

DH-WBC5-45AC-03S

Wireless Bridge



- Strong signal: enhanced antenna. 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.



Cloud Management



Industry Standard Protection



Enhanced Antenna



Wireless Management

Series Overview

The Wireless Bridge from the WBC series provides an excellent solution for solar-powered systems and other scenarios that require high transmission rates. It can be powered through Power over Ethernet (PoE) or a wide-range DC input, enabling direct connection to solar power systems and simplifying installation. With high energy efficiency, it extends battery life and improves overall system stability. Equipped with powerful hardware, the bridge delivers throughput greater than 500 Mbps. It uses 802.11ac radio technology combined with Time Division Multiple Access (TDMA), and its Gigabit Ethernet port can leverage the full radio capacity in point-to-point (PTP) or point-to-multipoint (PTMP) deployments. A built-in 2.4 GHz Wi-Fi module also enables remote management of the device.

Functions

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.

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.

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	Port 1: 1×RJ-45 10/100 Mbps (LAN1) Port 2: 1×RJ-45 10/100/1000 Mbps (LAN2, PoE In)
Power Supply	PoE(Passive,12-48V); 12-48 VDC, 0.58 A
Power Consumption	Idle:2.3W;Typical:2.7W;Max:3.5W
Antenna	IPEX
Memory	DDR 128 MB
Indicator Light	1 × Power 2 × LAN port 1 × Cloud management 1 × Wireless signal strength
External Port	2 × RJ-45; 1 × DC IN(12-48V)

Performance

Wireless Standard	2.4 GHz: IEEE 802.11b/g/n 5 GHz: IEEE 802.11a/n/ac
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Recommended Video Channels	Point to Point : 1000m : 25-ch 4-MP IPC ; 3000m : 12-ch 4-MP IPC ; 5000m : 5-ch 4-MP IPC ; Point to Multi-Point(All STAs summaries) : 1000m : 8-ch 4-MP IPC ; 500m : 16-ch 4-MP IPC ; 200m : 32-ch 4-MP IPC ;
Operating Frequency	2.4 GHz : 2.400 GHz–2.484 GHz ; 5 GHz : 5.150 GHz–5.850 GHz
Wireless Transmission Rate	2.4 GHz: 300 Mbps; 5 GHz: 867 Mbps
Channel Width	20/40/80 MHz
Max. Output Power	CE EIRP: ≤20 dBm@2400-2483.5 MHz ; ≤23 dBm@5150-5250 MHz ; ≤20 dBm@5250-5350 MHz ; ≤27 dBm@5470-5725 MHz ; ≤14 dBm@5725-5850 MHz
Antenna Direction Angle	Horizontal: 45°; vertical: 20°
Receiver Sensitivity	11ac VHT20_MCS0:-93 dBm 11ac VHT20_MCS8:-71 dBm 11ac VHT40_MCS0:-90 dBm 11ac VHT40_MCS0:-67 dBm
Polarization	Vertical/horizontal
Transmission Distance	Point to Point:3 km; Point to Multi-Point:1km;
Connected Wireless Terminals	8
PoE	PoE In (passive)

Function

Operating Mode	AP; STA(default mode)
Equipment Management	WEB; APP
Protection Mode	WPA-PSK/AES/TKIP
Security Mechanism	WPA/WPA2; hidden SSID
DFS	Yes
DHCP	Yes
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; Protection mode configuration (non-encrypted and WPA2-PSK; wireless frame segmentation and aggregation

General

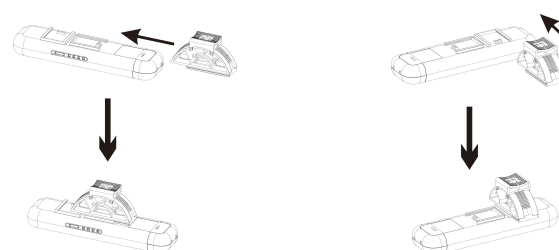
Operating Temperature	–30 °C to +65 °C (–22 °F to +149 °F)
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Storage Temperature	–40 °C to +80 °C (–40 °F to +176 °F)
Operating Humidity	5%–95% (RH), non-condensing
Net Weight	0.37kg (0.82lb)
Gross Weight	0.61kg (1.34lb)
Product Dimensions	268 mm×82 mm×35 mm (10.55" × 3.23" × 1.38") (L × W × H)
Packaging Dimensions	138mm×66mm×347mm (L × W × H)
Protection	IP65
Statics Protection	Air discharge: 15 kV; Contact discharge: 8 kV
Lightning Protection	Common mode: 6 kV; Differential mode: 4 kV
Installation	Pole mount
Certifications	CE
Packing List	1 × Wireless bridge; 1 × Metal hoop; 1 × Wall-Mount Bracket ; 1 × Quick start guide; 1 × Legal and regulatory information

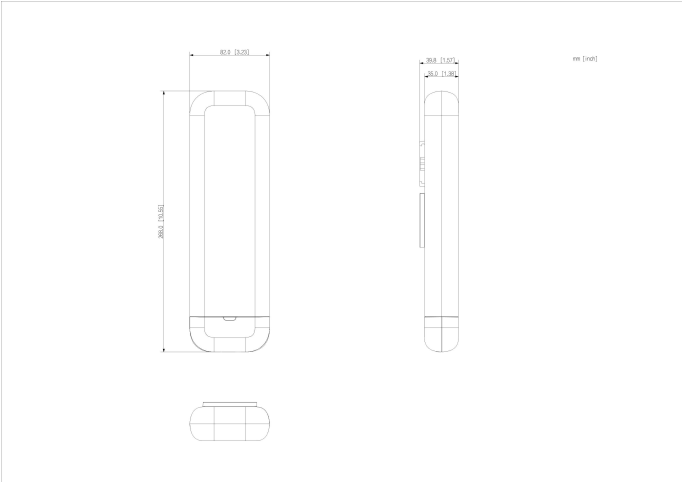
Ordering Information

Type	Model	Description
WirelessBridge	DH-WBC5-45AC-03S	Wireless Bridge

Installation



Dimensions (mm[inch])



Panels

