alhua TECHNOLOGY

DH-AX18

AX1800 Wireless Router

System Overview

DH-AX18 Gigabit Wireless Router provides wireless access to a large number of users, and has a wide signal coverage and fast wireless speed. It complies with the IEEE 802.11ax standard, and its wireless speed reaches up to 1,775 Mbps, allowing smooth internet access. Using MU-MIMO technology, it supports concurrent connections, greatly reducing network latency. It also uses WPA3 Encryption to protect the device against network attacks. The router is energy efficient, using TWT technology to reduce power consumption. It can be managed through the WiLynk app and provides wireless networks, making it a great choice to use with the latest wireless technology.

Functions

WPA3 Encryption
Adopts 192-bit CNSA (Commercial National Security Algorithm) to prevent brute force attacks on the password. The architecture of the security system also improves the privacy and security of wireless connections, and is strong against network attacks.

Low-power Consumption Technology
Using TWT (Target Wake Time) technology, the router can negotiate when and how often it wakes up to send or receive data, and switches to low-power consumption mode when it is idle. End Devices that access the router can save up to 30% on consumption, improving their battery life.

Intelligent Management
The router can be managed through the WiLynk app which features functions such as router configuration, network topology, parental control, guest Wi-Fi and Wi-Fi sharing. It not only improves router management, but also allows you to conveniently monitor the family network.

High Speed and Low Latency
It leverages 6th Generation Wi-Fi, dual-band Wi-Fi, MU-MIMO, OFDMA and BSS Coloring. This greatly improves the concurrent performance of the router and its anti-interference capabilities on the same frequency band, providing smooth high-speed transmission with low latency for multiple devices.

· 6th Gen Wireless Technology.

· 1.8 Gbps Wireless speed (574 Mbps@2.4 GHz, 1201Mbps@5 GHz).

· Backward compatible (IEEE 802.11 b/g/n/ac/ax standard).

· Beamforming for better Coverage.

· OFDMA and 1024-QAM.

· Bi-directional MU-MIMO.

· WiFi protected Access(WPA/WPA2/WPA3).

· Guest Wi-Fi.

· Parental Control.

WPA3 Encryption	Low-power Consumption Technology	WiLynk Intelligent Management	High Speed and Low Latency

Scene

Suitable for scenes that require wireless network coverage such as stores and villas.

Villa

Cafe

Supermarkt

Specification

Hardware

WAN Port	1×10/100/1000 Mbps
LAN Port	3×10/100/1000 Mbps
Reset Button	1
WPS Button	1
Power Consumption	<12 W
Memory	128 MB Flash and 256 MB RAM
Indicator Light	PWR
Wireless Standard	2.4 GHz: 802.11 b/g/n/ax 5 GHz: 802.11 a/n/a/ac/ax

Performance

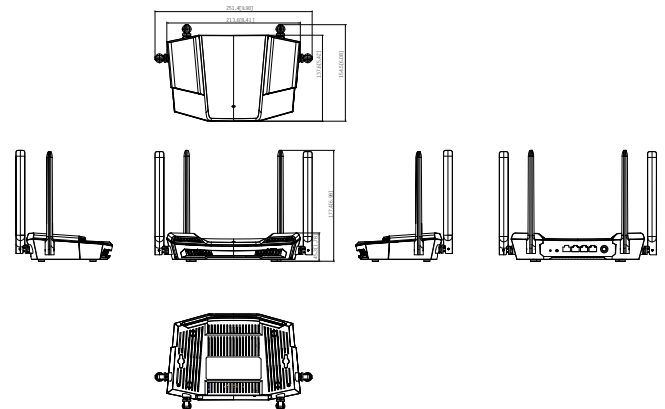|	
Operating Frequency	2.412 GHz–2.484 GHz 5.150 GHz–5.850 GHz
Wireless Transmission Rate	2.4 GHz: 574 Mbps 5 GHz: 1201 Mbps
Channel Width	20/40/80 MHz
Max. Output Power	20 dBm ± 2 dBm
Antenna Gain	2.4 GHz: 5dBi (±0.5) 5 GHz: 5dBi (±0.5)
Receiver Sensitivity	2.4 GHz 11n HT20_MCS0:-95 dbm 11n HT20_MCS7:-75 dbm 11n HT40_MCS0:-92 dbm 11n HT40_MCS7:-72 dbm 11ax HE20_MCS0:-95 dbm 11ax HE20_MCS11:-65 dbm 11ax HE40_MCS0:-92 dbm 11ax HE40_MCS11:-62 dbm 5 GHz 11ac VHT80_MCS0:-89 dbm 11ac VHT80_MCS9:-62 dbm 11ax HE80_MCS0:-89 dbm 11ax HE80_MCS11:-59 dbm
Optimal Transmission Distance	63 m (206.69 ft)
Channel	2.4 GHz: 1-13 5 GHz: 36/40/44/48,52/56/60/64,149/151/153/157/161/165
Connected Wireless Terminals	2.4 GHz: 32 5 GHz: 32

Function

Encryption Mode	WPA-PSK WPA-PSK/WPA2-PSKWPA2-PSKWPA2-PSK/WPA3-SAEWPA3-SAE
Management and Log	NTP; Syslog
Firmware Update	Web/WiLynk App update
OFDMA	Yes
MU-MIMO	2x2
DHCP	Yes
NAT	Mapping based on port

VPN	L2TP PPTP
QoS	Yes
DDNS	Yes
Parental Controls	Yes
Equipment Management	Yes

General

Power Supply	12 VDC,1 A
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Storage Temperature	−20 °C to +70 °C (−4 °F to 158 °F)
Operating Humidity	10%–90% (RH), non-condensing
Gross Weight	0.73 kg (1.61 lb)
Net Weight	0.43 kg (0.95 lb)
Packaging Dimensions	309 mm × 298 mm × 61 mm (12.17" × 11.73" × 2.40") (L × W × H)
Product Dimensions	252 mm × 155mm × 178 mm (9.92" × 6.10" × 7.01")(L × W × H)
Statics Protection	Air discharge: 8 kV Contact discharge: 6 kV
Lighting Protection	Common mode: 2 kV Differential mode: 0.5 kV
Installation	Desktop mount
Packing List	1 × Device 1 × Power adapter 1 × Ethernet cable 1 × Quick Start Guide 1 × Legal and Regulatory Information

Dimensions (mm[inch])

Panels