alhua
TECHNOLOGY

DH-WBC5-30AC-05P
Wireless Bridge

· Strong signal: With its enhanced antenna, the point-to-point transmission distance reaches up to 5 km (16,404.20 ft).

· Wide operating temperature: −30 °C to +65 °C (−22 °F to +149 °F).

· Easy installation: Supports multiple installation methods such as wall mount and pole mount.

· High protection: IP65 rated, it is suitable for outdoor scenes and withstands severe weather.

· Strong broadband: The bandwidth can reach up to 867 Mbps, ensuring there is no delay in transmission.

IP65	PoE Input	Enhanced Antenna	Wireless Management	TDMA
Industry Standard Protection	PoE Input	Enhanced Antenna	Wireless Management	TDMA Enhancement

System Overview

Wireless bridge from the WBC5 series provides a great solution for scenes that require high transmission rates. The device has a throughput rate that is higher than 500 Mbps through its powerful hardware, which was designed with 802.11ac technology based on radio and Time Division Multiple Access (TDMA). The Gigabit Ethernet port can utilize the full capacity of the radio when used in a point-to-point (PTP) or point-to-multipoint (PTMP) network design. WBC5 series devices are not only backwards compatible with Dahua Wireless devices through TDMA, but also help to expand and upgrade existing networks over time using the latest technologies. The device also supports PoE input and PoE output (802.3af), effectively simplifying installation. It also comes with a built-in 2.4GHz Wi-Fi module that allows operators to remotely manage the device.

Functions

Industry Standard Protection
Built to meet the industrial design standards, the device is highly reliable and stable. It is also IP65-rated, waterproof and dustproof.

PoE Input&PoE Out
Gigabit PoE input and 100 Mbps PoE output, just one cable satisfies demand of power supply and signal transmission.

Enhanced Antenna
Features enhanced antenna gain for the stable transmission of wireless signals over long distances, and it has strong anti-interference capabilities.

Wireless Management
With its built-in 2.4 GHz Wi-Fi, the device can be wirelessly accessed and configured.

TDMA Enhancement
Adopts TDMA (Time Division Multiple Access) technology to stabilize video transmission bandwidth, and to locate wireless transmission hidden nodes.

Scene

Suitable for scenes that require long-distance transmission, such as parks, scenic spots, and factories.

Technical Specification

Hardware

Interface	1 × PoE RJ–45 (1000 Mbps); 1 × LAN RJ–45 (100 Mbps)
Power Module Connector	1 × PoE RJ–45(IN: 30 W)
Wireless Standard	2.4GHz: 802.11b/g/n; 5GHz: 802.11a/n/ac
Power Supply	PoE IN: 802.3at; PoE OUT: 802.3af
Included Power Adapter	Yes
Included Antenna	Yes
Ethernet Ports	2
Ethernet Port Speed	10/100/1000 Mbps
Reset Button	1
Power Consumption	< 30 W
External Port	2 × RJ–45; 1 × Reset
Indicator Light	1 × power indicator; 2 × LAN port indicators; 1 × PoE indicator; 3 × wireless signal strength indicators

Performance

Terminal Communication Protocol	IEEE802.11a/n/ac
Network Access	Ethernet

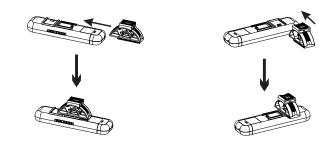|	
Operating Frequency	2.4 GHz(2412 MHz–2472 MHz); 5.150 - 5.850 GHz(5.15 GHz–5.25 GHz and 5.735 GHz–5.835 GHz)
Modulation Type	OFDM
Antenna	Built-in directional antenna
Antenna Interface	IPEX
Antenna Direction Angle	Horizontal 30°, vertical 20°
Polarization	Vertical/horizontal
Cross-polarization Isolation	> 12
Antenna Gain	12 dBi
Max. VSWR	< 2.5
Transmission Distance	5 km (16,404.20 ft)
Air Interface Rate	867 Mbps
Protection	IP65
Network Mode	Bridge
Operating Mode	Access point; client
Device Type	802.11a/b/g/n/ac
Channel Width	20/40/80 MHz
Standard TX Power	Adapt to the regulations of countries or regions.
Connected Wireless Terminals	8

Funtion

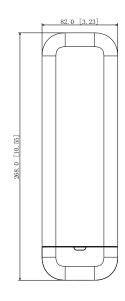|	
Encryption Mode	WPA-PSK/AES/TKIP
Management and Log	Syslog;NTP
Webpage Configuration Management	Web configuration
Firmware Update	Web update
Wireless Certification	CE/FCC
Security Mechanism	WPA/WPA2; hidden SSID
Network Protocol	UDP; TCP; HTTPS; IPv4; NTP; DHCP
TDMA Enhancement	Yes
TDMA	Yes

General

Operating Temperature	−30 °C to +65 °C (−22 °F to +149 °F)
Storage Temperature	−40 °C to +80 °C (−40 °F to +176 °F)
Operating Humidity	5%–95% (RH), non-condensing
Gross Weight	0.46 kg (1.01 lb)
Net Weight	0.37 kg (0.82 lb)
Packaging Dimensions	297 mm × 110 mm × 108 mm (11.7" × 4.33" × 4.25")
Product Dimensions	268 mm × 82 mm × 35 mm (10.55" × 3.23" × 1.38")
Memory	1 Gb
Mounting	Pole mounting bracket included

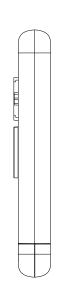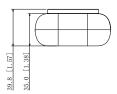|	
Input	48 V
Statics Protection	Air discharge: 15 kV; Contact discharge: 8 kV
Lighting Protection	Common mode: 6 kV; Differential mode: 4 kV
Installation	Pole mount

Installation

Dimensions (mm [inch])

Panels