



G4200C

Quick Installation Guide

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	Console port: A RS-232 connector for connection to a computer for console control/administration. The RS-232 console port can be 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	G.hn ports for data signal

The following table shows the LED descriptions.

Label	Type	Color	State	Description
PWR	Power status	Yellow	On	The power is on
			Off	The power is off
SYS	System status	Green	On	System is started
			Off	System has not started
G.hn1/G.hn2/ G.hn3/G.hn4/ G.hn5/G.hn6	G.hn link status	Green	On	The corresponding port connection normal
			Off	There is no connection to this port
10G	Ethernet link status	Green	On	The corresponding port connection normal
			Off	there is no connection to this port
MGMT / 10/100/1000BT	Ethernet link status	Green	On	The corresponding port connection rate is 1000Mbps
			Off	The corresponding port connection rate is 10/100 Mbps
		Yellow	On	The corresponding port connection normal
			Off	There is no connection to this port
			Blink	Corresponding port Data is transmitting (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
PWR	Yellow	On Power supply is normal
		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
GE	Green	On GE port is connected
		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

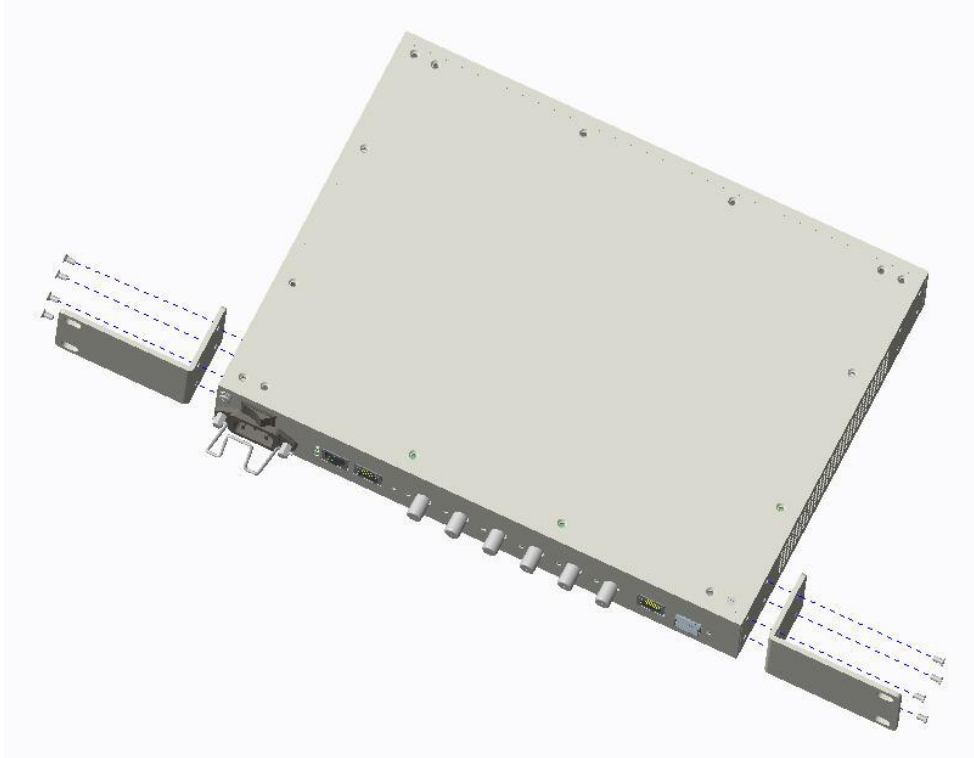
1* G4200C indoor headend unit,
2* mounting brackets,
10* bracket screws,
4* rack-mount screws,
4* rack-mount cage nuts
1* RS-232 serial console cable
1* power cord.



3.2 Mounting Procedures

3.2.1 Front Mounting on a Standard 19" Rack

- 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.

