



Overview //

As the IEEE 802.11ac Wave 1 and Wave 2 standards have been released, Wi-Fi is declared to embrace the gigabit era, providing choices for customers who require better-performance, higher-bandwidth wireless access networks.

After in-depth survey and analysis on customer requirements, Huawei have made subdivision of use scenarios and launched more than 20 AP products under five categories matching target coverage areas and terminal types: indoor settled, indoor wall plate, agile distributed, rail transportation, and outdoor. Such a wide assortment of AP products will support wireless network deployment and coverage in various service scenarios.

Indoor Settled AP



Wave 2 AP: AP7050DN-E



Wave 2 AP: AP7050DE

Applicable to indoor coverage scenarios such as universities and large-scale campuses, supporting convergence with LTE Pico base stations.

01

- 802.11ac Wave 2 and MU-MIMO (4SU-4MU) technology, delivering services simultaneously on 2.4G and 5G radios; 800 Mbit/s at 2.4 GHz; 1.73 Gbit/s at 5 GHz; and 2.53 Gbit/s for the device.
- 2.5GE Ethernet uplink interface to improve the service load capability.
- ⁻ Support for UPoE and 48 V DC power supply, and the PoE out function that allows the AP to supply power to other devices (such as Pico base stations).
- [–] Local-and cloud-managed.
- 3G/LTE signal filtering.
- Applicable to mobile office, high-density coverage, elementary education, and higher education scenarios.
- 802.11ac Wave 2 and MU-MIMO (4SU-4MU) technology, delivering services simultaneously on 2.4G and 5G radios; 800 Mbit/s at 2.4 GHz; 1.73 Gbit/s at 5 GHz; and 2.53 Gbit/s for the device.
- Smart antenna array technology enables targeted signal coverage for mobile terminals, reduces interferences, and improves signal quality. Additionally, it implements millisecondlevel switchover as terminals move.
- Built-in Bluetooth, allowing the AP to collaborate with eSight to accurately locate Bluetooth terminals.
- Local-and cloud-managed.
- Dual GE ports, supporting data backup.



- Applicable to medium- to large-scale scenarios such as mobile office, high-density coverage, elementary education, and higher education.
- 802.11ac Wave 2 and MU-MIMO (4SU-3MU) technology, delivering services simultaneously on 2.4G and 5G radios; 800 Mbit/s at 2.4 GHz; 1.73 Gbit/s at 5 GHz; and 2.53 Gbit/s for the device.
- Local-and cloud-managed.
- Dual GE ports, supporting data backup.

Wave 2 AP: AP6050DN&AP6150DN



Wave 2 AP: AP4050DN-E

Applicable to scenarios including shopping malls, supermarkets, healthcare, warehousing, manufacturing, and logistics.

02

- 802.11ac Wave 2 and MU-MIMO (2SU-2MU) technology, delivering services simultaneously on 2.4G and 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- Built-in Bluetooth, allowing the AP to collaborate with eSight to accurately locate Bluetooth terminals.
- ⁻ Three IoT module slots, allowing for flexible IoT application extension.
- [–] PoE out function, allowing the AP to supply power to other APs or devices.
- [–] Dual GE ports, supporting data backup.
- Local-and cloud-managed.



Wave 2 AP: AP4050DN-HD

- Applicable to indoor high-density scenarios such as stadiums, auditoriums, shopping malls, and supermarkets.
- 802.11ac Wave 2 and MU-MIMO (2SU-2MU) technology, delivering services simultaneously on 2.4G and 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- ⁻ Built-in smart directional high-density antennas, reducing inter-AP interference and saving construction costs.

Applicable to scenarios where buildings have simple structures, small areas, and dense users, such as small- and medium-sized enterprises, smart buildings, hospitals, and

- PoE out function, allowing the AP to supply power to other APs or devices.
- Dual GE ports, supporting data backup.
- [–] Local-and cloud-managed.



- shopping malls. – 802.11ac Wave 2 and MU-MIMO (2SU-2MU) technology, delivering services
 - simultaneously on 2.4G and 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.

Wave 2 AP: AP4050DN



Wave 2 AP: AP4051DN&AP4151DN

Applicable to scenarios where buildings have simple structures, small areas, and dense users, such as small- and medium-sized enterprises, intelligent buildings, healthcare, and shopping malls.

0.3

- 802.11ac Wave 2 and MU-MIMO (2SU-2MU) technology, delivering services simultaneously on 2.4G and 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- Dual GE ports, supporting data backup.



Wave 1 AP: AP7030DE

- Recommended for use in high-density scenarios, including business and exhibition centers, stadiums, and other large venues.
- 3 x 3 MIMO with three spatial streams; 600 Mbit/s at 2.4 GHz; 1.3 Gbit/s at 5 GHz; and 1.9 Gbit/s for the device.
- Smart antenna arrays, which can adjust the radiation direction and power accordingly as wireless terminals move.



