



Broadband Access Solutions
Digital Home Solutions
Wireless Networking Solutions

Hardware Configuration

- 2x2 OFDM and OFDMA DOCSIS® 3.1 channels, 32x8 SC-QAM DOCSIS® 3.0 channels
- Switchable upstream filters for 5-42/85MHz operation
- Fixed downstream for 108-1002MHz operation
- 1.2GHz Full Capture Bandwidth Tuner
- 2 port Gigabit Ethernet (RJ45)
- 1 port 2.5G Ethernet (RJ45)
- 1 FXS port for telephony (RJ11)
- 3x3 2.4 GHz 802.11ax and 4x4 5GHz 802.11ax
- PacketCable™ 1.5 compliant
- MoCA 2.0 bonded
- RDK based routing function

CM4642342

DOCSIS® 3.1 Dual-Band AX5660 Wi-Fi 6 Cable Gateway

Arcadyan Technology's CM4642342 is a DOCSIS® 3.1 capable Wi-Fi 6 Cable Gateway offering up to 5 Gigabit download speeds and VoIP functions for both residential and small business markets.

The CM4642342 also integrates next generation Dual-Band Wi-Fi 802.11ax, which offers premium Wi-Fi performance. Users can enjoy the best Wi-Fi experience without any interruption of data transmission in a home, apartment or SOHO. The addition of bonded MoCA also provides extra customer flexibility for in-home connectivity.

All of this in the most compact, heat efficient design available for your data, video or voice services.

CM4642342

DOCSIS® 3.1 Dual-Band AX5660 Wi-Fi 6 Cable Gateway

TECHNICAL SPECIFICATIONS

System

| | |
|---------------------------|---|
| DOCSIS® SoC | BCM3390S Dual Core 1.5GHz Processor |
| WiFi | BCM6710 + BCM43684 (3x3 11ax + 4x4 11ax) |
| RAM | 1GB DDR3 RAM (512MB*2) |
| Flash | 256MB NAND Flash |
| Wi-Fi Standard | IEEE 802.11ax, backwards compatible to 802.11ac/n/a/b/g |
| I/O Port | 1 x DC power jack 1 x RF interface (75ohm F-type) to bi-directional HFC network 2 x RJ45 10/100/1000 Base-T Ethernet LAN 1 x RJ45 1000/2500 Base-T Ethernet LAN 1 x FXS port for VoIP services 1x MoCA LED |
| Buttons | 1 x WPS on front panel, 1 x Reset on rear panel |
| Front Panel LED Indicator | Power, DS, US, Online, Voice, LAN, Wi-Fi |
| Dimensions (H*D*W) | 235mm(H) x 214mm(D) x 65mm(W) |
| Power (External adapter) | Input: 100V-240Vac 50-60Hz Output: DC 12V/3A |

RF Downstream

| | |
|---------------------|---|
| Bonded Channels | Up to 2 OFDM DOCSIS 3.1 channels or 32 SC-QAM DOCSIS 3.0 channels |
| Tuner Configuration | 1.2GHz full band capture tuning range |
| Frequency Range | 108MHz – 1002MHz |

RF Upstream

| | |
|-----------------|---|
| Bonded Channels | Up to 2 OFDMA DOCSIS 3.1 channels or 8 SC-QAM DOCSIS 3.0 channels |
| Frequency Range | 5MHz – 42MHz / 5MHz – 85MHz switchable |

Environment

| | |
|-----------------------|-----------------------------|
| Operating Temperature | 0 to 40 degree C |
| Operating Humidity | 5% to 95 % (non-condensing) |

CM4642342

DOCSIS® 3.1 Dual-Band AX5660 Wi-Fi 6 Cable Gateway

TECHNICAL SPECIFICATIONS

Wireless

| | |
|----------------------|---|
| Frequency Range | 2.4GHz and 5GHz |
| Data Rate | Up to 5661Mbps (861Mbps 2.4GHz 11ax + 4800Mbps 5GHz 11ax under 160MHz) |
| Wi-Fi Security Level | WPA-PSK/WPA2-PSK/WPA-WPA2-PSK (TKIP/AES) |
| WPS | PBC and PIN |
| QoS | WMM/WMM-PS |
| Antenna | 7 internal single-band antennas |

