

# G5201C

## InHome

G.hn Wave2 bridge with 2.5GE LAN port  
for home network via coaxial cable

## User manual

Version 1.0  
March 2026

For further information and purchase inquiries,  
please contact [info@gigacopper.net](mailto:info@gigacopper.net)

## 2. Scope of delivery

- G5201C Bridge
- DC-12V/1A power adapter
- Bracket for wall mounting
- 1,5m coaxial cable, F/F connector
- IEC TV/F- socket adapter
- 1,5m LAN-cable

## 3. Technical specifications

- Dimensions: 110x25x83(98 incl. coaxial connectors) mm
- Weight: 0,21kg
- Operating temperature: 0°C - 40°C
- Power consumption: <3W

## 4. G.hn specification

- G.hn Wave2, 2-200MHz
- Physical bandwidth (PHY): ca. 1800Mbit/s
- Net bandwidth: ca. 1600Mbit/s
- Max. attenuation of the cable connection: 75dB

## 1. Introduction

With the G.hn Wave2 Bridge G5201C, you can easily extend your **local Ethernet network** using existing coaxial cables.

The modems are “multipoint” capable: up to 16 devices can be used in the coaxial cabling. Each modem in the G.hn network communicates directly with all the others (“peer-to-peer”).

Any type of coaxial cable can be used for data transmission. The bandwidth is up to approx. 1600 Mbit/s. When the G.hn network is not heavily used, each modem can claim the transmission time for itself and transmit data to other modems at full bandwidth. When several modems are active, the transmission time and thus the bandwidth is automatically shared.

The G5201C Bridge is compatible with other GIGA Copper G.hn Wave2 InHome coax modems (see point 6) and can be combined as desired.

The G5201C bridge is also suitable for **forwarding a fiber optic connection from ONT to router** via an existing coaxial cable. This requires two modems.

## 5. Connections and LED indicators



Rear	
DC 12V	Power supply (12V, max. 1A)
RST	Recessed Reset button (15 sec. to hold)
LED on/off	On/Off all LED on the front
TV	CATV connection, frequency range 258-862MHz
LINE	Connection between modems, Data and TV, frequency range 2-862MHz
2.5GE	2,5 Gigabit Ethernet Port

Front	
PWR LED	Indicates power availability
LINE LED	State of G.hn connection: Off – no connection Green – connection active Green flashing – data transmission
2.5GE LED	State of Ethernet connection: Blue – 2,5Gbit/s (2500Mbit/s) Green – 10/100/1000Mbit/s Blue/blue flashing – data transmission

## 6. Use for home networking (local network behind Internet router)

The G5201C bridge complies with the G.hn Wave2 specification and enables complete home networking or expansion of the local Ethernet network via existing coaxial cabling at Gigabit speeds. Installation is based on the “plug-and-play” principle: the network is ready for use immediately after the modems have been connected.

Up to 16 modems can be used within the G.hn network. The G5201C bridge is compatible with the following GIGA Copper G.hn Wave2 InHome coax modems; all models can be combined as desired:

- G4201C (1x Gigabit LAN port)
- G4204C (4x Gigabit LAN port)
- G4202TCP (2x Gigabit LAN port with PoE/PoE+)
- G4204C-W (4x Gigabit LAN port and WiFi 5)

Any devices with Ethernet interfaces can be connected to the modems' LAN ports: PCs, printers, WLAN repeaters, etc.

*Note on IPv4 configuration:*

*DHCP client is enabled in the factory settings of the G5201C bridge, which means that the modem obtains an IPv4 address from the DHCP server (usually the Internet router). This address can be used to access the modem's web interface.*

## 7. Use for forwarding a fiber optic connection (connection ONT -> Router)

The G5201C bridge can be used to forward a fiber optic connection from the ONT (fiber optic modem) to the internet router. This requires two G5201C modems:



*Note on IPv4 configuration:*

*DHCP client is enabled in the factory settings of the G5201C bridge. Disable the DHCP client before connecting the modem to the ONT so that it does not receive an IP address from the Internet provider. To do this, log in to the modem's web interface (see section 10.2), set “IP / DHCP enabled” to “NO” in the menu, enter an IPv4 address from a private range (e.g., 192.168.9.252, subnet mask 255.255.255.0, default gateway 192.168.9.1, DNS 192.168.9.1) and confirm your entry with OK. Repeat this configuration in the second modem.*

IPv4 configuration*	
DHCP enabled	<input type="button" value="NO"/> ▾
IPv4 address / netmask	<input type="text" value="192.168.9.252"/> <input type="text" value="255.255.255.0"/>
Default Gateway	<input type="text" value="192.168.9.1"/>
DNS	<input type="text" value="192.168.9.1"/>
Additional address #1	<input type="text" value="192.168.10.253"/> <input type="text" value="255.255.255.0"/>
Additional address #2	<input type="text" value="0.0.0.0"/> <input type="text" value="0.0.0.0"/>
<small>*All changes except the DNS server will have effect after system boot</small>	
<input type="button" value="Ok"/> <input type="button" value="Cancel"/>	