Wave 1 AP: AP5030DN&AP5130DN



Wave 1 AP: AP4030TN

- Recommended for use in enterprise offices, airports and stations, digital trains, and stadiums.
- 3 x 3 MIMO with three spatial streams; 450 Mbit/s at 2.4 GHz; 1.3 Gbit/s at 5 GHz; and 1.75 Gbit/s for the device.
- Applicable to scenarios including elementary education electronic classrooms, highdensity scenarios, shopping malls, and supermarkets.
- 1 x 5G + 2 x 2.4G/5G radios, which can support wireless access at a rate of 867 Mbit/s + 300 Mbit/s + 300 Mbit/s or 867 Mbit/s + 867 Mbit/s + 300 Mbit/s. The maximum rate of the AP reaches up to 2 Gbit/s.
- Software-defined radio function, implementing flexible working frequency switchover from 2.4 GHz to 5 GHz and service function adjustment such as wireless coverage, positioning, security, and bridge.

Dual GE ports, supporting data backup.



Applicable to scenarios where buildings have simple structures, small areas, and dense users, such as small- and medium-sized enterprises, smart buildings, hospitals, and shopping malls.

04

Wave 1 AP: AP4030DN&AP4130DN

2 x 2 MIMO with two spatial streams; 300 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.167 Gbit/s for the device.

Indoor Wall Plate AP.



Wave 2 AP: AP2050DN

Recommended for environments with densely distributed small rooms, such as hotels, dormitories, hospitals, and offices.

- Compliance with 802.11ac Wave 2, MU-MIMO (2SU-2MU);400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- One GE uplink port, four GE downlink ports for Ethernet connections or wired terminal connections, and two RJ45 pass-through phone ports (compatible with RJ11).
- Various installation modes for easy deployment, including plate-mounting and deskmounting modes.
- [–] Local-and cloud-managed.



Wave 2 AP: AP2050DN-E

- Recommended for environments with densely distributed small rooms, such as hotels, dormitories, hospitals, and offices.
- Compliance with 802.11ac Wave 2, MU-MIMO (2SU-2MU);400 Mbit/s at 2.4 GHz; 867
 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- One GE uplink port, four GE downlink ports for Ethernet connections or wired terminal connections, and two RJ45 pass-through phone ports (compatible with RJ11).
- Built-in Bluetooth, allowing the AP to collaborate with eSight to accurately locate Bluetooth terminals.
- [–] PoE out function, allowing the AP to supply power for IP phones and other terminals.
- Various installation modes for easy deployment, including plate-mounting and deskmounting modes.
- Local-and cloud-managed.



Recommended for environments with densely distributed small rooms, such as hotels, dormitories, hospitals, and offices.

05

- 2 x 2 MIMO with two spatial streams; 300 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.167 Gbit/s for the device.
- Provides one GE port and four 100M ports for Ethernet connections or wired terminal connections, and two phone ports for phone connections.
- Has a compact design, with built-in antenna, hidden indicator, and sliding panel. The AP can be installed in an 86 mm junction box which makes the AP well blend into surroundings.

Agile Distributed AP



- Manages and configures remote units. The AD9430DN-24&AD9430DN-12 can be flexibly deployed in the equipment rooms, weak-current wells, and corridors, to cover scenarios with a high density of rooms and complex wall structure, such as schools, hotels, hospitals, and office conference rooms.
- An AD9430DN-24 central AP provides 4 uplink combo ports and 24 downlink GE ports supporting standard PoE power supply, and supports direct management over 24 remote units, which can be extended through the switch to a maximum of 48 remote units. The AD9430DN-24 supports a maximum of 1000 concurrent users and association from a maximum of 4000 users.
- An AD9430DN-12 central AP provides 2 uplink GE ports and 12 downlink GE ports, and supports direct management over 12 remote units, which can be extended through the switch to a maximum of 24 remote units. The AD9430DN-12 supports a maximum of 512 concurrent users and association from a maximum of 2000 users.
- Local-and cloud-managed.



Remote Unit: R240D&R230D

- Managed by the central AP, remote units can be directly installed in rooms to cover scenarios with a high density of rooms and complex wall structure, such as schools, hotels, hospitals, and office conference rooms.
- 2 x 2 MIMO with two spatial streams; 300 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.167 Gbit/s for the device.
- An R240D remote unit provides one GE port and four 100M ports for Ethernet connections or wired terminal connections, and one phone port for phone connections, and supports ceiling mounting, wall mounting, and wall plate mounting.
- An R230D remote unit provides one 100M port, and supports ceiling mounting, wall mounting, and wall plate mounting.



Remote Unit: R250D

Managed by the central AP, remote units can be directly installed in rooms to cover scenarios with a high density of rooms and complex wall structure, such as schools, hotels, hospitals, and office conference rooms.

06

- Compliance with 802.11ac Wave 2, MU-MIMO (2SU-2MU);400 Mbit/s at 2.4 GHz; 867
 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- One GE uplink port and one GE downlink port for Ethernet connections or wired terminal connections.
- ⁻ Supports PoE power supply in compliance with IEEE 802.3af/at.
- Various installation modes for easy deployment, including ceiling-mounting, wallmounting, plate-mounting modes.



