DH-WBC5-90AC-01P

5.8G 1km Wireless Bridge with 802.11ac

· Strong signal: With its enhanced antenna, the peer-to-peer transmission distance reaches up to 1 km (3,280.83 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.

Series Overview

Wireless Bridge from the WBC 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. WBC 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

Cloud Management
Devices can be managed through the DoLynk Care app and performs real-time monitoring of the network. The app also displays the status of devices, triggers alarms for errors in real time and sends notifications.

Quick Deployment
Network devices can be configured, and topologies are automatically generated.

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 and Output
The device performs operations using the power it receives from the PoE power supply, and outputs PoE power to PD devices. This reduces the number of cables needed for installation.

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

Sold in Pairs	No
Function Slots	LAN 2: 1 ✕ RJ-45 10/100/1000 Mbps(PoE In); LAN 1: 1 ✕ RJ-45 10/100 Mbps(PoE Out)
Power Supply	PoE(802.3 af/at)
Power Consumption	< 30 W
Antenna	IPEX
Memory	DDR 128 MB
Indicator Light	1 ✕ Power indicator; 2 ✕ LAN port indicators; 1 ✕ PoE indicator; 3 ✕ Wireless signal strength indicators
External Port	2 ✕ RJ–45; 1 ✕ Reset

Performance

Wireless Standard	2.4 GHz: 802.11b/g/n; 5 GHz: 802.11a/n/ac
Recommended Video Channels	10-ch 4M
Operating Frequency	2.4 GHz: 2.412 GHz–2.472 GHz; 5 GHz: 5.15 GHz–5.25 GHz; 5.735 GHz–5.835 GHz
Wireless Transmission Rate	2.4 GHz:300 Mbps; 5 GHz:867 Mbps
Channel Width	20/40/80 MHz
Max. Output Power	21 dBm + 9dBi
Antenna Direction Angle	Horizontal: 90°, vertical: 20°
Receiver Sensitivity	−96 dBm@11a_20M_6M
Polarization	Vertical/horizontal
Transmission Distance	1 km (3,280.83 ft)
Connected Wireless Terminals	8
PoE	PoE In: 802.3af/at(15W/30W); PoE Out: 802.3af(15W)

Function

Operating Mode	Access point; Client
Equipment Management	Web management; App management
Network Protocol	HTTPS;IPv4;UDP;NTP;DHCP;TCP
Encryption Mode	WPA-PSK/AES/TKIP
Security Mechanism	WPA/WPA2; hidden SSID
DHCP	Yes
Firmware Update	Web update;ConfigTool;App update

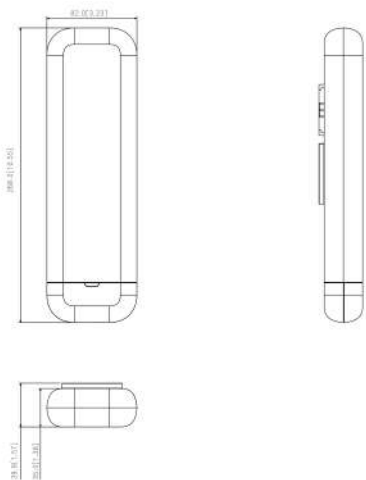|	
Software	Device Management: wireless bridge configuration on the app through WLAN; local web management; cloud management (cloud web and app); quick configuration guide; scanning code to add; Wi-Fi hotspot access cloud; System Management: system log; factory settings; backup restore configuration; import configuration; DMZ; diagnosis and restart; Network Management: DHCP/Static IP configuration; VLAN configuration; LLDP; topology display; Wireless Network Management: 2.4 GHz Wi-Fi access management; working mode selection (access point/client); hide SSID (only access point); wireless output power adjustment; channel selection and channel width configuration; encryption mode configuration (non-encrypted and WPA2-PSK; wireless frame segmentation and aggregation

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
Net Weight	0.37 kg (0.82 lb)
Gross Weight	1.16 kg (2.56 lb)
Product Dimensions	268 mm ✕ 82 mm ✕ 35 mm (10.55" ✕ 3.23" ✕ 1.38") (L ✕ W ✕ H)
Packaging Dimensions	299 mm ✕ 139 mm ✕ 111 mm(11.77" ✕ 5.47" ✕ 4.37")(L ✕ W ✕ H)
Protection	IP65
Statics Protection	Air discharge: 15 kV; Contact discharge: 8 kV
Lighting Protection	Common mode: 6 kV; Differential mode: 4 kV
Installation	Pole mount
Certifications	CE
Packing List	1 ✕ Wireless bridge; 1 ✕ Power cord; 1 ✕ PoE adapter; 1 ✕ Clamp(Φ59 mm to 82 mm); 1 ✕ Antenna adjustment bracket; 1 ✕ Mounting bracket; 1 ✕ Quick start guide; 1 ✕ Legal and regulatory information

Ordering Information

Type	Part Number	Description
WireLess Bridge	DH-WBC5-90AC-01P	5.8G 1km Wireless Bridge with 802.11ac

Dimensions (mm[inch])

Panels