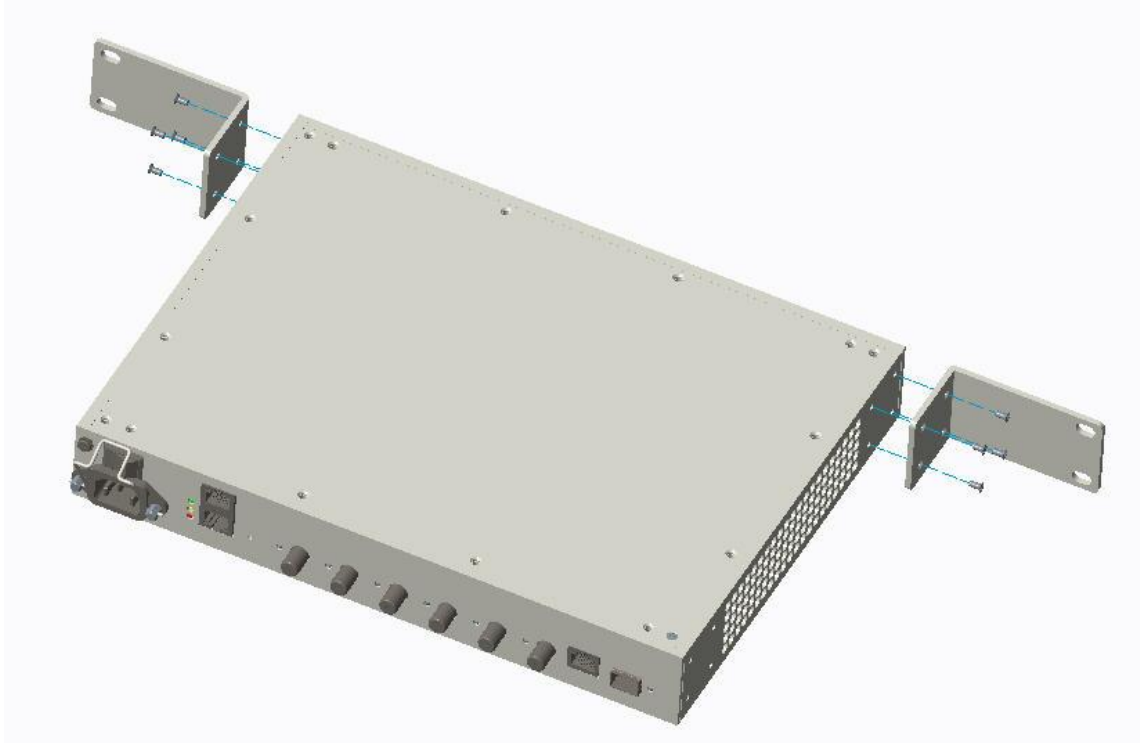


- c) If there is no screw hole on the rack rail and the holes on the rack rail are square, first insert the cage nuts to the proper holes on the rail from the far side, then install the rack-mount screws through the holes of the mounting bracket onto the cage nuts to mount G4200C to the rack, two mounting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

