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: WFA134171

Product Info

Date of Certification	February 20, 2025
Company	Extreme Networks
Product Name	AP4020 Universal Wireless Wi-Fi 7
Product Model Variant	WiFi 7
Model Number	AP4020-WW
Category	Routers
Sub-category	Enterprise/Service Provider Access Point, Switch/Controller or Router

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Connectivity	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities 6 GHz Spectrum Capabilities Wi-Fi CERTIFIED 6® Release 2 Wi-Fi CERTIFIED 7™ Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ n Wi-Fi Enhanced Open™ 2023-12
Optimization	WMM® Wi-Fi Agile Multiband™
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01 WPA3™-Enterprise 2022-12 WPA3™-Personal 2024-10
Spectrum & Regulatory Features	Spectrum & Regulatory

Wi-Fi CERTIFIED™ Certificate

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Wi-Fi Components

Wi-Fi Component Operating System

Linux

Wi-Fi Component Firmware

17.10.369.61

RF Architecture

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

Protected Management Frames

Spectrum & Regulatory

Spectrum & Regulatory (continued)

802.11d
802.11h

WMM®

Max Throughput

WPA2™-Enterprise 2018-04

EAP methods

WPA2™-Personal 2021-01

WPA3™-Enterprise 2022-12

EAP methods
192-bit security
Fast Transition OTA on WPA3-Enterprise
Fast Transition OTA on WPA3-Enterprise transition mode

WPA3™-Personal 2024-10

WPA3™-Personal 2024-10 (continued)

    AKM 24

Fast Transition OTA on WPA3-Personal

Fast Transition OTA on WPA3-Personal transition mode

Beacon Protection

Wi-Fi Agile Multiband™

Fast Transition OTA on WPA2-Enterprise

Fast Transition OTA on WPA2-Personal

Wi-Fi CERTIFIED 6® Release 2

A-MPDU with A-MSDU

Basic Trigger frame in HE MU PPDU

Beamforming sounding

BSRP Trigger frame

Compressed Block Ack Rx (buffer size 256)

Compressed Block Ack Tx (buffer size 256)

DL MU-MIMO

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

Operating mode subfield in A-Control field

Operating mode indication

Operating mode UL MU Rx

SU beamformer

SU-MIMO

Wi-Fi CERTIFIED 6® Release 2 (continued)

TXOP RTS Threshold

UL OFDMA

Wi-Fi 6E

    Co-located BSS

Wi-Fi 6 Release 2 features

    UL MU-MIMO

    UL MU Control

    Target Wake Time information frames

    Dynamic MU SMPS

    Preamble Puncturing

Wi-Fi CERTIFIED 7™

Advertised TID-to-link mapping

A-MPDU with A-MSDU

Beamforming sounding

BSRP Trigger frame

BSS critical update

Compressed Block Ack Rx (buffer size 256)

Compressed Block Ack Tx (buffer size 256)

DL MU-MIMO

DL OFDMA

Dynamic MU SMPS

EMLSR (Enhanced Multilink Single-Radio)

EPCS (Emergency Preparedness Communications Services) priority access

LDPC Rx

LDPC Tx

Load Balancing in MLO

MCS 8-9 Rx

MCS 8-9 Tx

MCS 10-11 Rx

MCS 10-11 Tx

MCS 12-13 Rx

MCS 12-13 Tx

Wi-Fi CERTIFIED 7™ (continued)

Multi-link reconfiguration – AP removal

Multi-link reconfiguration – AP restart

Multi-RU

MU-RTS Trigger frame

Operating mode indication

    Operating mode indication for 320 MHz

Static puncturing

STR (Simultaneous Transmit and Receive)

SU-MIMO

Triggered uplink access optimization

UL MU-MIMO

UL OFDMA

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU

DL MU-MIMO

Extended 5 GHz Channel Support

LDPC Rx

LDPC Tx

MCS 8 Rx

MCS 8-9 Rx

Short Guard Interval

STBC

SU beamformer

Wi-Fi CERTIFIED™ n

A-MPDU Tx

HT Duplicate Mode

OBSS on Extension Channel

RIFS

Short Guard Interval

Wi-Fi CERTIFIED™ n (continued)

STBC

Wi-Fi Enhanced Open™ 2023-12