Voice Functions

| | |
|--------------------|---|
| PacketCable | Complied with PacketCable 1.5 |
| Signaling Protocol | NCS |
| Call Feature | Call Waiting, Three Way Calling, Caller Number, Display and Restriction, MWI, Call Forwarding |
| Speech Codecs | ITU-T G.711-ulaw, G.711-alaw |
| Echo Canceller | ITU-T G.168 |
| Other Features | Caller ID (DTMF/FSK), Fax relay (T.30/T.38), DQoS Lite |

Routing Functions

| |
|---|
| IPv4/IPv6 Dual IP Stack |
| Discovery Protocol – UPnP |
| Static and dynamic IP routing (RIP v1/v2) |
| IGMPv3 proxy, IGMP snooping |
| NAT, PAT, Port Forwarding, Port Triggering, DMZ |
| MAC/IP/Port Filtering, Parental Controls |
| Compliant with RDK structure |
| Arcadyan EasyMesh |

Management and Security

| |
|---|
| User-friendly GUI via HTTP and HTTPS |
| Command Line Interface (CLI) – Telnet, SSH v2 |
| Protocol Support – TR-069, SNMP v1/v2/v3 |
| Support SPI Firewall, BPI+ security mechanism |

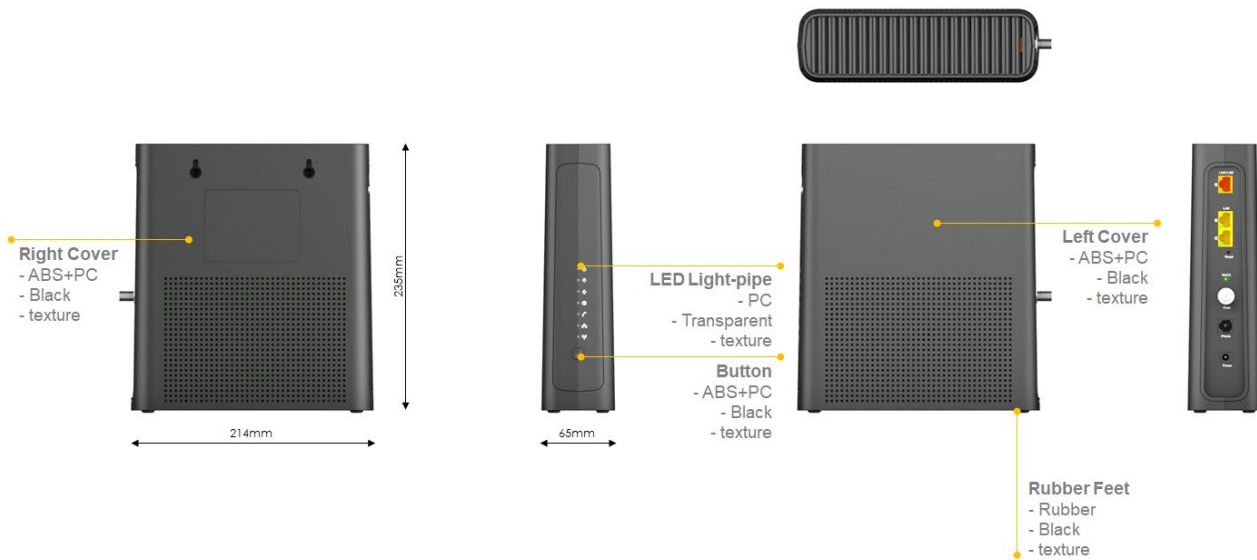
MoCA

| |
|--|
| MoCA 2.0 Dual-Bonded channel |
| Expanded range of operating frequencies – 1125MHz to 1675MHz |

CM4642342

DOCSIS® 3.1 Dual-Band AX5660 Wi-Fi 6 Cable Gateway

Industrial Design



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Wi-Fi 6 Cable Gateway

CM4642342-MM

QUICK START GUIDE

Package Contents:
1 Docsis 3.1 Wi-Fi 6 Voice Gateway
1 RJ-45 Ethernet Cable
1 Power Adapter
Quick Installation Guide