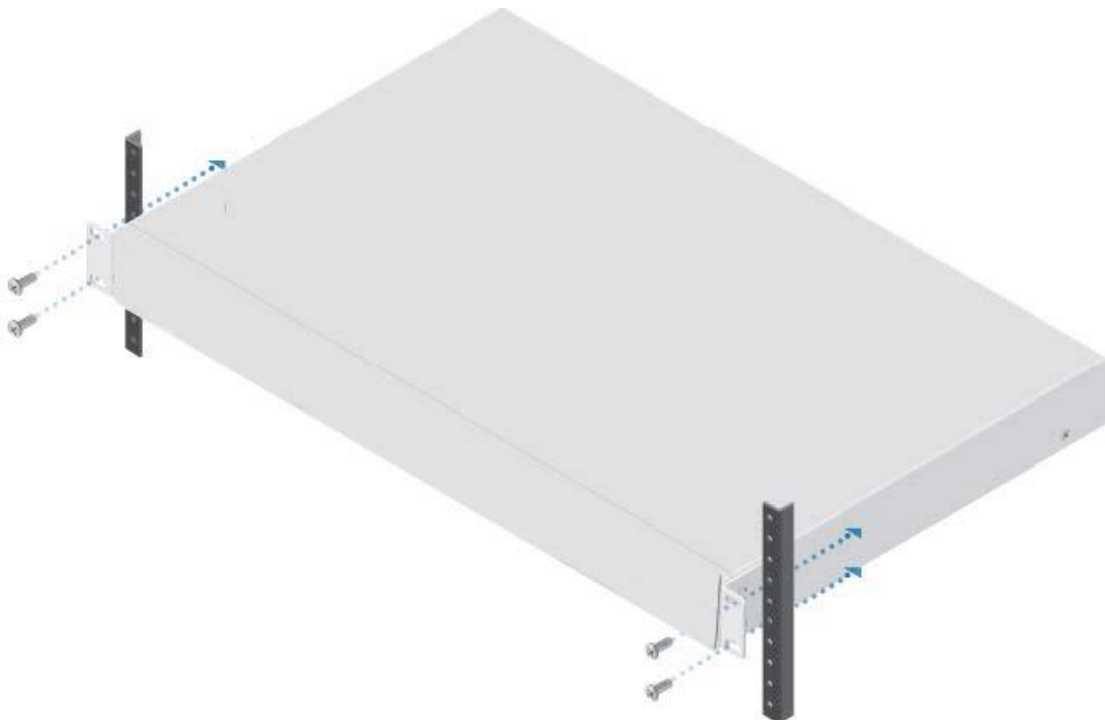


3.2.2 Rear Mounting on a Standard 19" Rack

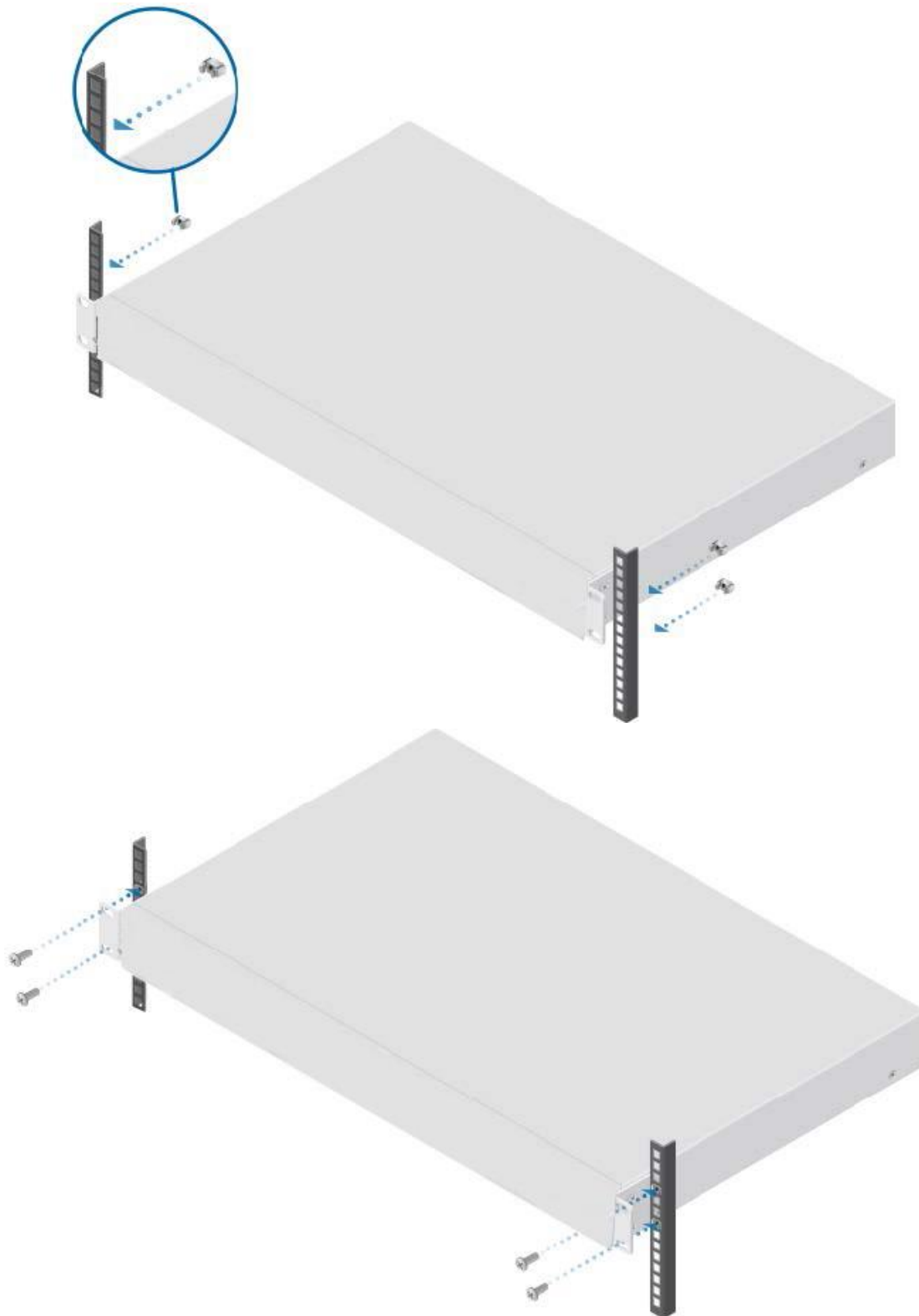
- a) Using eight bracket screws to fix the mounting brackets on left and right sides close to the back side of G4200C, four bracket screws on each side



