H3C WA7200 Series Access Points

Hardware Information and Specifications

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Preface

H3C WA7200 Series Access Points Hardware Information and Specifications covers the chassis views, models, technical specifications, and LEDs of the WA7200 APs.

This preface includes the following topics about the documentation:

- Audience.
- Conventions.
- Documentation feedback.

Audience

This documentation is intended for:

- Network planners.
- Field technical support and servicing engineers.
- Network administrators working with the WA7200 series access point.

Conventions

The following information describes the conventions used in the documentation.

Command conventions

Convention	Description
Boldface	**Bold** text represents commands and keywords that you enter literally as shown.
Italic	*Italic* text represents arguments that you replace with actual values.
[ ]	Square brackets enclose syntax choices (keywords or arguments) that are optional.
{ x | y | ... }	Braces enclose a set of required syntax choices separated by vertical bars, from which you select one.
[x | y | ...]	Square brackets enclose a set of optional syntax choices separated by vertical bars, from which you select one or none.
{ x | y | ... } *	Asterisk marked braces enclose a set of required syntax choices separated by vertical bars, from which you select a minimum of one.
[x | y | ...] *	Asterisk marked square brackets enclose optional syntax choices separated by vertical bars, from which you select one choice, multiple choices, or none.
&<1-n>	The argument or keyword and argument combination before the ampersand (&) sign can be entered 1 to n times.
#	A line that starts with a pound (#) sign is comments.

GUI conventions

Convention	Description
Boldface	Window names, button names, field names, and menu items are in Boldface. For example, the **New User** window opens; click **OK**.
>	Multi-level menus are separated by angle brackets. For example, **File** > **Create** > **Folder**.

Symbols

Convention	Description
WARNING!	An alert that calls attention to important information that if not understood or followed can result in personal injury.
CAUTION:	An alert that calls attention to important information that if not understood or followed can result in data loss, data corruption, or damage to hardware or software.
IMPORTANT:	An alert that calls attention to essential information.
NOTE:	An alert that contains additional or supplementary information.
TIP:	An alert that provides helpful information.

Network topology icons

Convention	Description
	Represents a generic network device, such as a router, switch, or firewall.
	Represents a routing-capable device, such as a router or Layer 3 switch.
	Represents a generic switch, such as a Layer 2 or Layer 3 switch, or a router that supports Layer 2 forwarding and other Layer 2 features.
	Represents an access controller, a unified wired-WLAN module, or the access controller engine on a unified wired-WLAN switch.
	Represents an access point.
	Represents a wireless terminator unit.
	Represents a wireless terminator.
	Represents a mesh access point.
	Represents omnidirectional signals.
	Represents directional signals.
	Represents a security product, such as a firewall, UTM, multiservice security gateway, or load balancing device.
	Represents a security module, such as a firewall, load balancing, NetStream, SSL VPN, IPS, or ACG module.

Examples provided in this document

Examples in this document might use devices that differ from your device in hardware model, configuration, or software version. It is normal that the port numbers, sample output, screenshots, and other information in the examples differ from what you have on your device.

Documentation feedback

You can e-mail your comments about product documentation to info@h3c.com.

We appreciate your comments.

Contents

Product overview

The WA7200 AP series includes the following models:

Table1-1 WA7200 AP series

Product code	Product model	Remarks
EWP-WA7220-HI-FIT	WA7220-HI	Indoor AP
EWP-WA7220CE	WA7220CE	
EWP-WA7232-FIT	WA7232	
EWP-WA7220X-FIT	WA7220X	Outdoor AP

AP views, ports, and technical specifications

WA7220CE

AP view and dimensions

Figure1-1 AP view

Figure1-2 AP dimensions

Ports

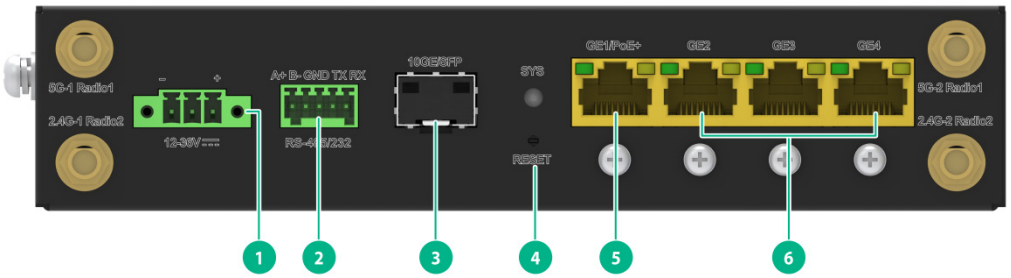
The AP provides the following ports:

- One 10GE/SFP port.
- One GE/PoE+ port.
- Three GE ports.
- One RS-485/232 (console) port.
- One power receptacle (12 to 36 VDC).

NOTE:

The AP also provides a reset button.

Figure1-3 Ports



(1) Power receptacle (12 to 36 VDC)	(2) RS-485/232 (console) port	(3) 10GE/SFP port
(4) Reset button	(5) GE1/PoE+ Port	(6) GE port

Technical specifications

Table1-2 Technical specifications

Item	Specification
Dimensions (H × W × D)	38 × 179.5 × 128 mm (1.50 × 7.07 × 5.04 in, excluding the mounting bracket)
Weight	1.15 kg (2.54 lb)
Power consumption	≤ 18 W
Antenna	External antenna
Standard compliance	• IEEE802.11a/b/g/n/ac/ax/be • IEEE802.3at
Powering option	• 12 to 36 VDC power source • PoE compliant with 802.3at
Operating temperature	–40°C to +60°C (–40°F to +140°F)
Storage temperature	–40°C to +85°C (–40°F to +185°F)
Operating humidity	5% RH to 95% RH, noncondensing
Storage humidity	5% RH to 95% RH, noncondensing
Operating altitude	–60 m to +5000 m (–196.85 ft to +16404.20 ft)
RS-485/232 (console)	Used by technical personnel only for device configuration and management.
GE	10/100/1000M copper Ethernet port.
GE1/PoE+	The 100/1000M copper Ethernet port is used for connecting the device to an uplink device for Internet or MAN access. It can operate at 1 Gbps and also act as an 802.3at-compliant PoE+ port.
10GE/SFP	1000M/2.5G/5G/10G fiber port.
Power receptacle (12 to 36 VDC)	Used for receiving 12 VDC to 36 VDC power from a local power source.
Reset button	The function of the reset button varies by duration for which it is pressed. For more information, see "LED description for the reset button."