RJ-45



Power
Adapter

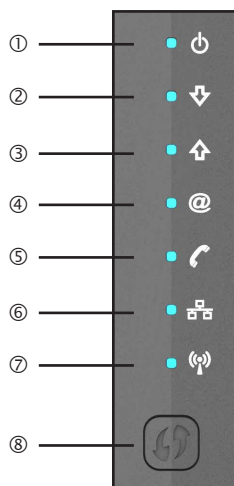
Device Overview

The Wi-Fi 6 Cable Gateway supports both MoCA 2.0 and DOCSIS 3.0/3.1 for broadband data transfer to an existing coaxial cable system. With the channel bonding connectivity, the Gateway allows for the aggregation of multiple downstream and upstream channels and brings up to 5 Gbps for download speed and 1 Gbps for upload speed.

The Gateway is also compliant with the IEEE 802.11ax specification while maintaining full backwards compatibility with the 802.11ac/a/b/g/n standards. IEEE 802.11ax is the new addition of the IEEE 802.11 standards, running at dual-band of 2.4 GHz and 5 GHz band types, as well as co-existing with the 802.11ac/11n network. It delivers wide bandwidth of up to 160 MHz, and reliable high data rates of up to 4.8 Gbps.

The Wi-Fi 6 Cable Gateway supports one 2.5-gigabit LAN port, two one-gigabit LAN ports, one F-type coax WAN port, one FXS RJ-11 port for telephony, and 802.11ax dual-band wireless capabilities. It provides high speed transmission rate for data/voice/video triple-play services. The Wi-Fi 6 Cable Gateway delivers sufficient bandwidth to stream HD video, listen to digital music, play online games, transfer large files, voice service, and surf the Internet simultaneously.

LED Indication and WPS Button



① Power

| On Blue | Flashing Blue | Off |
|-----------------|---------------------|-----------|
| Receiving power | System initializing | Power off |

② Downstream

| On Blue | Flashing Blue |
|-------------------------------------|--|
| Downstream channel has been locked. | Scanning for a downstream channel connection |

③ Upstream

| On Blue | Flashing Blue |
|-----------------------------------|---|
| Upstream channel has been locked. | Scanning for an upstream channel connection |

④ Online

| On Blue | On Green |
|---------------------------------------|---------------------------------------|
| WAN connection is in DOCSIS 3.1 mode. | WAN connection is in DOCSIS 3.0 mode. |

| Flashing | Off |
|---|-------------------|
| Synchronizing with termination system of your ISP (Internet service provider), and waiting for IP assignment from DHCP server | No WAN connection |

⑤ Voice

| On Blue | Flashing Blue | Off |
|--|---|--------------------------|
| EMTA (Embedded Multimedia Terminal Adapter) link has been established. | Phone call ongoing, a phone has been picked up to dial, or there is an incoming call. | No voice-over-cable link |

⑥ LAN (Front Panel)

| On Blue | Flashing Blue | Off |
|---|--|-------------------|
| Ethernet LAN connection has been established. | Sending or receiving data on any LAN port of the device. | No LAN connection |

LAN (Rear Panel)

| On Green | Flashing Green | Off |
|---|---|--|
| Ethernet LAN connection has been established. | The indicated LAN port is sending or receiving data.. | No LAN connection on the indicated LAN port. |

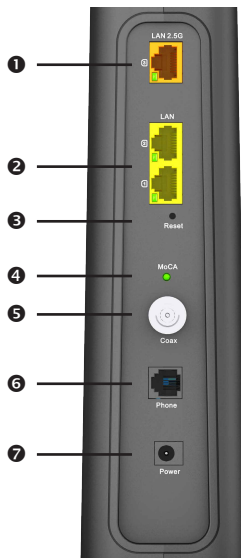
⑦ Wireless

| On Blue | Flashing Blue |
|-------------------------------------|---|
| Wireless link has been established. | Data is being transmitted via wireless network. |

| Slow Flashing | Off |
|---------------------|------------------|
| WPS mode in process | No wireless link |

⑧ WPS Button - Press this button for at least 4 seconds when activating the WPS function.

