

# G4200C

# **Quick Installation Guide**

GIGA Copper Networks GmbH



## 1. Overview

The G4200 coaxial system includes two types of devices, the Headend Switch G4200C and the Client Units G4201C, G4204C, G4204C-W.

## 2. Hardware Descriptions



## 2.1 G4200C (Local device)

G4200C is the device of multiplexer system, as shown in the following drawings. It supports one 1000-X/10000-X SFP/SFP+ uplink port, one 10/100/1000BT uplink port, six coax G.hn ports and one gigabit MGMT port.

## 2.1.1 Panel

The front panel is shown below:





### The following table shows the port descriptions.

Label	Description			
	Console port: A RS-232 connector for connection to a computer for			
Concolo	console control/administration. The RS-232 console port can be			
Console	used for accessing the device CLI (command line interface) for			
	out-of-band management.			
MGMT	10/100/1000BT RJ-45 port			
10/100/1000BT	10/100/1000BT Ethernet ports			
10G	1000-X/10000-X SFP/SFP+ ports			
G.hn1/G.hn2/G.hn3/				
G.hn4/G.hn5/G.hn6				

#### The following table shows the LED descriptions.

Label	Туре	Color	State	Description				
	Power	er Vellow		The power is on				
	status	renow	Off	The power is off				
eve	System		On	System is started				
313	status	Gleen	Off	System has not started				
G.hn1/G.hn2/	G hn link		On	The corresponding port connection normal				
G.hn3/G.hn4/	status	Green	Off	There is no connection to this port				
G.hn5/G.hn6								
100	Ethernet	Groop	On	The corresponding port connection normal				
100	link status	Green	Off	there is no connection to this port				
			On	The corresponding port connection rate is				
		Green		1000Mbps				
			Off	The corresponding port connection rate is				
MGMT /	Ethernet		011	10/100 Mbps				
10/100/1000BT	link status		On	The corresponding port connection normal				
		Vollow	Off	There is no connection to this port				
		TenOW	Dlink	Corresponding port Data is transmitting				
			DIITIK	(sending/receiving)				

## 2.1.2 Physical and Environmental

- Dimension: 320mm\*234mm\*45mm
- Weight: 1.85Kg
- Operating temperature: 0°C ~ 50°C
- Storage temperature: -25°C ~ 80°C
- Humidity: 10% ~ 90% RH Non-condensing
- Maximum power consumption: ~40W



## 2.2 G4201C (Remote device)

## 2.2.1 Panel

The panel is shown below:



#### The following table shows the port descriptions.

Label	Description
LINE	G.hn input port supporting P2P and P2MP connections
12VDC/1.0A Input	Support 12V DC power supply, connect to 12VDC power adapter
GE	10/100/1000BT Ethernet port, Ethernet RJ-45 connection, Connect
	to computer or other Ethernet device

#### The following table shows the LED description:

LED	LED color	Description				
	Yellow	On	Power supply is normal			
FVK		Off	The power is off or it is abnormal			
LINE	Green	On	G.hn port connection normal			
		Off	This G.hn port is not connected			
	Green	On	GE port is connected			
GE		Off	GE port is not connected			
		Blink	GE port Data is transmitting (sending/receiving)			

### 2.2.2 Physical and Environmental

- Dimension: 111.5 \* 83.0 \* 24.5mm
- Weight: 0.19 Kg
- Operating temperature: 0°C ~ 40°C
- Storage temperature: -25°C ~ 80°C
- Humidity: 5% ~ 95% RH Non-condensing
- Maximum power consumption: <3W



## **3 Hardware Installation**

## 3.1 G4200C Package Contents

- 1\* G4200C indoor headend unit,
- 2\* mounting brackets,
- 10\* bracket screws,
- 4\* rack-mount screws,
- 4\* rack-mount cage nuts
- 4\* rubber feet
- 4\* wall-mount plastic nuts
- 4\* wall-mount screws
- 1\* RS-232 serial console cable
- 1\* power cord.



### **3.2 Mounting Procedures**

## 3.2.1 Front Mounting on a Standard 19" Rack

a) Using eight bracket screws to fix the mounting brackets on left and right sides close to the front faceplate of G4200C, four bracket screws on each side





b) If there are screw holes on the rack rail, direct install the rack-mount screws through the holes of the mounting bracket to mount G4200C to the rack, two mounting screws on each side.



c) If there is no screw hole on the rack rail and the holes on the rack rail are square, first insert the cage nuts to the proper holes on the rail from the far side, then install the rack-mount screws through the holes of the mounting bracket onto the cage nuts to mount G4200C to the rack, two mounting screws on each side.







