5 GHz Outdoor Wireless CPE
N300 20 dBi Customer-premises Equipment

Product Overview

Dahua’s DH-PFWB5-10n is 5 GHz CPE-class device that delivers high-performance and stable operation. This product combines an advanced radio core containing MIMO 2 x 2 technology with an integrated, high-gain, dual polarization directional antenna. The feature-rich operating system is optimized for ultra-high performance wireless communications while optionally allowing compatibility with older 802.11 a standard devices.

The smart dynamic polling based protocol (TDMA) ensures reliable communication even in congested areas with 64 client devices connected to a base-station.

The device is equipped with Dahua’s dual firmware image feature that allows remote software upgrades even if a power failure interrupts the process. The device restarts using the prior firmware in the event of an upgrade failure.

The enclosure is made of polycarbonate plastic with UV inhibitors to provide years of outdoor exposure in direct sunlight without cracking. The DH-PFWB5-10n meet the IP66 Ingress Protection rating as well as vibration, temperature, drop, salt, fog, and electrical surge standards to ensure a high level of reliability. It is equipped with a grounding lug and a grounded 24-volt PoE to allow a professional installation, resistant to electrical surges.

Technical Specification

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Antenna

| Type                                           | Integrated directional panel antenna      |
| Gain                                           | 20 dBi                                    |

Wired

| Interface                                     | 10/100 Base-T, RJ45                        |
Software

Wireless Operating Modes
- Access Point (auto WDS), Access Point (TDMA2), Access Point (TDMA3), Station (WDS, TDMA2, TDMA3), 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

Tools
- Site survey, link test, antenna alignment, spectrum analyzer, ping and trace

Physical

Dimensions (L x W x H)
- 185.0 mm x 185.0 mm x 80.60 mm (7.28 in. x 7.28 in. x 3.18 in.)

Weight
- 0.40 kg (0.88 lb)

Mounting
- Combination wall / pole mount included

Power

Power Supply
- 12 VDC to 24 VDC passive PoE (24 V passive PoE adapter is included in the package)

Power Source
- 100 VAC to 240 VAC

Power Consumption
- 4.5 W, maximum

Environmental

Operating Temperature
- -30° C to +70° C (–22° F to 158° F)

Humidity
- 0% to 90% (non-condensing)

Ingress Protection
- IP66

Management

System Monitoring
- SNMP v1/2c/3 server, Syslogs, system alerts via e-mail and SNMP trap

Certifications

Electromagnetic Compatibility (EMC)
- FCC/CE

Internal Antenna

Frequency Range
- 5.1 GHz to 5.9 GHz

Gain
- 20 dBi

Polarization
- Dual linear

Cross-pol Isolation
- 27 dBi

VSWR
- <1.8

Azimuth Beam Width (H pol)
- 10°

Azimuth Beam Width (V pol)
- 10°

Elevation Beam Width
- 10°

Ordering Information

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<th>Part Number</th>
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<td>5 GHz Outdoor Wireless CPE</td>
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Compatibility

Wireless Base Station
- DHI-PFWB5-90n* 5 GHz N300 Outdoor Wireless Base Station

Dimensions (mm/in.)

- 185.0 mm [7.28 in.]
- 80.60 mm [3.18 in.]

* The PFWB5 Series is not a suitable replacement for the PFM880 and the PFM881 5.8G Wireless Video Transmission Devices.