Device Connectors



- ❶ One 2.5 gigabit Ethernet Port (RJ-45). Connect 2.5 gigabit network device on your network to this port.
- ❷ Two Ethernet LAN Ports - one gigabit Ethernet ports (RJ-45). Connect network devices on your network to these ports.
- ❸ Reset Button
 - Pressing this button less than 5 seconds brings up a reboot to the Gateway.
 - Pressing the button over 5 seconds restores the Gateway to the default factory settings.
- ❹ MoCA (Multimedia over Coax Alliance) LED

| On Green | Flashing Green | Off |
|---|---|--------------|
| Coaxial connection has been established and working properly. | Sending or receiving network traffic via coaxial link | No MoCA link |
- ❺ Coax Port - Connect the coax line to this port.
- ❻ Phone Port - Connect the telephone line to this port (RJ-11).
- ❼ Power Inlet - Connect the included power adapter to this inlet. Please contact the authorized distributor of Mediacom for AC Adapter purchase and installation.

Hardware Installation

Installation Precaution



Comply with the following guidelines for a safe use of your product:

- Avoid installing this product during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not try to disassemble and/or reassemble this device. Tempering the device might void the product warranty.

- When mounting or cleaning the device, be sure to unplug the power cord from the device.
- Keep your hands dry when handling the device to avoid the possible electrical shock.

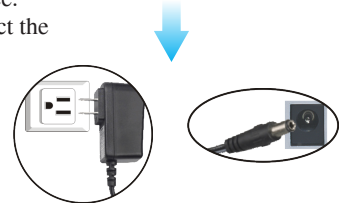
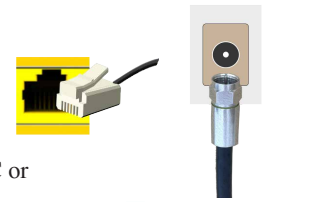
Choose a Location

- Appropriate safe and solid location which can sustain the device even in strong wind.
- Do not place the device in high humidity environments.
- For best RF performance, be sure to position this device at the highest possible location for getting the strongest signal strength from a base station.

Network Connectivity

Step 1 -

- a. Connect one end of the provided Ethernet cable into any of the LAN ports on the Wi-Fi 6 Cable Gateway. Then insert the other end of the cable into the Ethernet port of your PC or other Ethernet network device.
- b. Use a coaxial cable to connect the coaxial port of the Gateway to a cable wall outlet.



Step 2 - Plug the power adapter into the power socket on the rear of the Wi-Fi 6 Cable Gateway, and the other end into a power outlet.



Step 3 - Wireless Link: On the Windows desktop, click Start/ Settings/Network & Internet. The Network status window will open. Click Wi-Fi on the left menu bar of the screen. to browse the available wireless networks. Choose Wi-Fi 6 Cable Gateway from the list and click Connect button to start using the wireless network.



NOTE: Be sure all of the clients use the same values on your wireless network. (Default SSID: Wireless) The SSID is the name of your wireless network. It is used to distinguish your wireless network from other wireless network.

Model No: CM4642342-MM
Input: DC 12V=3A



Wifi SSID:
Xtream_2.4G_XXXX
Xtream_5G_XXXX



S/N: JYWWXXXXXX

Wifi Key:
XXXXXXXXXX
HW Ver: R0X
Made in XXX



CM MAC: MACOUIXXXXXX

MTA MAC: MACOUIXXXXXX

WAN MAC: MACOUIXXXXXX

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.



FCC ID: RAXCM4642342
I.T.E. E313020
146000192500J R01 XXX

The SSID and password was printed at the bottom of the Gateway.

System Requirements

To install and connect to the Wi-Fi 6 Cable Gateway, you must have:

- Broadband Internet service and modem/gateway with coax or Ethernet connection.
- 2.4/5 GHz 802.11ax/ac/a/b/g/n wireless adapter installed on each PC. Alternatively an Ethernet adapter can be used.
- Windows 7 or later, or Mac OS 10 or later.
- An up to date web browser: Internet Explorer 5.5 or later, Google Chrome, or Mozilla 1.7/Firefox 1.0 or later.

Software Installation

Configuring Client PC

After completing the hardware setup by connecting all your network devices, you need to configure your computer to connect to the Wi-Fi 6 Cable Gateway.