Remote Unit: R250D-E

- Managed by the central AP, remote units can be directly installed in rooms to cover scenarios with a high density of rooms and complex wall structure, such as schools, hotels, hospitals, and office conference rooms.
- Compliance with 802.11ac Wave 2, MU-MIMO (2SU-2MU);400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- One GE uplink port, four GE downlink ports for Ethernet connections or wired terminal connections.
- Built-in Bluetooth, allowing the AP to collaborate with eSight to accurately locate Bluetooth terminals.
- Supports PoE power supply in compliance with IEEE 802.3af/at and power supply of -48V DC.
- PoE out function, allowing the AP to supply power for IP phones and other terminals.
- Various installation modes for easy deployment, including plate-mounting and deskmounting modes.



Wave 1 AP: AP9132DN&AP9131DN

- Serves as the vehicle-mounted AP, trackside AP, or compartment AP and applies to transportation industry train-ground backhaul and compartment coverage scenarios.
- 802.11ac Wave 1, delivering services simultaneously on 2.4G and 5G radios; 450 Mbit/s at 2.4 GHz; 1.3 Gbit/s at 5 GHz; and 1.75 Gbit/s for the device.
- External dual-band antenna (2.4 GHz and 5 GHz), which can adjust the radiation direction to ensure the coverage.
- Soft switchover technology that establishes the link and then conducts the switchover, implementing fast link switching in train-to-ground communication and minimizing packet loss during the switchover.
- High-level material, overall heat dissipation design, −40°C to +65°C wide operating temperature range, and industrial M12 shockproof connectors for power supply Ethernet ports that meet shockproof, waterproof, and fireproof requirements, supporting vehicle-mounted deployment required by the rail transportation industry.
- Fast link switching in train-to-ground communication, controlling the switchover time within
 50 ms and providing a stable and high-speed train-ground backhaul network.
- AP9132DN: supports the splitting function, that is, compartments are covered at 2.4 GHz and bridged at 5 GHz, which are flexible and easy to deploy.

Outdoor AP...



Wave2 AP: AP8050DN&AP8150DN

Recommended for use in coverage scenarios (for example, high-density stadiums, squares, pedestrian streets, and amusement parks) and bridging scenarios (for example, wireless harbors, data backhaul, video surveillance, and vehicle-ground backhaul).

- 802.11ac Wave 2 and MU-MIMO (2SU-2MU) technology, delivering services simultaneously on 2.4G and 5G radios; 400 Mbit/s at 2.4 GHz; 867 Mbit/s at 5 GHz; and 1.267 Gbit/s for the device.
- PoE power supply in compliance with IEEE 802.3at, making APs easy to install.
- Uplink optical port and dual GE Ethernet ports, supporting data backup and PoE power supply.
- AP8150DN: uses external antennas. Antennas can be configured, and deployment locations are determined based on networking requirements.
- AP8050DN: uses built-in antennas with 10 dBi gain at 2.4 GHz and 10 dBi gain at 5 GHz (horizontal: 60 degrees; vertical: 30 degrees).



- Recommended for use in coverage scenarios (for example, high-density stadiums, squares, pedestrian streets, and amusement parks) and bridging scenarios (for example, wireless harbors, data backhaul, video surveillance, and vehicle-ground backhaul).
- 3 x 3 MIMO with three spatial streams; 450 Mbit/s at 2.4 GHz; 1.3 Gbit/s at 5 GHz; and 1.75 Gbit/s for the device.
- PoE power supply in compliance with IEEE 802.3at, making APs easy to install.
- Uplink optical port and dual GE Ethernet ports, supporting data backup and PoE power supply.
- AP8130DN: uses external antennas. Antennas can be configured, and deployment locations are determined based on networking requirements.
- AP8030DN: uses built-in antennas with 10 dBi gain at 2.4 GHz and 10 dBi gain at 5 GHz (horizontal: 60 degrees; vertical: 30 degrees).
- Cloud-managed.



Wave 1 AP: AP8130DN-W

- Recommended for use in coverage scenarios (for example, high-density stadiums, squares, pedestrian streets, and amusement parks) and bridging scenarios (for example, wireless harbors, data backhaul, video surveillance, and vehicle-ground backhaul).
- 3 x 3 MIMO with three spatial streams, delivers services simultaneously on two radios (one radio: 2.4 GHz/4.9 GHz/5 GHz; the other radio: 4.9 GHz/5 GHz) with a rate of 450 Mbit/s at 2.4 GHz, 1.3 Gbit/s at 5 GHz, and 1.75 Gbit/s for the device.
- ⁻ Supports wireless bridge and backhaul at 4.9 GHz.
- Supports 2.4 GHz, 4.9 GHz, or 5 GHz on one radio and 4.9 GHz or 5 GHz on the other. When working at dual 5 GHz frequency bands simultaneously, the AP provides a system rate of 2.6 Gbit/s and can function as a relay AP to implement wireless bridging functions, which reduces costs and improves device installation efficiency.
- Uplink optical port and dual GE Ethernet ports, supporting data backup and PoE power supply.
- Has built-in 5 kA surge protectors, requiring no external surge protective devices. This design simplifies installation and saves costs.