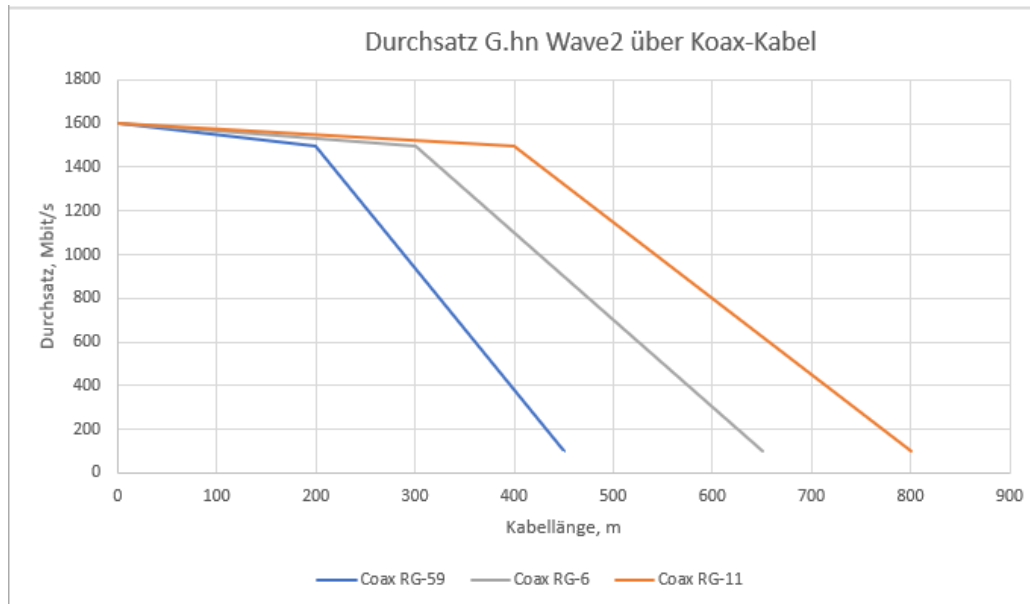
## 8. Data connection bandwidth and 2.5GE port on the modem

According to the G.hn Wave2 standard, the net bandwidth of the data connection at the application level is approximately 1.6 Gbit/s. Due to **2.5GE LAN port**, the G5201C bridge can fully utilize this bandwidth and **send and receive data at up to 1.6Gbit/s**. The bandwidth depends largely on the length of the cable connection (attenuation of the route, see point 9) and the coaxial components (e.g. sockets) used between the modems. The web interface of the G5201C bridge displays the negotiated bandwidths to all other modems in the network (see point 11).

## 9. Data connection range

The G5201C bridge uses a very powerful G.hn chipset: up to approx. 35dB attenuation, a net bandwidth of approx. 1500Mbps is achieved, at 50dB – approx. 1Gbps, at 75dB – still approx. 100Mbps.

The following graph shows the bandwidth that can be achieved in practice for typical coaxial cables used in home cabling: RG-59, RG-6, and RG-11 with attenuation at 200 MHz of 17 dB, 12 dB, and 8 dB.



## 10. Login to the web interface

You log in to the modem's web interface using its IP address and password. Factory settings:

Password: paterna

IP addresses:

- First IP address: DHCPv4 client is enabled, the modem obtains this IP address from the local DHCP server.
- Second IP address: 192.168.10.253

### 10.1 Accessing the modem via local network

- Connect the modem to your network. The modem will receive an IP address from the local DHCP server (usually the Internet router).
- Open a web browser on your computer and connect to the modem's IP address. You can find the assigned address in the administration section of your DHCP server.

### 10.2 Direct access to the modem

- Connect your computer to the 2.5GE port on the modem.
- Assign your computer a fixed IP address from the range 192.168.10.xxx: e.g., 192.168.10.100. Use 255.255.255.0 as the netmask. It is not necessary to enter the default gateway and DNS serv.
- Open a web browser and connect to the modem via its second IP address 192.168.10.253

## 11. Query of the negotiated bandwidth

The bandwidths negotiated between a G.hn bridge and all other modems in the network can be queried via the web interface. The values displayed are gross transmission rates in Mbits/s on the physical layer (PHY) in the transmit and receive directions. The net transmission rate at the application level is approximately 17% lower.