## 3.2.2 Rear Mounting on a Standard 19" Rack

a) Using eight bracket screws to fix the mounting brackets on left and right sides close to the back side of G4200C, four bracket screws on each side



b) If there are screw holes on the rack rail, direct install the rack-mount screws through the holes of the mounting bracket to mount G4200C to the rack, two mounting screws on each side.





c) If there is no screw hole on the rack rail and the holes on the rack rail are square, first insert the cage nuts to the proper holes on the rail from the far side, then install the rack-mount screws through the holes of the mounting bracket onto the cage nuts to mount G4200C to the rack, two mounting screws on each side.





## 3.2.3 Vertical Mounting on a Wall

a) Using eight bracket screws to fix the mounting brackets on left and right sides close to the front faceplate of G4200C, four bracket screws on each side



b) Using 8mm or 3/8" drill tip to drill four holes on the wall with the pattern below



c) Nail in four wall-mount plastic nuts into four drill holes, then mount G4200C on the wall with four wall-mount screws.



# 3.2.4 Horizontal Mounting on a Wall

a) Using eight bracket screws to fix the mounting brackets on left and right sides close to the back side of G4200C, four bracket screws on each side



b) Using 8mm or 3/8" drill tip to drill four holes on the wall with the pattern below





c) Nail in four wall-mount plastic nuts into four drill holes, then mount G4200C on the wall with four wall-mount screws.



# **3.3 Connecting Fiber and Coaxial**

a) Remove the dust cover on the SFP cage



b) Insert SFP transceiver into the SFP cage





c) Connect optical fiber to the SFP transceiver and coaxial cable to the G.hn port(s) respectively



## **3.4 Connecting Power**

After G4200C has been mounted either on a rack or on the wall and the optical fiber and coaxial cable have been connected properly, please follow the procedures below to power up the system.



1. Lift up the power core clip toward the power switch,



2. Plug in the power cord onto power connector, then press down the power core clip



4. Switch on the power on the power outlet and on G4200C.



# **4** Application Diagram



## **5 Service Installation**

G4200C (Local device) + G4201C, G4204C, G4204C-W (Remote devices)

## 5.1 G4200C (Local Device)

Step 1: Connect to uplink Ethernet port, 10/100/1000BT or 10G

If you use CAT5 cable is available, please connect to 10/100/1000BT port.

If you use fiber is available, please insert a proper SFP/SFP+ module into the cage and connect the fiber to the SFP/SFP+ module.

Step 2: Connect to downlink coaxial cable to the G.hn port.

Step 3: Insert power cord and turn on the power switch.

The power LED will turn yellow, G.hn port green LEDs will be on shortly and then off. The SYS green LED on the headend switch will turn on within one minute. If the remote clients are connected and on, the LEDs on the G.hn ports will be on.

## 5.2 G4201C, G4204C, G4204C-W (Remote Devices)

- Step 1: Connect to uplink coaxial cable to the G.hn port.
- Step 2: Connect to downlink RJ-45 Ethernet port.
- Step 3: Insert power adapter.



## 6 Web Management for Local Device

Default configuration:

IP address:	192.168.0.252
IP subnet:	255.255.255.0
User name:	superuser
Password:	123

You can browse <u>http://192.168.0.252</u>, input username and password to login WEB interface of G4200C as following:

Sign in					
http://192.168.0.252 Your connection to this site is not private					
Username	superuser				
Password					
		Sian in	Cancel		

## 6.1 Change IP

You can configure IP address for G4200C via WEB interface, Click "VLAN Management" -> "VLAN Interface" from the left menu to configure IP address as following:

Vlan Interfac	e				
Vlan ID					
Vlan Interfac	e IPv4 Configua	ntion			
түре		Manual 👻			
IP Address		192.168.120.246			
IP Netmask		255.255.255.0	×		
IP Gateway		192.168.120.1			
			Apply		
Vlan Interfac	e Second IPv4	Configuation			
IP Address					
IP Netmask					
			Apply		
Vlan Interfa	e Ipv6 Configua	ition			
IPv6 Addres	5				
			Apply		
vian IP List					
Vlan	Туре	IPv4 IP	IPv4 Netmask	Ipv4 Gateway	Opera

## 6.2 Change Device Time

You can change system time through the path Administration >SNTP.