- 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.

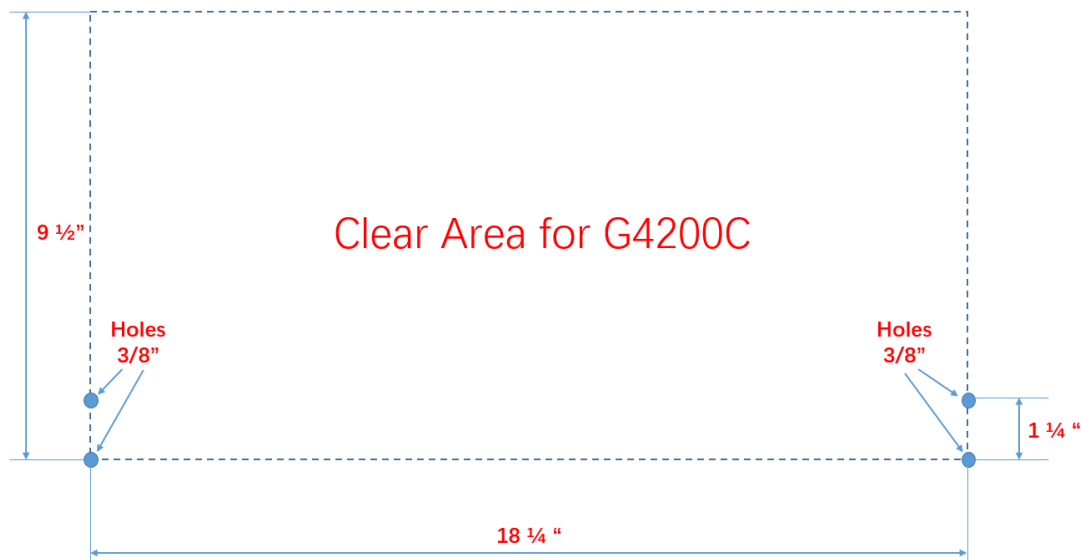


3.2.3 Vertical Mounting on a Wall

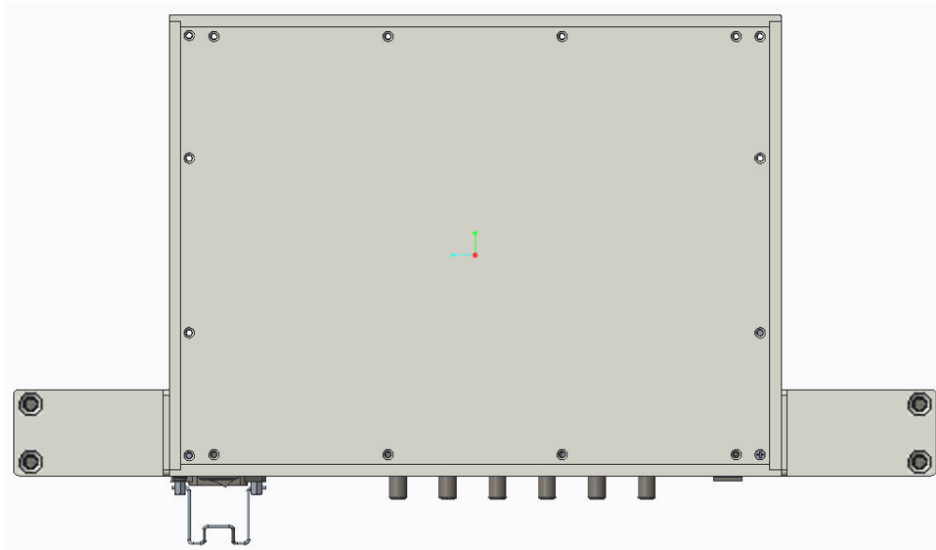
- a) Using eight bracket screws to fix the mounting brackets on left and right sides close to the front faceplate of G4200C, four bracket screws on each side



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

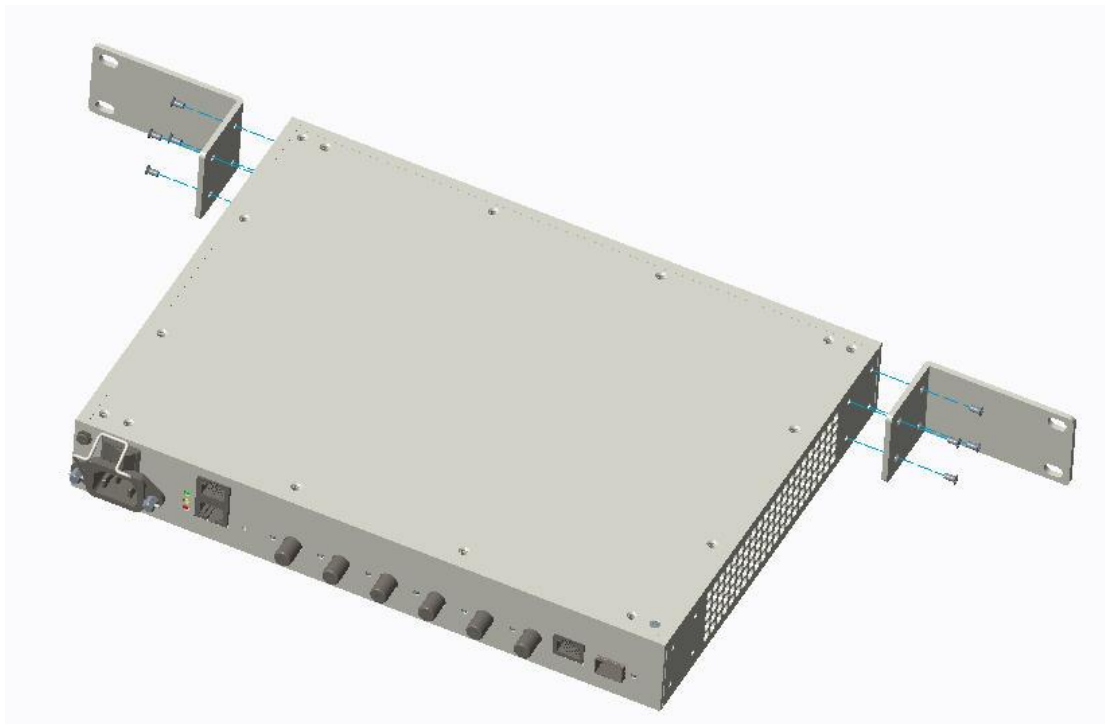


- c) Nail in four wall-mount plastic nuts into four drill holes, then mount G4200C on the wall with four wall-mount screws.