Huawei AP Specifications and Features

Specifications and features of Huawei 802.11ac wave2 series indoor settled APs

	802.11ac Wave 2 Indoor Settled AP								
Huawei 802.11ac AP	AP7050DN-E	AP7050DE	AP6050DN & AP6150DN	AP4050DN-E	AP4050DN-HD	AP4050DN	AP4150DN & AP4151DN		
Target market	In indoor coverage, such as colleges and large campuses	Mobile office, high-density scenarios, elementary education, and higher education	Mobile office, high-density scenarios, elementary education, and higher education	Shopping malls, supermarkets, healthcare, warehousing, manufacturing, and logistics	High-density scenarios such as indoor stadiums, auditoriums, shopping malls, and supermarkets	Small and medium enterprises, smart buildings, hospitals, and large shopping malls	Small and medium enterprises, smart buildings, hospitals, and large shopping malls		
Standard protocols	2.4 GHz: 802.11b/	2.4 GHz: 802.11b/g/n; 5G Hz: 802.11a/n/ac/ac Wave 2							
MIMO: number of spatial streams	4x4:4 MU-MIMO 4x4:4 MU-MIMO 4x4:4 4SU-3MU 2x2:2 MU-MIMO								
Rate	800 Mbit/s (2.4 GHz) + 1.73 Gbit/ s (5G)	800 Mbit/s (2.4 GHz) +1.73 Gbit/s (5 GHz)	800 Mbit/s (2.4 GHz) + 1.73 Gbit/ s (5 GHz)	400 Mbit/s (2.4 GHz) + 867 Mbit/s (5 GHz)	400 Mbit/s (2.4 GHz) + 867 Mbit/s (5 GHz)	400 Mbit/s (2.4 GHz) + 867 Mbit/s (5 GHz)	400 Mbit/s (2.4 GHz) + 867 Mbit/s (5 GHz)		
Number of SSIDs supported by each radio	16	16	16	16	16	16	16		
Interface	1 x 10/100/1000 Base-T Ethernet port + 1 x 100/1000/2500 Base-T Ethernet port	2 x 10/100/1000Ba	ise-T Ethernet port	1 x 10/100/1000 Base-T Ethernet port	2 x 10/100/1000 Base-T Ethernet port				
Power supply	48 V DC UPoE	12 V DC PoE: 802.3at	12 V DC PoE: 802.3at	12 V DC PoE: 802.3at	12 V DC PoE: 802.3at	12 V DC PoE: 802.3at	12 V DC PoE: 802.3at		
Maximum power consumption	28 W	25 W	25 W	15 W	15 W	12.95 W	12.95 W		
Temperature	-10 to +45°C	-10 to +50°C	-10 to +50°C	-10 to +50°C	-10 to +50°C	-10 to +50°C	−10 to +50°C		
Antenna	Built-in antennas	Built-in smart antennas	AP6050DN: Built- in antennas AP6150DN: external antennas	Built-in antennas	Built-in smart high-density antennas	Built-in antennas	AP4051DN: Built-in antennas AP4151DN: external antennas		
Maximum transmit	2.4 GHz: 17 dBm 5 GHz: 21 dBm	2.4 GHz: 20 dBm 5 GHz: 21 dBm	2.4 GHz: 20 dBm 5 GHz: 19 dBm	2.4 GHz: 20 dBm 5 GHz: 20 dBm	2.4 GHz: 20 dBm 5 GHz: 20 dBm	2.4 GHz: 20 dBm 5 GHz: 20 dBm	2.4 GHz: 20 dBm 5 GHz: 20 dBm		
power	NOTE: The actual n	naximum transmit po	ower depends on loc	al laws and regulation	ons.				
IP protection grade	IP41	IP41	IP41	IP41	IP41	IP41	IP41		

Huawei	802.11ac Wave 2 Indoor Settled AP								
802.11ac AP	AP7050DN-E	AP7050DE	AP6050DN & AP6150DN	AP4050DN-E	AP4050DN-HD	AP4050DN	AP4150DN & AP4151DN		
Working mode	Fit/Fat/Cloud AP	Fit/Fat/Cloud AP	Fit/Fat/Cloud AP	Fit/Fat/Cloud AP	Fit/Fat/Cloud AP	Fit/Fat AP	Fit/Fat AP		
USB port	\checkmark	\checkmark	\checkmark	\checkmark	-	-	\checkmark		
Wireless positioning/ Real-Time Location System (RTLS)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V		
Spectrum analysis	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Seamless roaming	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
IPv6	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Wireless Intrusion Prevention System (WIPS)/ Wireless Intrusion Detection System (WIDS)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Auto Radio	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
High Density Boost	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
User Awareness	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		

