## ROUTER'S KNOWLEDGE 6: MESH ROUTER - WIFI COVERAGE

### What is a mesh Wi-Fi router?

Mesh systems are made to cover your home in Wi-Fi, extending wireless coverage by sharing that network across multiple devices. If you're finding that the router that worked in your apartment doesn't give you wireless connectivity you want for your whole home, then a mesh Wi-Fi router is the solution for you.

**If you have a large home/house** — at least 3,000 square feet — or one with an unusual layout, more than two stories or interior brick walls, you probably regularly encounter Wi-Fi dead zones, and your setup could be a good candidate for a mesh-router system. Here's everything you need to know about what a mesh Wi-Fi router does, and whether it's right for your home.

### Got a larger home? Check out the best mesh Wi-Fi systems

The best Wi-Fi routers are perfect for smaller homes and apartments

Unlike standalone routers, which use a single device to provide Wi-Fi coverage to a limited area, mesh routers use two or more connected devices to offer multiple sources of Wi-Fi signal, all on the same seamless network. It's like having 3-5 separate routers in your home, but they all share a single Wi-Fi network. And modern mesh systems have super simple setup, letting you wipe out dead spots and fill in the gaps in your home coverage, and enjoy Wi-Fi in every room, and even in the backyard or garage.

Reference: <https://www.tomsguide.com/us/what-is-mesh-wifi-router.news-24580.html>



## ROUTER'S KNOWLEDGE 7: CABLE CONNECTION VS WIRELESS CONNECTION

### How Much Faster Is Ethernet?

**RELATED:** Upgrade Your Wireless Router to Get Faster Speeds and More Reliable Wi-Fi

Ethernet is just plain faster than Wi-Fi—there's no getting around that fact. But the real-world differences are smaller than you might think. Wi-Fi has gotten significantly faster over the last few years, thanks to new standards like 802.11ac and 802.11n, which offer maximum speeds of 866.7 Mb/s and 150 Mb/s, respectively. Even though this is a maximum speed for all your wireless devices to share (and you likely won't get those speeds in the real world), Wi-Fi has become good enough to handle most of our daily tasks.

On the other hand, a wired Ethernet connection can theoretically offer up to 10 Gb/s, if you have a Cat6 cable. The exact maximum speed of your Ethernet cable depends on the type of Ethernet cable you're using. However, even the Cat5e cable in common use supports up to 1 Gb/s. And, unlike with Wi-Fi, that speed is consistent.

Reference: <https://www.howtogeek.com/217463/wi-fi-vs.-ethernet-how-much-better-is-a-wired-connection/>