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: WFA131916

Product Info

Date of Certification	August 20, 2024
Company	Extreme Networks
Product Name	AP5020 Universal Wireless Wi-Fi 7
Product Model Variant	Wi-Fi 7
Model Number	AP5020-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™ b Wi-Fi CERTIFIED™ g 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 2023-12
Spectrum & Regulatory Features	Spectrum & Regulatory

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Wi-Fi Components

Wi-Fi Component Operating System

Linux

Wi-Fi Component Firmware

17.10.369.1808

RF Architecture

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

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

WPA3™-Personal 2023-12

WPA3™-Personal 2023-12 (continued)

AKM 24

Beacon Protection

Wi-Fi Agile Multiband™

Fast Transition OTA on WPA2-Personal

Wi-Fi CERTIFIED 6® Release 2

4 antenna support

A-MPDU with A-MSDU

Basic Trigger frame in HE MU PPDU

Beamforming sounding

BSRP Trigger frame

Co-located BSS

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 indication

SU beamformer

SU-MIMO

TXOP RTS Threshold

UL OFDMA

Wi-Fi 6E

Wi-Fi CERTIFIED 6® Release 2 (continued)

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

Basic Trigger frame in EHT MU PPDU

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)

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

Multi-link reconfiguration – AP removal

Multi-link reconfiguration – AP restart

Multi-RU

MU-RTS Trigger frame

Operating mode indication

Wi-Fi CERTIFIED 7™ (continued)

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™ b

Wi-Fi CERTIFIED™ g

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

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