Specifications and features of Huawei 802.11ac wave1 series indoor settled APs

	802.11ac Wave 1 Indoor Settled AP								
Huawei 802.11ac AP	AP7030DE	AP5030DN & AP5130DN	AP4030TN	AP4030DN & AP4130DN					
Target market	High-end market: medium- to large-sized enterprises	Mid-range market: small- to medium-sized enterprises	High-density scenarios, such as mobile office, elementary education, and higher education	Small and medium enterprises, smart buildings, hospitals, and large shopping malls					
Standard protocols	2.4 GHz: 802.11b/g/n; 5 GHz: 802	2.11a/n/ac							
MIMO: number of spatial streams	3x3:3	3x3:3	2x2:2	2x2:2					
Rate	600 Mbit/s (2.4 GHz) + 1.3 Gbit/ 450 Mbit/s (2.4 GHz) + 1.3 Gbit/ s(2.4 GHz) + 867 Mbit/s (5 GHz) s (5 GHz) s (5 GHz) s(5 GHz) 300 Mbit/s(5 GHz) + 867 Mbit/s (5 GHz)		300 Mbit/s(2.4 GHz) + 300 Mbit/ s(2.4GHz) + 867 Mbit/s (5 GHz); 300 Mbit/s(5GHz) + 867 Mbit/ s(5GHz) + 867 Mbit/s(5GHz)	300 Mbit/s (2.4 GHz) + 867 Mbit/ s (5 GHz)					
Number of SSIDs supported by each radio	16	16	16	16					
Interface	2 x 10/100/1000Base-T Ethernet p	1 x 10/100/1000Base-T Ethernet port							
Power supply	12V DC PoE: 802.3at	12 V DC PoE: 802.3af/at	12 V DC PoE: 802.3at	12 V DC PoE: 802.3af/at					
Maximum power consumption	19 W	12.95 W	18 W	10.2 W					
Temperature	-20 to +50°C	-10 to +50°C	-10 to +50°C	-10 to +50°C					
Antenna	12 x built-in dual-band smart antennas	AP5030DN: Built-in antennas AP5130DN: external antennas	Built-in antennas	4030DN: Built-in antennas 4130DN: external antennas					
Maximum	2.4 GHz: 25 dBm 5 GHz: 21 dBm	2.4 GHz: 25 dBm 5 GHz: 25 dBm	2.4 GHz: 20 dBm 5 GHz: 20 dBm	2.4 GHz: 23 dBm 5 GHz: 23 dBm					
transmit power	NOTE: The actual maximum transmit power depends on local laws and regulations.								
IP protection grade	IP41	IP41	IP41	IP41					
Working mode	Fit AP	Fit/Fat AP	Fit/Fat AP	Fit/Fat AP					
USB port	-	-	\checkmark	-					
Wireless positioning/ Real-Time Location System (RTLS)	\checkmark	\checkmark	\checkmark	\checkmark					

	802.11ac Wave 1 Indoor Settled AP							
Huawei 802.11ac AP	AP7030DE	AP5030DN & AP5130DN	AP4030TN	AP4030DN & AP4130DN				
Spectrum analysis	\checkmark	\checkmark	\checkmark	V				
Seamless roaming				\checkmark				
IPv6	\checkmark	\checkmark	\checkmark	\checkmark				
Wireless Intrusion Prevention System (WIPS)/ Wireless Intrusion Detection System (WIDS)	\checkmark	\checkmark	\checkmark	\checkmark				
Auto Radio	\checkmark	\checkmark	\checkmark	\checkmark				
High Density Boost	\checkmark	\checkmark	\checkmark	V				
User Awareness				\checkmark				

Specifications and features of Huawei 802.11ac series APs (indoor wall plate, rail transportation, and outdoor)