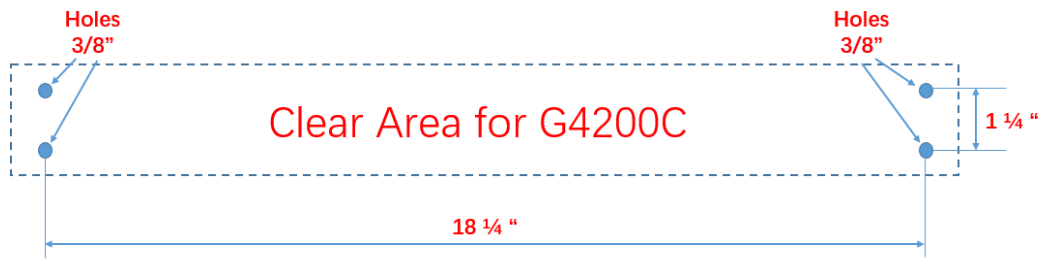


3.2.4 Horizontal Mounting on a Wall

- 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



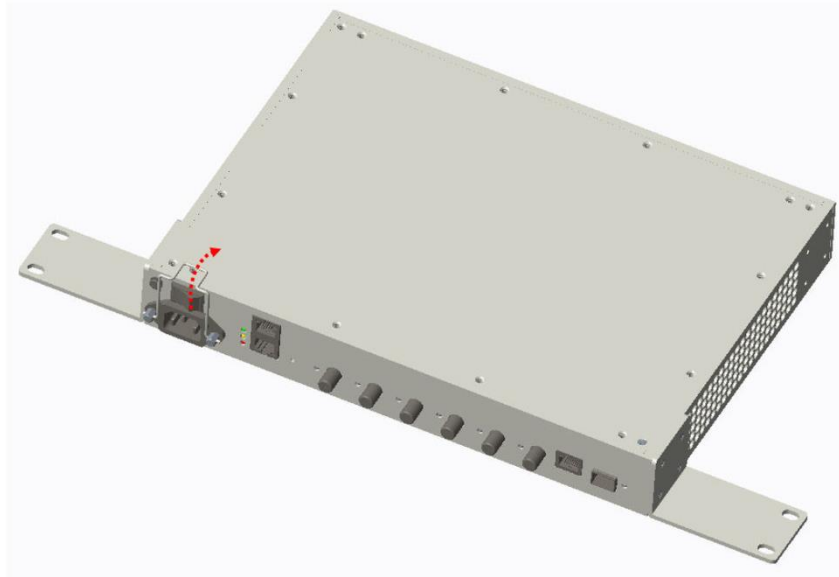
- c) Connect optical fiber to the SFP transceiver and coaxial cable to the G.hn port(s) respectively



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.

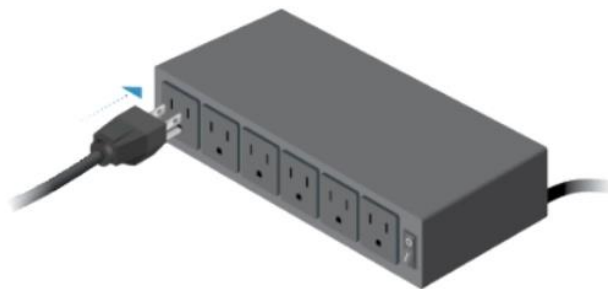
1. Lift up the power core clip toward the power switch,