- [G.hn](#)
- [IP](#)
- [Ethernet](#)
- [Device](#)
- [Multicast](#)
- [QoS](#)
- [G.hn spectrum](#)
- [Advanced](#)

**Basic settings**

- MAC address fc:e4:98:b1:00:65
- Device ID 3
- Domain Name
- Force node Type AUTOMATIC ▾
- Node type\* END\_POINT

\* Node type change can take some time, please refresh page to update state

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- G.hn profile COAX 200 MHz ▾

**Available Connections**

Device ID	MAC Address	Phy Tx (Mbps)	Phy Rx (Mbps)
1	fc:e4:98:b1:00:67	1851	1887
2	fc:e4:98:b1:00:6c	1885	1868

**12. Use of multicast IP TV**

For the transmission of multicast IP TV in the local network, "IGMP snooping" must be enabled in the multicast configuration.

**Multicast Configuration\***

- IGMP Snooping YES ▾
- MLD snooping NO ▾
- IGMP/MLD broadcast report NO ▾
- IGMP/MLD broadcast report mode 0 ▾
- Filter unknown multicast traffic NO ▾
- IGMP Multicast ranges:

<small>Minimum IP address</small>	<small>Maximum IP address</small>
<input type="text" value="224"/> <input type="text" value="0"/> <input type="text" value="0.0"/>	<input type="text" value="239"/> <input type="text" value="254"/> <input type="text" value="255.255"/>
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0.0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="255.255"/>
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0.0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="255.255"/>
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0.0"/>	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="255.255"/>

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**Broadcast supression**

- Broadcast xput limit (Mbps)

**13. VLAN usage in the network**

The modems are compatible with VLANs according to the 802.1Q standard. The VLAN tags are forwarded transparently. External Ethernet switches must be used to create VLANs.

## 14. Notching

For compatibility with other signals in the 2-200 MHz frequency range, the required frequencies can be reduced by up to 40 dB or completely blocked (100 dB) in the G.hn spectrum.

The setting must be configured in each modem.

Notches Configuration				
Notch index	Start freq (KHz)	Stop freq (KHz)	Depth (dB)	Type
0	0	1954	100	Regulation

Add new user notch

- Index (0..9)
- Start frequency (KHz)
- Stop frequency (KHz)
- Depth (0..40dB, 100 removes notch)

Remove user notch

- Index (0..9)

## 15. Wall mounting

There are four screws in the corners on the back of the device. To attach the brackets for wall mounting, first loosen the screws on one side, position the bracket, and secure it with these screws or the replacement screws provided. Repeat the step on the other side.

## 16. Compatibility with TV signals on a coaxial cable

Coaxial cables are characterized by their high quality. They enable data transmission across a very wide frequency spectrum. Multiple signals are transmitted in parallel across different frequency ranges.

The G5201C Bridge G.hn uses the **2-200MHz** frequency range for data transmission. It can be used on a coaxial cable in parallel with the following TV signals:

- SAT-TV: 950-2200MHz
- DVB-T2: 470-690MHz
- Can also be used in conjunction with CATV (DVB-C) in the 258-862MHz frequency range.

## 17. Parallel operation with cable Internet

Simultaneous use with cable Internet (DOCSIS 3.0/3.1) on a cable is not possible because cable Internet occupies the entire terrestrial frequency range of 5-862MHz. For networking with our G.hn modems, the Internet reception must be separated from the coaxial data network.

## 18. Using the TV connection on the modem

The G5201C bridge has an integrated diplexer (2-200MHz / 258-862MHz). To transmit the G.hn data signal (2-200MHz) together with the CATV signal (258-862MHz) in parallel on a coaxial cable, connect your cable TV feed from the house

amplifier to the TV connection of the modem located nearby. Insert a 258 MHz high-pass filter between the amplifier and the modem to prevent interferences in the cable network.

TV sets can be connected and used at the TV connection of other G.hn modems in the network.

## 19. Use of antenna sockets

The G5201C bridge can be connected directly to a coaxial cable or to an antenna socket.

When connecting to an antenna socket, use the "DATA" connection (5-862 MHz). Other connections (TV, radio, SAT) are only suitable if they are open in the 5-200MHz frequency range. Please note the information on the design of the connections in the antenna socket data sheet.

## 20. Connection between the modems

In order for G.hn modems to communicate with each other on different cable runs, there must be a connection between the individual cables. Various options are possible:

- Terrestrial coaxial distributors or splitters (5-862MHz)
- Broadband SAT distributors or splitters (5-2400MHz)
- SAT multiswitches of all types
- SAT/TERR feed switches. These enable data networking in conjunction with SAT LNB without multiswitches.

Data connections via pass-through sockets on the same cable harness are also possible.

***Further detailed information and installation tips can be found on our website [www.gigacopper.net](http://www.gigacopper.net) under "Support and Advice"***

## 21. Warranty

We provide a 12-month warranty on all GIGA Copper Networks brand products purchased from us. Full warranty terms and conditions can be found at <https://www.gigacopper.net/wp/en/warranty/>