Huawei	Indoor Wall Panel			Transportation	Outdoor			
Huawei 802.11ac AP	AP2030DN	AP2050DN	AP2050DN-E	AP9131DN & AP9132DN	AP8050DN & AP8150DN	AP8130DN-W	AP8030DN & AP8130DN	
Target market	Hotels, dormitories, hospitals, and offices	Recommended for environments with densely distributed small rooms, such as hotels, dormitories, hospitals, and offices	Recommended for environments with densely distributed small rooms, such as hotels, dormitories, hospitals, and offices	Vehicle-mounted AP, trackside AP, and compartment AP	Coverage scenarios : high-density stadiums, squares, pedestrian streets, and amusement parks Bridging scenarios : wireless harbors, data backhaul, video surveillance, and vehicle- ground backhaul	Coverage scenarios : high-density stadiums, squares, pedestrian streets, and amusement parks Bridging scenarios : wireless harbors, data backhaul, video surveillance, and vehicle- ground backhaul	Large campus outdoor coverage or backhaul	
Standard protocols	2.4 GHz: 802.11b/g/n; 5 GHz: 802.11a/ n/ac	2.4 GHz: 802.11b/g/n; 5 GHz: 802.11a/ n/ac wave2	2.4 GHz: 802.11b/g/n; 5 GHz: 802.11a/ n/ac wave2	2.4 GHz: 802.11b/g/n; 5 GHz: 802.11a/ n/ac	2.4 GHz: 802.11b/g/n; 5 GHz: 802.11a/ n/ac wave2	2.4 GHz: 802.11b/g/n; 5 GHz: 802.11a/ n/ac	2.4 GHz: 802.11b/g/n; 5 GHz: 802.11a/ n/ac	
MIMO: number of spatial streams	2x2:2	2x2:2 MU-MIMO	2x2:2 MU-MIMO	3x3:3	2x2:2 MU-MIMO	3x3:3	3x3:3	
Rate	3x3:3 3x3:3 300 Mbit/s (2.4 GHz) + 867 Mbit/ s (5 GHz)	400 Mbit/s (2.4 GHz) + 867 Mbit/ s (5 GHz)	400 Mbit/s (2.4 GHz) + 867 Mbit/ s (5 GHz)	450 Mbit/s (2.4 GHz) + 1.3 Gbit/s (5 GHz)	400 Mbit/s (2.4 GHz) + 867 Mbit/ s (5 GHz)	450 Mbit/s (2.4 GHz) + 1.3 Gbit/s (5 GHz)	450 Mbit/s (2.4 GHz) + 1.3 Gbit/s (5 GHz)	
Number of SSIDs supported by each radio	8	8	8	16	16	16	16	
Interface	Uplink:1 x 10/100/1000 Base-T Ethernet port Downlink: 4 x 10/100Base-T Ethernet port	Uplink:1 x 10/100/1000 Base-T Ethernet port Downlink: 4 x 10/100/1000 Base-T Ethernet port	Uplink:1 x 10/100/1000 Base-T Ethernet port Downlink: 4 x 10/100/1000 Base-T Ethernet port	1 x 10/100/1000 Base-T Ethernet port (M12) + 1 x 1000Base-X Ethernet port (SFP)	2 x 10/100/1000 Base-T Ethernet port + 1 x 1000Base-X Ethernet port (SFP)	2 x 10/100/1000 Base-T Ethernet port + 1 x 1000Base-X Ethernet port (SFP)	2 x 10/100/1000 Base-T Ethernet port + 1 x 1000Base-X Ethernet port (SFP)	
Power supply	12 V DC PoE: 802.3af/at	48 V DC PoE: 802.3af/at	48 V DC PoE: 802.3af/at	48 V DC PoE: 802.3at	PoE: 802.3at	PoE: 802.3at	PoE: 802.3at	
Maximum power consumption	8.7 W	10.5W	10.5W	Compartment coverage: 17.5 W Trackside single 5 GHz scenario: 12.5 W	23W	22.4W	AP8030DN: 20.1 W AP8130DN: 22.4 W	
Temperature	0 to +40°C	0 to +40°C	0 to +40°C	–40 to +65°C	–40 to +65°C	–40 to +65°C	-40 to +65°C	

Unioni		Indoor Wall Panel			on Outdoor			
Huawei 802.11ac AP	AP2030DN	AP2050DN	AP2050DN-E	AP9131DN & AP9132DN	AP8050DN & AP8150DN	AP8130DN-W	AP8030DN & AP8130DN	
Antenna	Built-in antennas	Built-in antennas	Built-in antennas	External antennas	AP8050DN: built- in antennas AP8150DN: external antennas	External antennas	AP8030DN: built- in antennas AP8130DN: external antennas	
Maximum transmit power	2.4 GHz: 21 dBm 5 GHz: 20 dBm	2.4G:21dBm 5G:20dBm	2.4G:21dBm 5G:20dBm	AP9131DN: 2.4 GHz: 25 dBm 5 GHz: 25 dBm AP9132DN: 2.4 GHz: 26 dBm 5 GHz: 25 dBm	2.4 GHz: 27 dBm 5 GHz: 26 dBm	2.4G:28dBm 5G:26dBm	2.4 GHz: 28 dBm 5 GHz: 26 dBm	
	NOTE: The actual r	naximum transmit p	ower depends on lo	cal laws and regulati	ons.			
IP protection grade	IP20	IP20	IP20	IP41	IP67	IP67	IP67	
Working mode	Fit AP	Fit/Fat/Cloud AP	Fit/Fat/Cloud AP	Fit/Fat AP	Fit/Fat AP	Fit/Fat/Cloud AP	Fit/Fat/Cloud AP	
Wireless positioning/ Real-Time Location System (RTLS)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	V	
Spectrum analysis	\checkmark				\checkmark	\checkmark	\checkmark	
Seamless roaming	\checkmark				\checkmark	\checkmark	\checkmark	
IPv6	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Wireless Intrusion Prevention System (WIPS)/ Wireless Intrusion Detection System (WIDS)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Auto Radio	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	
High Density Boost	\checkmark				\checkmark		\checkmark	
User Awareness								

Specifications and features of Huawei 802.11ac series APs (agile distribution)