SNTP Setting							
SNTP Mode	Server -	Server 💌					
Server IP address		XXX.XXX.XXX					
Max Response Time(s)	5						
Time Zone Offset	GMT 👻	GMT P					
Time Offset(min)	0						
Year	2015	Month	7	Day	1		
Hour	0	Minute	6	Second	59		
Apply							

#### 6.3 Save Configuration

After changing IP address, Device time and others configuration, you need to save configuration through the path Administration >Save Configuration. Otherwise, configuration will be lost once the device is power down or reboot.

#### Save Current Configurations

Save

#### 6.4 Check Device Basic Information

You can check device basic information through the path System Information>Basic Information.

System Information					
System Name	XXXxC				
System Location	XXXXXXXXXXX				
System Description	G.hn Managed Switch				
System Contact	support@xxxxxxxxx.com				
MAC Address	00- XX-XX-09-23				
Hardware Version	1.0				
Kernel Version	1.00				
Software Version	2.845C				
Boot Loader Version	Version 1.000				
Serial Number R3A0138992					
Temperature Status	36.5 degree Celsius				
Fans Status	Normal				
Powers Status	A: On, B: On				
Local Date Time	Wed Jul 1 00:03:40 EDT 2015				
Apply Refresh					

### 6.5 Check Link Status between Local Device and Remote Device

You can click "System Information"-> "Node Summary" from left menu to check the G.hn information as following:



Interface	Node Name	Location	MAC Address	Domain Name	Role	US/DS	Service	IP	Firmware Version	Hardware
						Ratio				Version
Ghn1	Ghn HE	GHN NODE	00-1e-6e-10-41-06	Ghn	DM	50% : 50%	6	192.168.10.252	dcp962c_v1_x-HE-P2MP SPIRIT.v7_6_r589+9_cvs R81	1_0
Ghn2	Ghn HE	GHN NODE	00-1e-6e-10-41-04	Ghn	DM	50% : 50%	۲	192.168.10.252	dcp962c_v1_x-HE-P2MP SPIRIT.v7_6_r589+9_cvs R78	1_0
Ghn3	Ghn HE	GHN NODE	00-1e-6e-10-41-03	Ghn	DM	50% : 50%	6	192.168.10.252	dcp962c_v1_x-HE-P2MP SPIRIT.v7_6_r589+9_cvs R81	1_0
Ghn4	Ghn HE	GHN NODE	00-1e-6e-11-41-18	Ghn	DM	50% : 50%	6	192.168.10.252	dcp962c_v1_x-HE-P2MP SPIRIT.v7_6_r589+9_cvs R81	1_0
Ghn5	Ghn HE	GHN NODE	00-1e-6e-10-41-01	Ghn	DM	50% : 50%	6	192.168.10.252	dcp962c_v1_x-HE-P2MP SPIRIT.v7_6_r589+9_cvs R81	1_0
Ghn6	Ghn HE	GHN NODE	00-1e-6e-10-41-05	Ghn	DM	50% : 50%	۲	192.168.10.252	dcp962c_v1_x-HE-P2MP SPIRIT.v7_6_r589+9_cvs R81	1_0

# 6.6 Check System Logs

You can check system logs through Administration > System Logs > System Logs.

G.hn	
System Information     Configuration	System Logs
<ul> <li>VLAN Management</li> <li>QoS Configurations</li> </ul>	2015/7/1 00:04:14 Ethernet interface of Ghn3 is up.
Forwarding     Security	2015/7/1 00:04:13 Ethernet interface of Ghn3 is down.
Spanning Tree     Monitoring	2015/7/1 00:02:12 Ethernet interface of Ghn4 is up.
SNMP Manager	2015/7/1 00:02:10 Ethernet interface of Ghn4 is down.
+ LLDP	2015/7/1 00:00:55 192.168.0.249 logins the system via Telnet, level 3.
Administration     IP Configuration     DHCP Server     Language     SNTP     Ping Diagnosis     Traceroute Diagnosis     Account	2015/7/1 00:00:15 192.168.0.249 logins the system via WEB UI!
	2015/7/1 00:00:13 RJ45/G1 is up.
	2015/7/1 00:00:12 Ethernet interface of Ghn4 is up.
	2015/7/1 00:00:10 Ethernet interface of Ghn3 is up.
<ul> <li>Firmware Upgrade</li> <li>Reboot&amp;Reset</li> </ul>	2015/7/1 00:00:06 Starting system!
Configuration Managemer     Save Configuration	2015/7/1 00:18:03 192.168.0.249 reboots system with WEB!
- System Logs	2015/7/1 00:17:08 Ethernet interface of Ghn1 is up.
System Logs	2015/7/1 00:17:05 Ethernet interface of Ghn1 is down.