

DH-PFWB5-90ac

5GHz AC867 18dBi Outdoor Base Station



Product Overview

500+ Mbps throughput- a result of powerful hardware platform with 802.11ac technology based radio and a proprietary data transmission protocol (TDMA). Incorporating a QCA 9563 CPU (750 MHz), a QCA 9882 radio and 64 MBytes of RAM and 16 MBytes of flash memory the, DH-PFWB5-90 ac series devices are an ideal solution for capacity demanding applications. State of the art RF design with great output power and sensitivity parameters improve range and capacity over the highest modulation- 256 QAM. The 24V Gigabit Ethernet port (passive PoE) allows utilizing the full capacity of the radio when used in a point-to-point or point-to-multipoint network design. DH-PFWB5-90ac series devices are backwards compatible with DaHua Wireless devices using TDMA mode, which helps to expand or upgrade existing networks using the latest technologies over time.

Features

- Integrated 5 GHz (2x2) MIMO radio
- Frequency 5.150- 5.850 GHz (FCC 5.150- 5.250 and 5.725- 5.850 GHz)
- High performance and stability
- IP-66 standards rated enclosure
- Improved noise immunity
- TDMA ensures reliable communication
- Powerful OS
- Dual firmware
- Built-in tools including Site Survey, Link Test, Antenna Alignment, Spectrum Analyzer, Ping & Trace help in configuration and debugging
- Recommended for 0~5km PTP/PTMP wireless connection(as a station in PTMP link)

Technical Specification

Model	DH-PFWB5-90ac
Wireless	
WLAN Standard	IEEE 802.11 a/n/ac
Radio Mode	MIMO 2x2
Radio Frequency Band	5.150 - 5.850 GHz (FCC 5.150 - 5.250 and 5.725 - 5.850 GHz)
Transmit Power	Up to 30 dBm (country dependent)
Receive Sensitivity	Varying between -95 and -75 dBm depending on modulation
Channel Size	5,10,20,40, 80 MHz
Modulation Schemes	802.11 a/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK) 802.11 ac: OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK)
Data Rates	802.11 ac @ 40 MHz: 400, 360, 300, 270, 240, 180, 120, 90, 60, 30 Mbps 802.11 ac @ 80 MHz: 866, 780, 650, 585, 520, 390, 260, 195, 130, 65 Mbps
Error Correction	FEC, LDPC
Duplexing Scheme	Time division duplex
Transmission Distance	0-5km (recommended), max≤7km
Antenna	
Type	Integrated directional panel antenna
Gain	18dBi
Wired	
Interface	10/100/1000 Base-T, RJ45

Technical Specification	
Software	
Wireless Operating Modes	Access point (auto WDS), access point (TDMA), station (WDS, TDMA), station (ARP NAT)
Wireless Techniques	Smart station polling, smart auto-channel, adaptive auto modulation, automatic transmit power control (ATPC)
Wireless Security	WPA/WPA2 personal, WPA/WPA2 enterprise, WACL, user isolation
Wireless QoS	4 queues prioritization on TDMA
Network Operating Modes	Bridge, router IPv4, router IPv6
Network Techniques	Routing with and without NAT, VLAN
WAN Protocols	Static IP, DHCP client, PPPoE client
Services	DHCP server, SNMP server, NTP client, router advertisement daemon, ping watchdog
Management	HTTP(S) GUI, SSH, SNMP read, Telnet
Tools	Site survey, link test, antenna alignment
Physical	
Dimensions	383mm (length)× 100mm (width)× 98mm (height)
Weight	520 g
Mounting	Pole mounting bracket included
Power	
Power Supply	12- 24 VDC passive PoE (24 V passive PoE adapter is included in the package)
Power Source	100 – 240V AC
Power Consumption (max)	10W
Environmental	
Operating Temperature	-30°C ~ +70°C
Humidity	0 ~ 90 % (non-condensing)
Management	
System Monitoring	SNMP, Syslog, Web UI, DWMP
Regulatory	
Certification	FCC/CE
Internal Antenna	
Frequency Range	5.1- 5.9 GHz
Gain	18 dBi
Polarization	Dual linear
Cross-pol Isolation	24 dBi
VSWR	<1.7
Azimuth Beam Width (H pol)	90°
Azimuth Beam Width (V pol)	90°
Elevation Beam Width	20°

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Receive Sensitivity (dBm)	802.11 ac (40MHz)	400 Mbps	360 Mbps	300 Mbps	270 Mbps	240 Mbps	180 Mbps	120 Mbps	90 Mbps
		-70	-72	-76	-78	-80	-84	-87	-92
		60 Mbps	30 Mbps						
		-94	-95						
	802.11 ac (80MHz)	866 Mbps	780 Mbps	650 Mbps	585 Mbps	520 Mbps	390 Mbps	260 Mbps	195 Mbps
		-64	-66	-70	-72	-74	-78	-81	-85
		130 Mbps	65 Mbps						
		-88	-90						
Output Power (dBm, combined)	802.11 ac (40MHz)	400 Mbps	360 Mbps	300 Mbps	270 Mbps	240 Mbps	180 Mbps	120 Mbps	90 Mbps
		26	27	28	29	30	30	30	30
		60 Mbps	30 Mbps						
		30	30						
	802.11 ac (80MHz)	866 Mbps	780 Mbps	650 Mbps	585 Mbps	520 Mbps	390 Mbps	260 Mbps	195 Mbps
		24	25	25	26	27	28	28	29
		130 Mbps	65 Mbps						
		29	29						