Huawei	Agile Distributed								
802.11ac AP	AD9430DN-24	AD9430DN-12	R230D	R240D	R250D	R250D-E			
Target market	Indoor distribution sce coverage	narios of education and	d medical treatment ind	ustries, as well as multir	media classrooms and ir	ndoor seamless			
Standard protocols	2.4 GHz: 802.11b/g/ n; 5 GHz: 802.11a/n/ac	2.4 GHz: 802.11b/g/ n; 5 GHz: 802.11a/n/ac	2.4 GHz: 802.11b/g/ n; 5 GHz: 802.11a/n/ac	2.4 GHz: 802.11b/g/ n; 5 GHz: 802.11a/n/ac	2.4 GHz: 802.11b/g/ n; 5 GHz: 802.11a/n/ac wave2	2.4 GHz: 802.11b/g/ n; 5 GHz: 802.11a/n/ac wave2			
MIMO: number of spatial streams	1	1	2x2:2	2x2:2	2x2:2 MU-MIMO	2x2:2 MU-MIMO			
Rate	4 Gbit/s	1.2 Gbit/s	300 Mbit/s (2.4 GHz) + 867 Mbit/s (5 GHz)	300 Mbit/s (2.4 GHz) + 867 Mbit/s (5 GHz)	400 Mbit/s (2.4 GHz) + 867 Mbit/s (5 GHz)	400 Mbit/s (2.4 GHz) + 867 Mbit/s (5 GHz)			
Number of SSIDs supported by each radio	1	1	16	16	16	16			
Interface	Uplink: 4 x combo (10/100/1000Base-T) Ethernet interface Downlink: 24 x 10/100/1000Base-T Ethernet port	Uplink: 2 x 10/100/1000Base-T Ethernet port Downlink: 12 x 10/100/1000Base-T Ethernet port	Uplink: 1 x 10/100Base-T Ethernet port	Uplink: 1 x 10/100/1000Base-T Ethernet port Downlink: 4 x 10/100Base-T Ethernet port	Uplink: 1 x 10/100/1000Base-T Ethernet port Downlink: 1 x 10/100/1000Base-T Ethernet port	Uplink: 1 x 10/100/1000Base-T Ethernet port Downlink: 4 x 10/100/1000Base-T Ethernet port			
Power supply	220 V AC	48 V DC UPoE: 802.3at	PoE: 802.3af/at	12 V DC PoE: 802.3af/at	PoE: 802.3af/at	48 VDC PoE: 802.3af/at			
Maximum power consumption	435 W (device: 55 W; PoE out: 380 W)	16.2 W (excluding PoE out power and reserved USB power consumption)	5.1 W	8.7 W	10.1W	11.5W			
Temperature	0 to +45°C	-10 to +50°C	0 to +40°C	0 to +40°C	0 to +40°C	0 to +40°C			
Antenna	1	/	Built-in antennas	Built-in antennas	Built-in antennas	Built-in antennas			
Maximum	1	1	2.4G:20dBm 5G:15dBm	2.4G:21dBm 5G:20dBm	2.4G:21dBm 5G:20dBm	2.4G:21dBm 5G:20dBm			
transmit power	NOTE: The actual maximum transmit power depends on local laws and regulations.								
IP protection grade	IP20	IP41	IP20	IP20	IP20	IP20			
Working mode	Fit/Fat AP		-	-	-	-			
Wireless positioning/ Real-Time Location System (RTLS)			\checkmark	\checkmark	\checkmark	V			
Spectrum analysis	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark			

Huawei			Agile Di	stributed		
802.11ac AP	AD9430DN-24	AD9430DN-12	R230D	R240D	R250D	R250D-E
Seamless roaming	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
IPv6	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
Wireless Intrusion Prevention System (WIPS)/ Wireless Intrusion Detection System (WIDS)						
Auto Radio	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
High Density Boost	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
User Awareness	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark

16

Optimal Choice

Professional Service Stemming from Abundant Accumulation

- Huawei, staffed with top industry experts (including chair of the IEEE 802.11ac Working Group), has made continuous investments in the wireless field over the past 15 years, earning more than 100 innovative patents.
- Huawei has the most efficient simulation platform and world's largest automation test factory, enabling the company to establish an accurate test environment. Huawei products have been strictly verified through accurate simulation tests, ensuring high product quality.
- By capitalizing on successful 3G/4G network planning cases and Huawei-developed 3D network planning tools, Huawei delivers professional network planning and optimization solutions well-suited to actual environments, making wireless network deployment easy in complex scenarios.

Innovative High Performance Experience

- Auto Radio: Huawei applies innovative technologies to WLAN products, including dynamic power adjustment, channel optimization, 5-G prior access, and dynamic load balancing, which enables wireless networks to be deployed rapidly and automatically adjusts to network changes in real time, improving network running efficiency and radio performance. Interference suppression technologies, such as Clear Channel Assessment (CCA), rogue device detection, and radio calibration dynamically detect and minimize interference in the radio environment, creating a clean radio experience.
- High Density Boost: By integrating dynamic access control, multi-user collision control, airtime scheduling, and user CAC technologies,
 High Density Boost addresses challenges in high-density scenarios, including access problems, data congestion, and poor roaming experience, helping construct a wireless expressway network that can accommodate more terminals.