Item	Specification
LEDs	Yellow/green/blue. For more information about the LED status in different AP operating modes, see "LED descriptions for single-LED APs."

WA7220-HI

AP view and dimensions

Figure1-4 AP view

Figure1-5 AP dimensions

Ports

The AP provides the following ports:

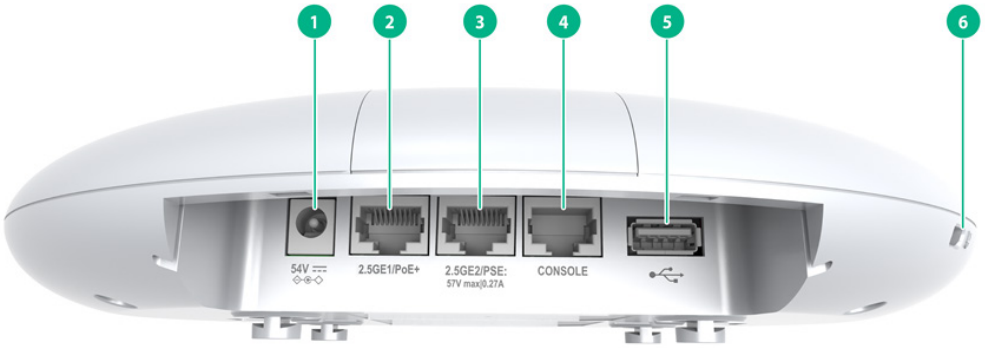
- One 54 VDC power receptacle.
- One 2.5GE1/PoE+ port.
- One 2.5GE2/PSE port.
- One console port.

- One USB port.

NOTE:

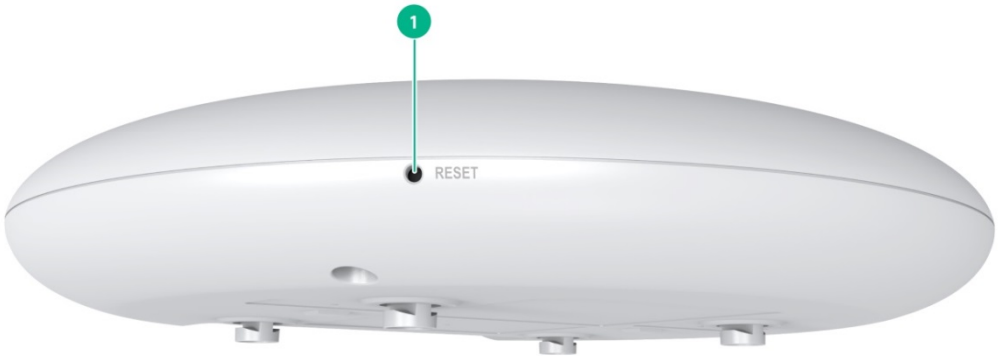
The AP also provides a reset button and a security slot with a size of 7 × 3 mm (0.28 × 0.12 in).

Figure1-6 Ports (1)



(1) 54 VDC power receptacle	(2) 2.5GE1/PoE+ port	(3) 2.5GE2/PSE port
(4) Console port	(5) USB port	(6) Security slot

Figure1-7 Ports (2)



(1) Reset button

Technical specifications

Table1-3 Technical specifications

Item	Specification
Dimensions (H × W × D)	40 × 220 × 220 mm (1.57 × 8.66 × 8.66 in, excluding the mounting bracket)
Weight	0.67 kg (1.48 lb)

Power consumption	Support for local DC power supply and PoE power supply:
	• Local power supply:
	  ○ ≤ 33.9 W (including PoE_OUT/USB)
	  ○ ≤ 16.4 W (excluding PoE_OUT/USB)

Item	Specification

	• PoE power reception compliant with 802.3at:
	  ○ ≤ 26.1 W (PoE_OUT port supplying power, radios in 1×1 MIMO mode, and excluding USB)
	  ○ ≤ 18.9 W (PoE_OUT port not supplying power and including USB)
	• PoE power reception compliant with 802.3af: ≤ 13.6 W (PoE_OUT port not supplying power, radios in 1×1 MIMO mode, and including USB)

