

# DH-PFWB5-30ac

5GHz AC867 15dBi Outdoor Wireless CPE



## 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-PFWB5-30ac 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-PFWB5-30ac 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 0~3km PTP/PTMP wireless connection(as a station in PTMP link)

## Technical Specification

|                       |  |
|-----------------------|--|
| Model                 | DH-PFWB5-30ac  |
| <b>Wireless</b>       |  |
| 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 -97 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)<br>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<br>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 | 0-3km (recommended), max≥5km   |
| <b>Antenna</b>        |  |
| Type                  | Integrated directional panel antenna   |
| Gain                  | 15dBi  |
| <b>Wired</b>          |  |
| Interface             | 10/100/1000 Base-T, RJ45   |

| Technical Specification    |  |
|----------------------------|--|
| <b>Software</b>            |  |
| 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  |
| <b>Physical</b>            |  |
| Dimensions                 | 128 mm (length)× 97mm (width )× 40mm (height )   |
| Weight                     | 200 g  |
| Mounting                   | Pole mounting bracket included   |
| <b>Power</b>               |  |
| 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  |
| <b>Environmental</b>       |  |
| Operating Temperature      | -30°C ~ +70°C  |
| Humidity                   | 0 ~ 90 % (non-condensing)  |
| <b>Management</b>          |  |
| System Monitoring          | SNMP, Syslog, Web UI, DWMP   |
| <b>Regulatory</b>          |  |
| Certification              | FCC/CE   |
| <b>Internal Antenna</b>    |  |
| Frequency Range            | 5.1- 5.9 GHz   |
| Gain                       | 15 dBi   |
| Polarization               | Dual linear  |
| Cross-pol Isolation        | 21 dBi   |
| VSWR                       | <1.4   |
| Azimuth Beam Width (H pol) | 30°  |
| Azimuth Beam Width (V pol) | 30°  |
| Elevation Beam Width       | 30°  |

| Technical Specification      |                   |          |          |          |          |          |          |          |          |
|------------------------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 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  |          |          |          |          |          |          |
|                              | 802.11 ac (80MHz) | -94      | -95      |          |          |          |          |          |          |
|                              |                   | 866 Mbps | 780 Mbps | 650 Mbps | 585 Mbps | 520 Mbps | 390 Mbps | 260 Mbps | 195 Mbps |
|                              |                   | -64      | -66      | -70      | -72      | -74      | -78      | -81      | -85      |
|                              | 802.11 ac (80MHz) | 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  |          |          |          |          |          |          |
|                              | 802.11 ac (80MHz) | 30       | 30       |          |          |          |          |          |          |
|                              |                   | 866 Mbps | 780 Mbps | 650 Mbps | 585 Mbps | 520 Mbps | 390 Mbps | 260 Mbps | 195 Mbps |
|                              |                   | 24       | 25       | 25       | 26       | 27       | 28       | 28       | 29       |
|                              | 802.11 ac (80MHz) | 130 Mbps | 65 Mbps  |          |          |          |          |          |          |
|                              |                   | 29       | 29       |          |          |          |          |          |          |
|                              |                   |          |          |          |          |          |          |          |          |

## Dimensions (mm)