User Awareness: This technology helps build a more secure and resilient network and provides access policies matching each user or terminal anywhere at any time. The network delivers policies based on user identities, terminal types, terminal operating system, network use time, and physical locations, which improves network security and serviceability. In addition, Huawei ACs provide a builtin Bonjour gateway. Devices running Apple Bonjour can construct a network automatically, without extra settings or an additional Bonjour gateway..

Extensive Experience for Complex Scenarios

- Huawei unique high-density technologies and specially crafted antennas help customers easily deal with such challenges of highdensity situations as high density access and large burst traffic.
- Huawei outdoor wide coverage solution can achieve a distance of 10 km, facilitating broadband access and data transmissions in small towns where wired networks are difficult to deploy.
- Huawei wireless office solution employs industry-leading GE wireless access devices to implement fine-grained security management and control, bringing users super fast bandwidth and high security experience.

NOTE: All products are subject to the latest releases.

More Information

For more information, visit http://enterprise.huawei.com/ or contact the Huawei local sales office.





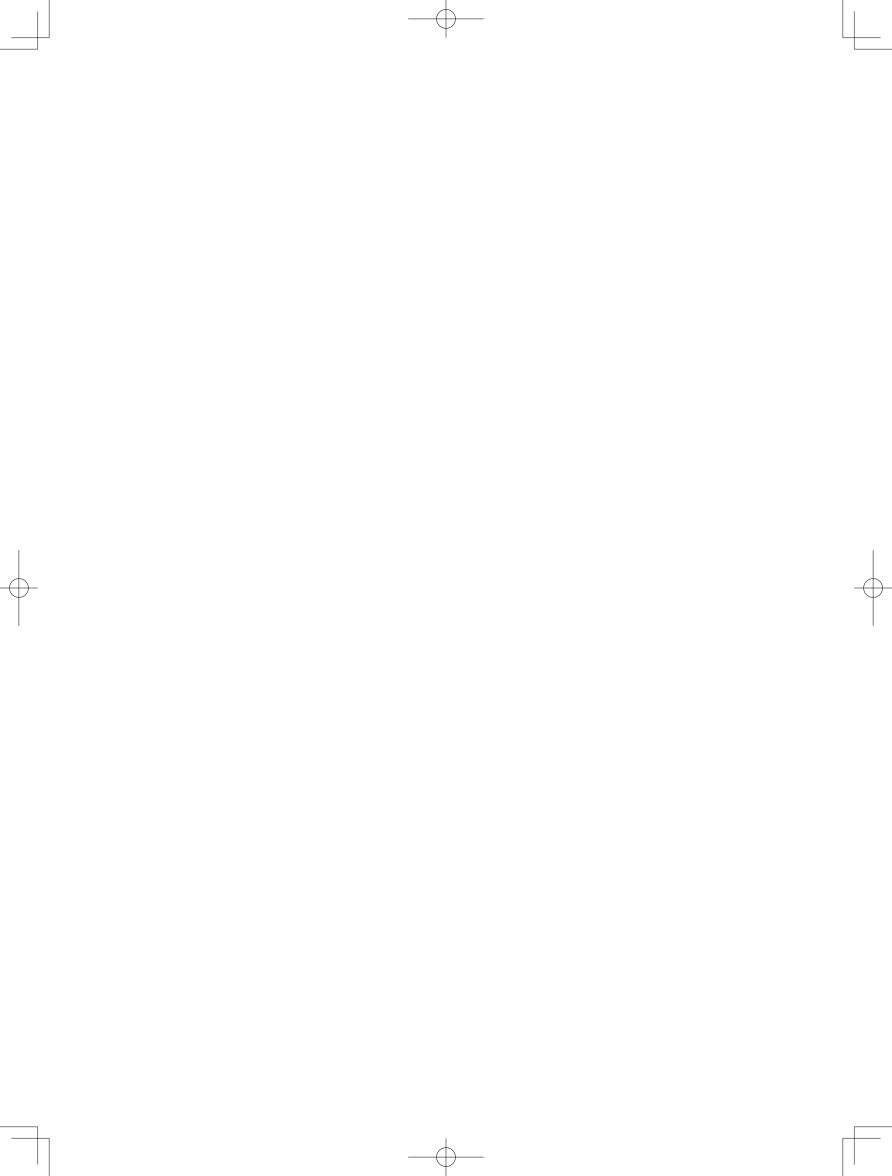




Enterprise Services

Product Overview

Marketing Documentation



Copyright © Huawei Technologies Co., Ltd. 2017. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademark Notice

, HUAWEI, and **W** are trademarks or registered trademarks of Huawei Technologies Co., Ltd. Other trademarks, product, service and company names mentioned are the property of their respective owners.

General Disclaimer

The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Huawei may change the information at any time without notice.

HUAWEI TECHNOLOGIES CO.,LTD. Huawei Industrial Base Bantian Longgang Shenzhen 518129,P.R.China Tel: +86 755 28780808

www.huawei.com