Antenna	Built-in antenna
Standard compliance	• 802.11a/b/g/n/ac/ax/be • 802.3af/at
Powering option	IEEE802.3af/at powering standard-compliant: • Power adapter • PoE+ (802.3at) • PoE (802.3af)
Operating temperature	–10°C to +50°C (14°F to 122°F)
Storage temperature	–40°C to +70°C (–40°F to +158°F)
Operating humidity	5% RH to 95% RH, noncondensing
Storage humidity	5% RH to 95% RH, noncondensing
Operating altitude	–60 m to +5000 m (–196.85 ft to +16404.20 ft)
Console port	Used by technical personnel only for device configuration and management.
2.5GE1/PoE+	100M/1000M/2.5G copper Ethernet port, used for connecting the AP to an uplink device for Internet or MAN access. It can also act as a standard PoE port. When the AP operates in fit AP mode, the port is represented by interface number SGE1/0/1 in the MAP file and Smartrate-Ethernet 1 for configuration on the AC.
2.5GE2/PSE	100/1000/2500M copper Ethernet port, used for connecting a downlink device. The AP can supply power through this port to a standard PD. When the AP operates in fit AP mode, the port is represented by interface number Smartrate-Ethernet 1/0/2 in the MAP file and Smartrate-Ethernet 2 for configuration on the AC.
USB port	Compliant with USB 2.0. Note: By default, the USB port is disabled. To enable the USB port, execute the **`usb enable`** command in AP view.
Power port (54VDC)	Used for receiving power from a local power source.
Reset button	The function of the reset button varies by duration for which it is pressed. For more information, see "LED description for the reset button."
LEDs	Yellow/green/blue. For more information about the LED status in different AP operating modes, see "LED descriptions for single-LED APs."

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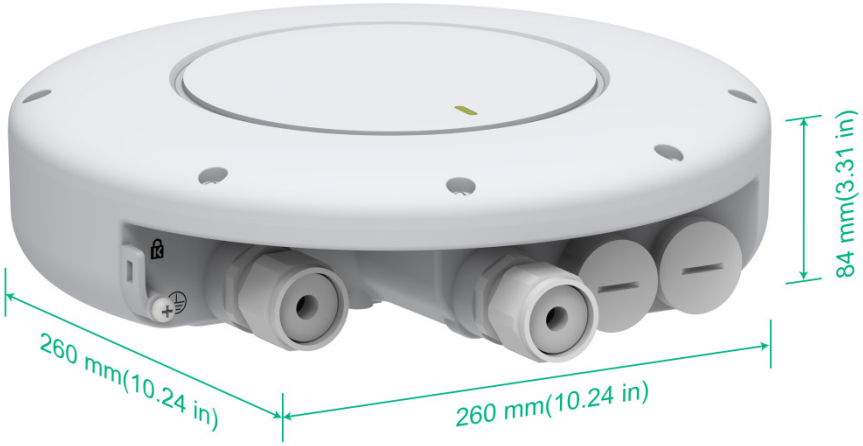
AP view and dimensions

Figure1-8 AP view

Figure1-9 AP dimensions



Ports

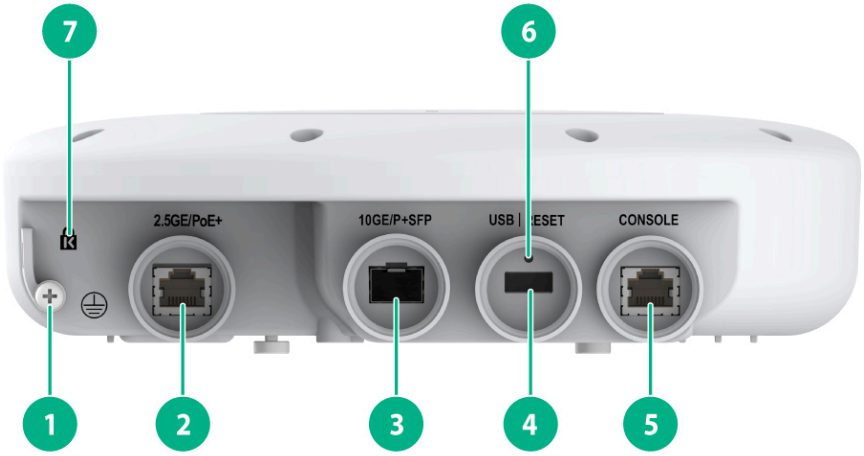
The AP provides the following ports:

- One 2.5GE/PoE+ port.
- One 10GE/P+SFP port.
- One USB port.
- One console port.

NOTE:

The AP also provides a reset button and a security screw hole.

Figure1-10 Ports



(1) Grounding screw	(2) 2.5GE/PoE+ Port
(3) 10GE/P+SFP port	(4) USB port
(5) Console port	(6) Reset button
(7) Security screw hole	

Technical specifications

Table1-4 Technical specifications

Item	Specification
Dimensions (H × W × D)	260 × 260 × 84 mm (10.24 × 10.24 × 3.31 in)
Weight	2.1 kg (4.63 lb)
System power consumption	31 W
Antenna	Built-in antenna
Standard compliance	IEEE802.11a/b/g/n/ac/ax/be
Operating temperature	–40°C to +70°C (–40°F to +158°F)
Storage temperature	–40°C to +85°C (–40°F to +185°F)
Operating humidity	0% RH to 100% RH
Storage humidity	0% RH to 100% RH
IP rating	IP68
2.5GE/PoE+	The 100M/1000M/2.5G copper Ethernet port is used for connecting the device to an uplink device for Internet or MAN access. It can also act as a standard PoE port. When the AP operates in fit AP mode, the port is represented by interface number SGE1/0/1 in the MAP file and Smartrate-Ethernet 1 for configuration on the AC.
10GE/P+SFP	1000M/2.5G/5G/10G hybrid copper-fiber port.
Console port	Used by technical personnel only for device configuration and management.
USB port	Used for data writing and reading or charging.

