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: WFA127120

Product Info

Date of Certification	July 13, 2023
Company	Extreme Networks
Product Name	AP3000X
Product Model Variant	AP3000X
Model Number	AP3000X-WW
Category	Routers
Sub-category	Enterprise/Service Provider Access Point, Switch/Controller or Router

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Network management	WMM® Wi-Fi Agile Multiband™
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01 WPA3™-Enterprise 2022-12 WPA3™-Personal 2022-06 Wi-Fi Enhanced Open™ 2021-01
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™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n

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Wi-Fi Components

Wi-Fi Component Operating System

Linux, version 4.19.183

Wi-Fi Component Firmware

17.10.188.93

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

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
Fast Transition OTA on WPA3-Enterprise
Fast Transition OTA on WPA3-Enterprise transition mode

WPA3™-Personal 2022-06

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WPA3™-Personal 2022-06 (continued)

Fast Transition OTA on WPA3-Personal

Fast Transition OTA on WPA3-Personal transition mode

Wi-Fi Agile Multiband™

Fast Transition OTA on WPA2-Enterprise

Fast Transition OTA on WPA2-Personal

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU

Basic Trigger frame in HE MU PPDU

Beamforming sounding

BSRP Trigger frame

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

TXOP RTS Threshold

UL OFDMA

Wi-Fi 6E

    Co-located BSS

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

RTS with BW Signaling

Extended 5 GHz Channel Support

A-MPDU with A-MSDU

DL MU-MIMO

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

STBC

Wi-Fi Enhanced Open™ 2021-01