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

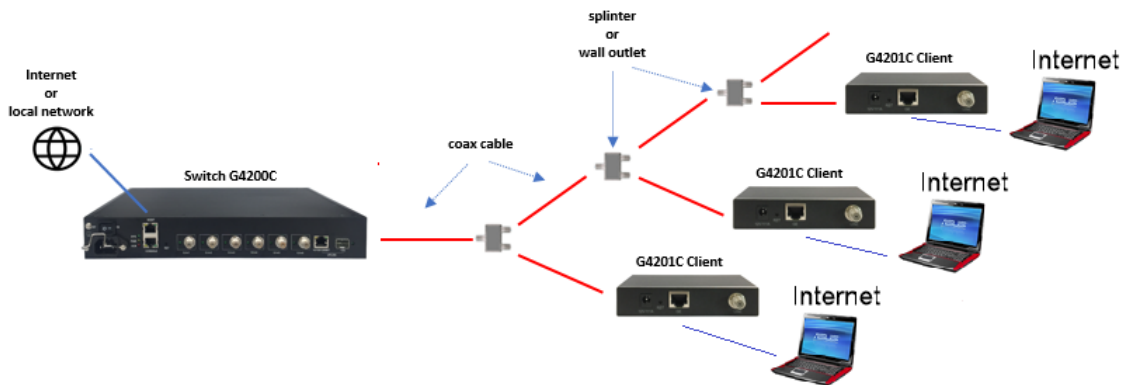


3. Insert the power core to power outlet



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 <http://192.168.0.252>, 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

Password

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 Interface

Vlan ID

Vlan Interface IPv4 Configuration

TYPE

IP Address

IP Netmask

IP Gateway

Vlan Interface Second IPv4 Configuration

IP Address

IP Netmask

Vlan Interface Ipv6 Configuration

IPv6 Address

Vlan IP List

Vlan	Type	IPv4 IP	IPv4 Netmask	IPv4 Gateway	Operation
1	DHCP	192.168.120.246	255.255.255.0	192.168.120.1	<input type="button" value="Delete"/>

Vlan Second IP List

6.2 Change Device Time

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

SNTP Setting					
SNTP Mode	Server				
Server IP address	xxx.xxx.xxx.xxx				
Max Response Time(s)	5				
Time Zone Offset	GMT				
Time Offset(min)	0				
Year	2015	Month	7	Day	1
Hour	0	Minute	5	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	xxxxxxxxxxxx
System Description	G.hn Managed Switch
System Contact	support@xxxxxxxx.com
MAC Address	00-XX-XX-XX-09-23
Hardware Version	1.0
Kernel Version	1.00
Software Version	2.845C
Boot Loader 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 Ratio	Service	IP	Firmware Version	Hardware Version
Ghn1	Ghn HE	GHN NODE	00-1e-6e-10-41-06	Ghn	DM	50% : 50%		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%		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%		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%		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%		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%		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 Logs	
	System Logs	
<ul style="list-style-type: none"> System Information Configuration VLAN Management QoS Configurations Forwarding Security Spanning Tree Monitoring SNMP Manager RMON LLDP Administration <ul style="list-style-type: none"> IP Configuration DHCP Server Language SNTP Ping Diagnosis Traceroute Diagnosis Account Firmware Upgrade Reboot&Reset Configuration Management Save Configuration System Logs <ul style="list-style-type: none"> Syslog Server System Logs 	2015/7/1 00:04:14 Ethernet interface of Ghn3 is up.	
	2015/7/1 00:04:13 Ethernet interface of Ghn3 is down.	
	2015/7/1 00:02:12 Ethernet interface of Ghn4 is up.	
	2015/7/1 00:02:10 Ethernet interface of Ghn4 is down.	
	2015/7/1 00:00:55 192.168.0.249 logs the system via Telnet, level 3.	
	2015/7/1 00:00:15 192.168.0.249 logs 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.	
	2015/7/1 00:00:06 Starting system!	
	2015/7/1 00:18:03 192.168.0.249 reboots system with WEB!	
	2015/7/1 00:17:08 Ethernet interface of Ghn1 is up.	
	2015/7/1 00:17:05 Ethernet interface of Ghn1 is down.	