Item	Specification
Reset button	The function of the reset button varies by duration for which it is pressed. For more information, see "LED description for the reset button"
LED	Yellow/green/blue. For more information about the LED status in different AP operating modes, see "LED descriptions for single-LED APs"

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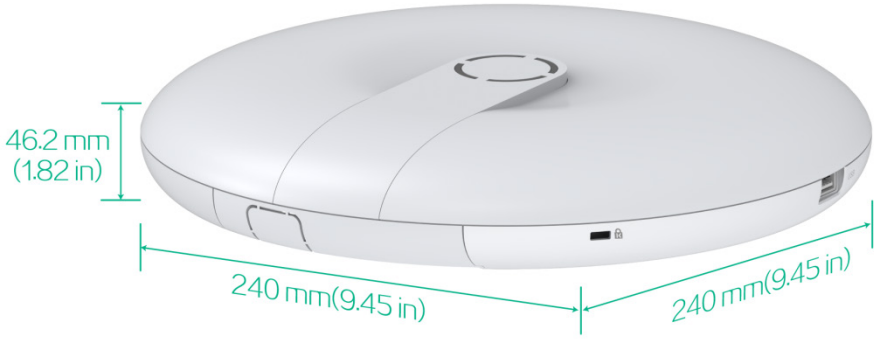
AP view and dimensions

Figure1-11 AP view

Figure1-12 AP dimensions



Ports

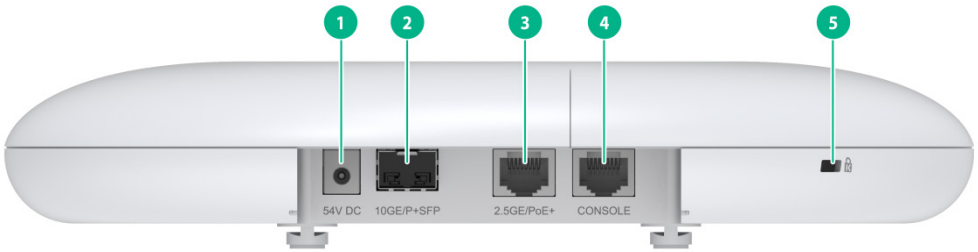
The AP provides the following ports:

- One 54 VDC power receptacle.
- One 10GE/P+SFP port.

- One 2.5GE/PoE+ port.
- One console port.
- One USB port.

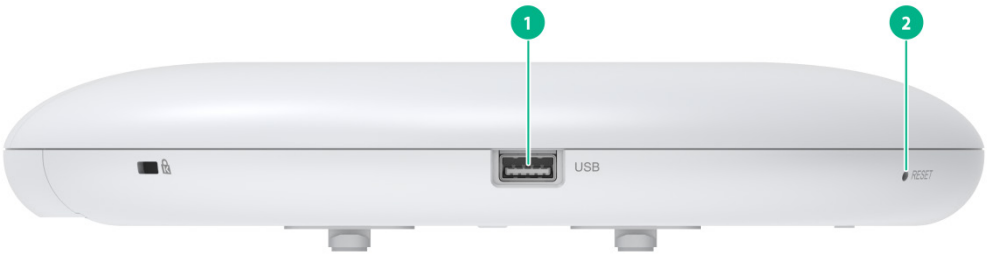
NOTE:
The AP also provides a reset button and a security slot with a size of 7 × 3 mm (0.28 × 0.12 in).

Figure1-13 Ports (1)



(1) 54 VDC power receptacle	(2) 10GE/P+SFP port	(3) 2.5GE/PoE+ port
(4) Console port	(5) Security slot	-

Figure1-14 Ports (2)



(1) USB port	(2) Reset button	-

Technical specifications

Table1-5 Technical specifications

Item	Specification
Dimensions (H × W × D)	46.2 × 240 × 240 mm (1.82 × 9.46 × 9.45 in, excluding the mounting bracket)
Weight	0.85 kg (1.87 lb)

Power consumption	Support for local DC power supply and PoE power supply:
	• Local power supply:
	  ○ ≤ 25.4 W (including USB)
	  ○ ≤ 22.9 W (excluding USB)
	• PoE power reception compliant with 802.3at:
	  ○ ≤ 25.4 W (including USB)
	  ○ ≤ 22.9 W (excluding USB)

Item	Specification

	• Hybrid copper-fiber interface at power receiving with 802.3at:
	  ○ ≤ 25.4 W (including USB)
	  ○ ≤ 22.9 W (excluding USB)

Antenna	Built-in antenna
Standard compliance	• 802.11a/b/g/n/ac/ax/be • 802.3at
Powering option	IEEE802.3af/at powering standard-compliant: • Power adapter • PoE • Hybrid copper-fiber transceiver module
Operating temperature	–10°C to +50°C (14°F to 122°F)
Storage temperature	–40°C to +70°C (–40°F to +158°F)
Operating humidity	5% RH to 95% RH, noncondensing
Storage humidity	5% RH to 95% RH, noncondensing
Operating altitude	–60 m to +5000 m (–196.85 ft to +16404.20 ft)
Console port	Used by technical personnel only for device configuration and management.
10GE/P+SFP	100M/1000M/2.5G/5G/10G hybrid copper-fiber port.
2.5GE/PoE+	100M/1000M/2.5G copper Ethernet port, used for connecting the AP to an uplink device for Internet or MAN access. It can also act as a standard PoE port.
USB port	Compliant with USB 2.0. Note: By default, the USB port is disabled. To enable the USB port, execute the **`usb enable`** command in AP view.
Power port (54VDC)	Used for receiving power from a local power source.
Reset button	The function of the reset button varies by duration for which it is pressed. For more information, see "LED description for the reset button."
LEDs	Yellow/green/blue. For more information about the LED status in different AP operating modes, see "LED descriptions for single-LED APs."

LEDs

The description for the status LED on the AP varies by AP operating mode. For information about the operating modes supported by the AP, see the release notes.

The LED status includes the color and flashing frequency of the LEDs, which indicates the AP operating status.

The AP has only one LED.

Figure1-15 Single-LED AP(WA7220-HI as an example)

Table1-6 AP LEDs

AP series		Models	Description
Wi-Fi 7	WA7200 AP series	WA7220CE, WA7220-HI, WA7220X	For the LED descriptions, see "LED descriptions for single-LED APs."

