

# DH-WBK5-45AC-03P

## Wireless Bridge



### 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

#### Pre-Configured Twin Pack

The bridge pair is conveniently packaged together, allowing for immediate use once powered on without any configuration required.

#### Cloud Management

Devices can be managed through the DoLink 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.

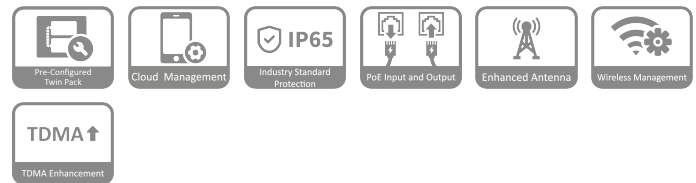
#### Quick Deployment

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.

- Strong signal: With its enhanced antenna, the peer-to-peer transmission distance reaches up to 3 km (9,842.52 ft).
- Wide operating temperature:  $-30^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$  to  $+149^{\circ}\text{F}$ ).
- 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.



#### 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

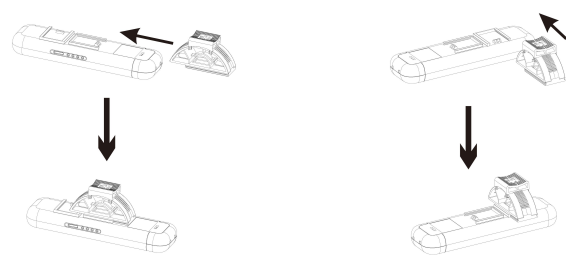
Suitable for scenes that require long-distance transmission, such as parks, scenic spots, and factories.

| Technical Specification      |                                                                                                                                                                                                                    |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hardware                     |                                                                                                                                                                                                                    |
| Sold in Pairs                | Yes                                                                                                                                                                                                                |
| Function Slots               | LAN 2: 1 × RJ-45 10/100/1000 Mbps(PoE In);<br>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;<br>2 × LAN port indicators;<br>1 × PoE indicator;<br>3 × Wireless signal strength indicators                                                                                                  |
| External Port                | 2 × RJ-45;<br>1 × Reset                                                                                                                                                                                            |
| Performance                  |                                                                                                                                                                                                                    |
| Wireless Standard            | 2.4 GHz: 802.11b/g/n;<br>5 GHz: 802.11a/n/ac                                                                                                                                                                       |
| Recommended Video Channels   | 10-ch 4-MP IPC                                                                                                                                                                                                     |
| Operating Frequency          | 2.4 GHz: 2.412 GHz–2.472 GHz;<br>5 GHz: 5.15 GHz–5.25 GHz; 5.735 GHz–5.835 GHz                                                                                                                                     |
| Wireless Transmission Rate   | 2.4 GHz:300 Mbps;<br>5 GHz:867 Mbps                                                                                                                                                                                |
| Channel Width                | 20/40/80 MHz                                                                                                                                                                                                       |
| Max. Output Power            | 21 dBm + 12dBi                                                                                                                                                                                                     |
| Antenna Direction Angle      | Horizontal: 45°, vertical: 20°                                                                                                                                                                                     |
| Receiver Sensitivity         | −96 dBm@11a_20M_6M                                                                                                                                                                                                 |
| Polarization                 | Vertical/horizontal                                                                                                                                                                                                |
| Transmission Distance        | 3 km (9,842.52 ft)                                                                                                                                                                                                 |
| Connected Wireless Terminals | 8                                                                                                                                                                                                                  |
| PoE                          | PoE In: 802.3af/at(15W/30W);<br>PoE Out: 802.3af(15W)                                                                                                                                                              |
| Function                     |                                                                                                                                                                                                                    |
| Operating Mode               | Access point; Client                                                                                                                                                                                               |
| Equipment Management         | Web management;<br>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; |

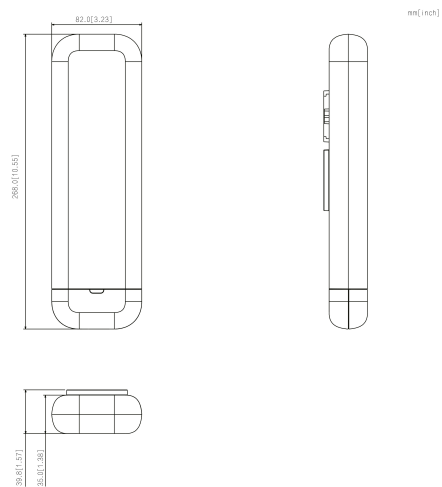
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | System Management: system log; factory settings; backup restore configuration; import configuration; DMZ; diagnosis and restart;<br>Network Management: DHCP/Static IP configuration; VLAN configuration; LLDP; topology display;<br>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            | 0.74 kg (1.63 lb)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Gross Weight          | 2.095 kg (4.62 lb)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Product Dimensions    | 268 mm × 82 mm × 35 mm (10.55" × 3.23" × 1.38") (L × W × H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Packaging Dimensions  | 312 mm × 205 mm × 136 mm (12.28" × 8.07" × 5.35") (L × W × H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Protection            | IP65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Statics Protection    | Air discharge: 15 kV;<br>Contact discharge: 8 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Lightning Protection  | Common mode: 6 kV;<br>Differential mode: 4 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Installation          | Pole mount                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Certifications        | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Packing List          | 2 × Wireless bridge;<br>2 × Power cord;<br>2 × PoE adapter;<br>2 × Clamp(Φ59 mm to 82 mm);<br>2 × Antenna adjustment bracket;<br>2 × Mounting bracket;<br>1 × Quick start guide;<br>1 × Legal and regulatory information                                                                                                                                                                                                                                                                                                                                                    |

| Ordering Information |                  |                 |
|----------------------|------------------|-----------------|
| Type                 | Model            | Description     |
| WirelessBridge       | DH-WBK5-45AC-03P | Wireless Bridge |

Installation



Dimensions (mm[inch])



Panels

