Wi-Fi CERTIFIED™ Certificate

This certificate lists the features that have successfully completed Wi-Fi Alliance interoperability testing. Learn more: www.wi-fi.org/certification/programs

Certification ID: WFA131992

Product Info

Date of Certification	February 26, 2025
Company	HAN Networks Co., Ltd.
Product Name	HAN Access Point
Product Model Variant	add MCS12-13
Model Number	AP521
Category	Routers
Sub-category	Enterprise/Service Provider Access Point, Switch/Controller or Router

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Passpoint® Release 3
Network management	WMM® WMM®-Power Save Wi-Fi Agile Multiband™
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01 WPA3™-Enterprise 2022-12 WPA3™-Personal 2023-12 Wi-Fi Enhanced Open™ 2023-12
Wi-Fi (MAC/PHY)	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities 6 GHz Spectrum Capabilities Spectrum & Regulatory Wi-Fi CERTIFIED 6® Wi-Fi CERTIFIED 7™ Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ Certificate

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CLASSIFICATION	CERTIFICATION
Wi-Fi (MAC/PHY)	Wi-Fi CERTIFIED™ n

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Wi-Fi Components

Wi-Fi Component Operating System

linux 5.4

Wi-Fi Component Firmware

SPF 12.2

RF Architecture

Bands Supported	Transmit (Tx)	Receive (Rx)
2.4 GHz	2	2
5 GHz	4	4
6 GHz	2	2

Certifications

2.4 GHz Spectrum Capabilities

20 MHz Channel Width in 2.4 GHz
40 MHz Channel Width in 2.4 GHz

5 GHz Spectrum Capabilities

20 MHz Channel Width in 5 GHz
40 MHz Channel Width in 5 GHz
80 MHz Channel Width in 5 GHz
160 MHz Channel Width in 5 GHz

6 GHz Spectrum Capabilities

20 MHz Channel Width in 6 GHz
40 MHz Channel Width in 6 GHz
80 MHz Channel Width in 6 GHz
160 MHz Channel Width in 6 GHz
320 MHz channel width in 6 GHz

Passpoint® Release 3

Roaming Consortium Selection

Passpoint® Release 3 (continued)

Terms and Conditions
Venue Information

Protected Management Frames

Spectrum & Regulatory

802.11d
802.11h

WMM®

WMM®-Power Save

Unschedule auto PS

WPA2™-Enterprise 2018-04

EAP methods

WPA2™-Personal 2021-01

WPA3™-Enterprise 2022-12

EAP methods

192-bit security

WPA3™-Personal 2023-12

AKM 24

Beacon Protection

Wi-Fi Agile Multiband™

Automatically populate BSS Transition candidate list

Cellular Data aware

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU

Basic Trigger frame in HE MU PPDU

BSRP Trigger frame

Compressed Block Ack Rx (buffer size 256)

Compressed Block Ack Tx (buffer size 256)

DL OFDMA

Individual Target Wake Time

LDPC Rx

LDPC Tx

MCS 8-9 Rx

MCS 8-9 Tx

MCS 10-11 Rx

MCS 10-11 Tx

MU EDCA Parameter Set element

MU-BAR Trigger frame

MU-RTS Trigger frame

M-BSSID

Operating mode subfield in A-Control field

Operating mode indication

Wi-Fi CERTIFIED 6® (continued)

Operating mode UL MU Rx

SU beamformer

SU-MIMO

TXOP RTS Threshold

UL OFDMA

Wi-Fi 6E

Co-located BSS

Wi-Fi CERTIFIED 7™

A-MPDU with A-MSDU

BSRP Trigger frame

BSS critical update

Compressed Block Ack Rx (buffer size 256)

Compressed Block Ack Tx (buffer size 256)

DL OFDMA

Dynamic MU SMPS

EMLSR (Enhanced Multilink Single-Radio)

LDPC Rx

LDPC Tx

MCS 8-9 Rx

MCS 8-9 Tx

MCS 10-11 Rx

MCS 10-11 Tx

MCS 12-13 Rx

MCS 12-13 Tx

Multi-RU

MU-RTS Trigger frame

Operating mode indication

Static puncturing

STR (Simultaneous Transmit and Receive)

SU-MIMO

Triggered uplink access optimization

UL OFDMA

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU
LDPC Rx
LDPC Tx
MCS 8-9 Rx
Short Guard Interval
STBC
SU beamformer

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

A-MPDU Tx
OBSS on Extension Channel
Short Guard Interval
STBC

Wi-Fi Enhanced Open™ 2023-12