LED descriptions for single-LED APs

LED descriptions before version changes

For the LED descriptions for the AP in versions earlier than 2614P02, see Table1-7, Table1-8, and Table1-9.

Table1-7 LED description (fit mode)

LED color	Status	Description
N/A	Off	No power is present or the LED has been turned off from the CLI.
Yellow	Steady on	The AP is initializing, or an initialization exception has occurred.
	Flashing (twice per second)	The Ethernet ports are down and no mesh links are established.

LED color	Status	Description
Green	Steady on	The AP has started up and registered with an AC, but is in standby state (does not have any associated clients).
	Flashing (once every two seconds)	The AP has started up, but has not registered to any AC.
	Flashing (twice per second)	The AP is upgrading the image.
Blue	Flashing (once per second)	A radio has associated clients and the number of associated clients is less than the threshold.
Alternating between green and blue	Flashing (once per second)	The number of associated clients has exceeded the threshold.

Table1-8 LED description (cloud mode)

LED color	Status	Description
N/A	Off	No power is present or the LED has been turned off from the CLI.
Yellow	Steady on	The AP is initializing, or an initialization exception has occurred.
	Flashing (twice per second)	The Ethernet ports are down and no mesh links are established.
Green	Steady on	The AP is in standby state, has connected to Cloudnet, but does not have any associated clients.
	Flashing (once per second)	The AP has connected to Cloudnet, and the radios have associated clients. The number of associated clients is less than the threshold.
	Flashing (twice per second)	The AP is upgrading the image.
Blue	Steady on	The AP is in standby state, has not connected to Cloudnet, and does not have any associated clients.
	Flashing (once per second)	The AP has not connected to Cloudnet, but the radios have associated clients. The number of associated clients is less than the threshold.
Alternating between green and blue	Flashing (once per second)	The number of associated clients has exceeded the threshold.

Table1-9 LED description (anchor AC mode)

LED color	Status	Description
N/A	Off	No power is present or the LED has been turned off from the CLI.
Yellow	Steady on	The AP is initializing, or an initialization exception has occurred.
	Flashing (twice per second)	The Ethernet ports are down and no mesh links are established.
Green	Steady on	The AP has started up and is in standby state, but does not

LED color	Status	Description
		have any associated clients.
	Flashing (twice per second)	The AP is upgrading the image.
Blue	Flashing (once per second)	A radio has associated clients and the number of associated clients is less than the threshold.
Alternating between green and blue	Flashing (once per second)	The number of associated clients has exceeded the threshold.

LED descriptions after version changes

For the LED descriptions for the AP in 2614P02 and later versions, see Table1-10.

Table1-10 LED description

LED color	Status	Description
N/A	Off	No power is present or the LED has been turned off from the CLI.
Yellow	Steady on	The AP is initializing, or an initialization exception has occurred.
	Flashing (twice per second)	The Ethernet ports are down and no mesh links are established.
Green	Steady on	The AP is in standby state and does not have any associated clients.
	Flashing (once every two seconds)	The AP has started up in fit mode, but has not registered to any AC.
	Flashing (once per second)	A radio has associated clients and the number of associated clients is less than the threshold.
	Flashing (twice per second)	The number of associated clients has exceeded the threshold.
Blue	Flashing (twice per second)	The AP is upgrading the image.

LED description for the reset button

Table1-11 LED description for the reset button

Reset button	Press and hold duration (seconds)	LED color	Status	Description
RESET	0 to 5	Green	Steady on	Reset the AP.
	5 to 20	Green	Flashing (twice per second)	Restore to the factory defaults.
	20 to 30	Yellow	Flashing (once every two seconds)	The AP is operating in fit mode.
			Flashing (twice per	The AP is operating in anchor AC mode.

Reset button	Press and hold duration (seconds)	LED color	Status	Description
			second)	
			Flashing (four times per second)	The AP is operating in cloud mode.
	> 30	Yellow	Flashing (twice per second)	The AP is operating in anchor AC mode.
			Flashing (four times per second)	The AP is operating in cloud mode.
		Green	Flashing (four times per second)	The AP is switching from fit mode to cloud mode. Note: After you release the button, if the AP has switched from fit mode to cloud mode, it will restart for the new mode to take effect.

Transceiver modules

Common transceiver modules

Transceiver module, fiber connector, and optical fiber views

To connect a fiber port, use an SFP transceiver module and optical fibers with LC connectors.

Figure1-16 SFP transceiver module

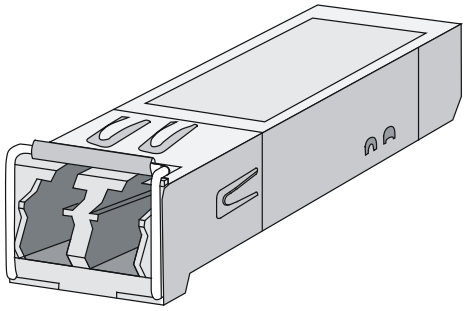
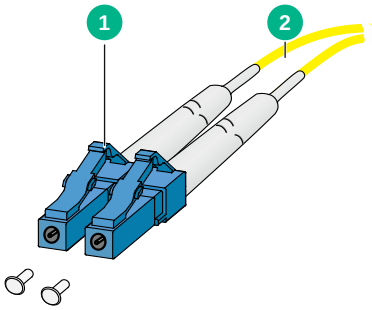


Figure1-17 Optical fiber with LC connectors



(1) LC connector	(2) Optical fiber

Technical specifications

10G transceiver module

Table1-12 SFP-XG-CPRI-IR-SM1310 transceiver module specifications

Item	SFP-XG-CPRI-IR-SM1310
Central wavelength	1310 nm
Maximum transmission distance	1.4 km (0.87 miles)
Data rate	4920 to 10310 Mbps
Connector type	LC