To access the Internet through the Wi-Fi 6 Cable Gateway, you must configure the network settings of the computers in your LAN to use the same IP subnet as the gateway. The default IP settings for the Wi-Fi 6 Cable Gateway are:

- IP address: 192.168.0.1
- Subnet mask: 255.255.255.0

Windows 8

1. On the Windows desktop, click Start/Desktop.
2. Right-click the Ethernet icon on the task bar, then select Open Network and Sharing Center.
3. The Network and Sharing Center window will open. Click Ethernet in the View your active networks field of the screen.
4. On the Ethernet Status screen, click Properties.
5. Double-click Internet Protocol Version 6/Version 4 (TCP/IPv6,v4).
6. If Obtain an IP(v6) address automatically and Obtain DNS server address automatically are selected, your computer is already configured for DHCP. If not, select the options.

Windows 10

1. On the Windows desktop, click Start/Settings/Network & Internet.
2. The Network status window will open. Click Ethernet on the left menu bar of the screen.
3. Click Open Network and Sharing Center.
4. Double-click the Ethernet connection for this device.
5. On the connection status screen, click Properties.
6. Double-click Internet Protocol Version 6/Version 4 (TCP/IPv6/v4).
7. If Obtain an IP(v6) address automatically and Obtain DNS server address automatically are already selected, your computer is already configured for DHCP. If not, select the options.

Obtain IP Settings from Your Wireless Wi-Fi 6 Cable Gateway

Now that you have configured your computer to connect to your gateway, it needs to obtain new network settings. By releasing old DHCP IP settings and renewing them with settings from your Wi-Fi 6 Cable Gateway, you can verify that you have configured your computer correctly.

1. On the Windows desktop, click Start/Programs/Accessories/Command Prompt.
2. In the Command Prompt window, type `ipconfig /release` and press the Enter key.

3. Type `ipconfig /renew` and press the Enter key. Verify that your IP Address is now 192.168.0.xxx, your Subnet Mask is 255.255.255.0 and your Default Gateway is 192.168.0.1. These values confirm that your Wireless Wi-Fi 6 Cable Gateway is functioning correctly.
4. Type `exit` and press the Enter key to close the Command Prompt window.

Manual TCP/IP Settings

1. Follow steps 1-5 in “Windows 8”.
2. Select Use the following IP Address.
3. Enter an IP address based on the default network 192.168.0.x (where x is between 2 and 254), and use 255.255.255.0 for the subnet mask. Use 192.168.0.1 for the Default gateway field.
4. Select Use the following DNS server addresses.
5. Enter the IP address for the Wi-Fi 6 Cable Gateway in the Preferred DNS server field. This automatically relays DNS requests to the DNS server(s) provided by your ISP. Otherwise, add a specific DNS server into the Alternate DNS Server field and click OK to close the dialogue boxes.

Record the configured information in the following table.

TCP/IP Configuration Setting

IP Address _____.____.____.____

Subnet Mask _____.____.____.____

Preferred DNS Server _____.____.____.____

Alternate DNS Server _____.____.____.____

Default Gateway _____.____.____.____

Macintosh Computer

You may find that the instructions here do not exactly match your operating system. This is because these steps and screen shots were created using Mac OS 10.2. Mac OS 7.x and above are similar, but may not be identical to Mac OS 10.2.

Follow these instructions:

1. Pull down the Apple Menu . Click System Preferences.
2. Double-click the Network icon in the Systems Preferences window.
3. If Using DHCP Server is selected in the Configure field, your computer is already configured for DHCP. If not, select this option. Your new settings are shown in the TCP/IP tab. Verify that your IP Address is now 192.168.0.xxx, your Subnet Mask is 255.255.255.0 and your Default Gateway is 192.168.0.1. These values confirm that your Wireless Wi-Fi 6 Cable Gateway is functioning.
4. Close the Network window.

Now your computer is configured to connect to the Wi-Fi 6 Cable Gateway.

NOTICE:

The cable distribution system should be grounded (earthed) in accordance with ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable. other wireless network.

Federal Communication Commission Interference Statement

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.

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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 32cm between the radiator & your body.

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.