Item	SFP-XG-CPRI-IR-SM1310
Fiber mode	SMF
Fiber diameter	9/125 μm
Tx optical power	–8.2 to +0.5 dBm

2.5G transceiver module

Table1-13 SFP-2.5G-LX10-SM1310-DR-I transceiver module specifications

Item	SFP-2.5G-LX10-SM1310-DR-I
Central wavelength	1310 nm
Maximum transmission distance	10 km (6.21 miles)
Data rate	1228.8 to 2457.6 Mbps
Connector type	LC
Fiber mode	SMF
Fiber diameter	9/125 μm
Tx optical power	–7 to +2 dBm

Hybrid copper-fiber transceiver modules

Hybrid copper-fiber transceiver module and hybrid copper-fiber connector views

Hybrid copper-fiber transceiver modules support both optical and electrical transmission and PoE power supply. To connect a hybrid copper-fiber port, use a hybrid copper-fiber transceiver module and a hybrid copper-fiber cable with hybrid copper-fiber connectors.

Figure1-18 Hybrid copper-fiber transceiver module

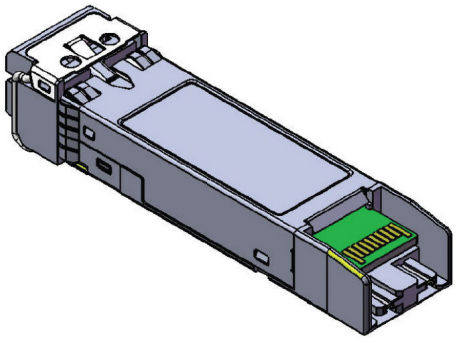
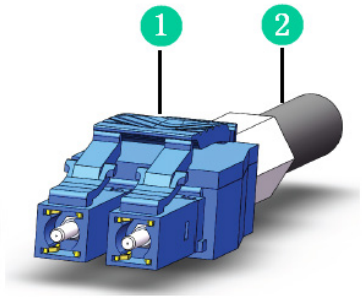


Figure1-19 Hybrid copper-fiber cable with hybrid copper-fiber connectors



(1) Hybrid copper-fiber connector	(2) Hybrid copper-fiber cable

Technical specifications

GE hybrid copper-fiber transceiver module

Table1-14 H3C-LS5M1SFPPOE-SFP GE hybrid copper-fiber transceiver module specifications

Item	H3C-LS5M1SFPPOE-SFP
Operating wavelength	1310 nm
Maximum transmission distance	10 km (6.21 miles)
Data rate	1.25 Gbps
Connector type	LC
Maximum power consumption	1.0 W
Operating temperature range	–40°C to +85°C (–40°F to +185°F)
Tx optical power	–9 to –1 dBm

10GE hybrid copper-fiber transceiver module

Table1-15 H3C-LS5M1SFPPOEA-SFP 10GE multi-rate hybrid copper-fiber transceiver module specifications

Item	H3C-LS5M1SFPPOEA-SFP
Operating wavelength	1310 nm
Maximum transmission distance	1.4 km (0.87 miles)
Data rate	10.3125 Gbps
Connector type	LC
Maximum power consumption	1.2 W
Operating temperature range	–40°C to +85°C (–40°F to +185°F)
Tx optical power	–8.2 to +0.5 dBm

Receive Sensitivity Values

Receive sensitivity is the minimum signal receive power at the antenna port required for correct wireless device operation. A lower receive sensitivity value indicates better receive performance of the wireless device.

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Table1-16 Receive Sensitivity Values

Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
802.11/11b		
1 Mbps	-	-100
11 Mbps	-	-92
802.11a/g		
6 Mbps	-97	-97
24 Mbps	-88	-88
54 Mbps	-79	-79
802.11n HT20		
MCS0	-98	-97
MCS4	-89	-87
MCS7	-79	-77
802.11n HT40		
MCS0	-95	-94
MCS4	-86	-84
MCS7	-76	-75
802.11ac VHT20		
MCS0	-98	-
MCS4	-88	-
MCS7	-79	-
MCS8	-75	-
MCS9	-	-
802.11ac VHT40		
MCS0	-95	-
MCS4	-86	-
MCS7	-76	-

Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS8	-74	-
MCS9	-71	-
802.11ac VHT80		
MCS0	-92	-
MCS4	-83	-
MCS7	-73	-
MCS8	-70	-
MCS9	-67	-
802.11ac VHT160		
MCS0	-89	-
MCS4	-77	-
MCS7	-70	-
MCS8	-66	-
MCS9	-64	-
802.11ax HE20		
MCS0	-98	-96
MCS4	-88	-86
MCS7	-78	-78
MCS8	-77	-76
MCS9	-75	-74
MCS10	-73	-71
MCS11	-69	-67
802.11ax HE40		
MCS0	-95	-94
MCS4	-86	-85
MCS7	-76	-75
MCS8	-73	-72
MCS9	-70	-69
MCS10	-68	-67
MCS11	-65	-64
802.11ax HE80		
MCS0	-92	-
MCS4	-82	-

Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS7	-71	-
MCS8	-69	-
MCS9	-66	-
MCS10	-64	-
MCS11	-62	-
802.11ax HE160		
MCS0	-89	-
MCS4	-79	-
MCS7	-69	-
MCS8	-66	-
MCS9	-63	-
MCS10	-61	-
MCS11	-58	-
802.11be EHT20		
MCS0	-98	-
MCS4	-89	-
MCS7	-80	-
MCS8	-78	-
MCS9	-75	-
MCS10	-71	-
MCS11	-68	-
MCS12	-65	-
MCS13	-62	-
802.11be EHT40		
MCS0	-95	-
MCS4	-88	-
MCS7	-77	-
MCS8	-75	-
MCS9	-72	-
MCS10	-68	-
MCS11	-65	-
MCS12	-63	-
MCS13	-60	-

Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
802.11be EHT80		
MCS0	-92	-
MCS4	-84	-
MCS7	-74	-
MCS8	-72	-
MCS9	-69	-
MCS10	-66	-
MCS11	-63	-
MCS12	-60	-
MCS13	-58	-
802.11be EHT160		
MCS0	-89	-
MCS4	-80	-
MCS7	-70	-
MCS8	-68	-
MCS9	-65	-
MCS10	-63	-
MCS11	-60	-
MCS12	-58	-
MCS13	-56	-

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Table1-17 Receive Sensitivity Values

Radio	6GHz Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
802.11/11b			
1 Mbps	-	-	-100
11 Mbps	-	-	-92
802.11a/g			
6 Mbps	-	-96	-97

Radio	6GHz Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
24 Mbps	-	-87	-88
54 Mbps	-	-77	-79
802.11n HT20			
MCS0	-	-97	-97
MCS4	-	-87	-87
MCS7	-	-78	-78
802.11n HT40			
MCS0	-	-94	-95
MCS4	-	-83	-85
MCS7	-	-74	-76
802.11ac VHT20			
MCS0	-	-97	-
MCS4	-	-87	-
MCS7	-	-78	-
MCS8	-	-74	-
MCS9	-	-	-
802.11ac VHT40			
MCS0	-	-94	-
MCS4	-	-84	-
MCS7	-	-75	-
MCS8	-	-72	-
MCS9	-	-69	-
802.11ac VHT80			
MCS0	-	-91	-
MCS4	-	-81	-
MCS7	-	-72	-
MCS8	-	-69	-
MCS9	-	-65	-
802.11ac VHT160			
MCS0	-	-87	-
MCS4	-	-77	-
MCS7	-	-69	-
MCS8	-	-66	-

Radio	6GHz Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS9	-	-63	-
802.11ax HE20			
MCS0	-95	-97	-97
MCS4	-85	-87	-87
MCS7	-76	-78	-78
MCS8	-73	-76	-76
MCS9	-70	-73	-73
MCS10	-68	-70	-70
MCS11	-65	-67	-67
802.11ax HE40			
MCS0	-92	-94	-95
MCS4	-82	-84	-85
MCS7	-74	-75	-76
MCS8	-71	-72	-74
MCS9	-68	-69	-71
MCS10	-66	-67	-68
MCS11	-63	-64	-65
802.11ax HE80			
MCS0	-89	-91	-
MCS4	-79	-81	-
MCS7	-71	-72	-
MCS8	-68	-70	-
MCS9	-65	-67	-
MCS10	-63	-64	-
MCS11	-60	-61	-
802.11ax HE160			
MCS0	-86	-87	-
MCS4	-76	-78	-
MCS7	-68	-70	-
MCS8	-66	-68	-
MCS9	-63	-65	-
MCS10	-60	-62	-
MCS11	-56	-58	-

Radio	6GHz Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
802.11be EHT20			
MCS0	-94	-96	-97
MCS4	-84	-86	-87
MCS7	-76	-78	-79
MCS8	-73	-75	-76
MCS9	-70	-72	-73
MCS10	-68	-70	-71
MCS11	-65	-67	-68
MCS12	-62	-63	-
MCS13	-58	-59	-
802.11be EHT40			
MCS0	-92	-93	-95
MCS4	-82	-83	-85
MCS7	-73	-74	-76
MCS8	-71	-72	-74
MCS9	-68	-69	-71
MCS10	-65	-66	-68
MCS11	-62	-63	-65
MCS12	-60	-61	-
MCS13	-57	-58	-
802.11be EHT80			
MCS0	-89	-90	-
MCS4	-79	-80	-
MCS7	-71	-72	-
MCS8	-68	-70	-
MCS9	-65	-67	-
MCS10	-63	-64	-
MCS11	-60	-61	-
MCS12	-57	-59	-
MCS13	-54	-56	-
802.11be EHT160			
MCS0	-86	-87	-
MCS4	-76	-77	-

Radio	6GHz Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS7	-68	-69	-
MCS8	-66	-67	-
MCS9	-63	-64	-
MCS10	-60	-61	-
MCS11	-56	-57	-
MCS12	-55	-56	-
MCS13	-53	-54	-
802.11be EHT320			
MCS0	-83	-	-
MCS4	-74	-	-
MCS7	-66	-	-
MCS8	-64	-	-
MCS9	-61	-	-
MCS10	-57	-	-
MCS11	-53	-	-
MCS12	-53	-	-
MCS13	-52	-	-

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Table1-18 Receive Sensitivity Values

Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
802.11/11b		
1 Mbps	-	-100
11 Mbps	-	-92
802.11a/g		
6 Mbps	-97	-97
24 Mbps	-88	-87
54 Mbps	-78	-79
802.11n HT20		

Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS0	-98	-98
MCS4	-86	-86
MCS7	-79	-78
802.11n HT40		
MCS0	-95	-95
MCS4	-83	-83
MCS7	-76	-76
802.11ac VHT20		
MCS0	-98	-
MCS4	-86	-
MCS7	-79	-
MCS8	-75	-
MCS9	-	-
802.11ac VHT40		
MCS0	-95	-
MCS4	-83	-
MCS7	-76	-
MCS8	-71	-
MCS9	-70	-
802.11ac VHT80		
MCS0	-92	-
MCS4	-80	-
MCS7	-73	-
MCS8	-69	-
MCS9	-67	-
802.11ac VHT160		
MCS0	-89	-
MCS4	-77	-
MCS7	-70	-
MCS8	-66	-
MCS9	-64	-
802.11ax HE20		
MCS0	-98	-97

Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS4	-86	-87
MCS7	-79	-78
MCS8	-75	-75
MCS9	-73	-73
MCS10	-70	-70
MCS11	-68	-68
802.11ax HE40		
MCS0	-95	-95
MCS4	-83	-83
MCS7	-76	-76
MCS8	-71	-73
MCS9	-70	-71
MCS10	-67	-68
MCS11	-65	-65
802.11ax HE80		
MCS0	-92	-
MCS4	-80	-
MCS7	-73	-
MCS8	-69	-
MCS9	-67	-
MCS10	-66	-
MCS11	-63	-
802.11ax HE160		
MCS0	-89	-
MCS4	-77	-
MCS7	-70	-
MCS8	-66	-
MCS9	-64	-
MCS10	-52	-
MCS11	-59	-
802.11be EHT20		
MCS0	-98	-
MCS4	-86	-

Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS7	-79	-
MCS8	-75	-
MCS9	-73	-
MCS10	-70	-
MCS11	-68	-
MCS12	-65	-
MCS13	-61	-
802.11be EHT40		
MCS0	-95	-
MCS4	-83	-
MCS7	-76	-
MCS8	-71	-
MCS9	-70	-
MCS10	-67	-
MCS11	-65	-
MCS12	-62	-
MCS13	-59	-
802.11be EHT80		
MCS0	-92	-
MCS4	-80	-
MCS7	-73	-
MCS8	-69	-
MCS9	-67	-
MCS10	-66	-
MCS11	-63	-
MCS12	-60	-
MCS13	-58	-
802.11be EHT160		
MCS0	-89	-
MCS4	-77	-
MCS7	-70	-
MCS8	-66	-
MCS9	-64	-
MCS10	-52	-

Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS11	-59	-
MCS12	-57	-
MCS13	-55	-

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Table1-19 Receive Sensitivity Values

Radio	6GHz Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
802.11/11b			
1 Mbps	-	-	-99
11 Mbps	-	-	-92
802.11a/g			
6 Mbps	-	-95	-97
24 Mbps	-	-86	-89
54 Mbps	-	-77	-79
802.11n HT20			
MCS0	-	-95	-97
MCS4	-	-86	-88
MCS7	-	-76	-79
802.11n HT40			
MCS0	-	-92	-95
MCS4	-	-83	-85
MCS7	-	-73	-76
802.11ac VHT20			
MCS0	-	-95	-
MCS4	-	-86	-
MCS7	-	-76	-
MCS8	-	-72	-
MCS9	-	-	-
802.11ac VHT40			

Radio	6GHz Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS0	-	-92	-
MCS4	-	-83	-
MCS7	-	-73	-
MCS8	-	-71	-
MCS9	-	-68	-
802.11ac VHT80			
MCS0	-	-89	-
MCS4	-	-79	-
MCS7	-	-69	-
MCS8	-	-67	-
MCS9	-	-64	-
802.11ac VHT160			
MCS0	-	-86	-
MCS4	-	-76	-
MCS7	-	-67	-
MCS8	-	-65	-
MCS9	-	-62	-
802.11ax HE20			
MCS0	-96	-95	-97
MCS4	-87	-85	-87
MCS7	-77	-76	-78
MCS8	-74	-74	-76
MCS9	-71	-72	-73
MCS10	-68	-69	-71
MCS11	-65	-66	-68
802.11ax HE40			
MCS0	-94	-92	-95
MCS4	-84	-83	-84
MCS7	-74	-73	-75
MCS8	-72	-70	-73
MCS9	-69	-68	-71
MCS10	-67	-65	-68
MCS11	-63	-62	-65

Radio	6GHz Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
802.11ax HE80			
MCS0	-90	-89	-
MCS4	-81	-80	-
MCS7	-71	-70	-
MCS8	-68	-67	-
MCS9	-65	-64	-
MCS10	-63	-62	-
MCS11	-61	-60	-
802.11ax HE160			
MCS0	-87	-86	-
MCS4	-78	-76	-
MCS7	-68	-67	-
MCS8	-66	-64	-
MCS9	-63	-61	-
MCS10	-60	-59	-
MCS11	-57	-56	-
802.11be EHT20			
MCS0	-95	-94	-
MCS4	-86	-84	-
MCS7	-77	-75	-
MCS8	-74	-73	-
MCS9	-71	-71	-
MCS10	-68	-69	-
MCS11	-65	-66	-
MCS12	-63	-63	-
MCS13	-60	-59	-
802.11be EHT40			
MCS0	-93	-92	-
MCS4	-84	-82	-
MCS7	-74	-73	-
MCS8	-72	-70	-
MCS9	-69	-68	-
MCS10	-66	-67	-

Radio	6GHz Radio	5GHz Radio	2.4GHz Radio
	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1	Rx sensitivity (dBm) NSS1
MCS11	-63	-64	-
MCS12	-60	-61	-
MCS13	-57	-58	-
802.11be EHT80			
MCS0	-90	-89	-
MCS4	-81	-79	-
MCS7	-72	-71	-
MCS8	-69	-69	-
MCS9	-66	-66	-
MCS10	-64	-64	-
MCS11	-62	-61	-
MCS12	-59	-58	-
MCS13	-56	-55	-
802.11be EHT160			
MCS0	-87	-86	-
MCS4	-78	-77	-
MCS7	-69	-68	-
MCS8	-66	-65	-
MCS9	-63	-63	-
MCS10	-60	-61	-
MCS11	-58	-58	-
MCS12	-55	-55	-
MCS13	-52	-53	-
802.11be EHT320			
MCS0	-84	-	-
MCS4	-74	-	-
MCS7	-65	-	-
MCS8	-63	-	-
MCS9	-60	-	-
MCS10	-58	-	-
MCS11	-55	-	-
MCS12	-52	-	-
MCS13	-49	-	-