



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

**Certification ID: WFA132136** 

### **Product Info**

Date of Certification November 8, 2024

**Company** Zyxel Communications Corporation

Product Name Tri-Band Wireless BE18000 10G Ethernet Gateway

**Product Model Variant** EE6510-10

Model Number EE6510-10

**Category** Routers

**Sub-category** Cable, DSL or Other Broadband Gateway (Integrated Home Access

Device)

# **Summary of Certifications**

CLASSIFICATION	CERTIFICATION
----------------	---------------

**Connectivity** 2.4 GHz Spectrum Capabilities

5 GHz Spectrum Capabilities6 GHz Spectrum Capabilities

Wi-Fi CERTIFIED 6®
Wi-Fi CERTIFIED 7™
Wi-Fi CERTIFIED™ a
Wi-Fi CERTIFIED™ b
Wi-Fi CERTIFIED™ g
Wi-Fi CERTIFIED™ n

Optimization WMM®

Wi-Fi Agile Multiband™

**Security** Protected Management Frames

WPA2<sup>™</sup>-Personal 2021-01 WPA3<sup>™</sup>-Personal 2023-12

Spectrum & Regulatory

**Features** 

Spectrum & Regulatory



**Certification ID: WFA132136** 



Role: Access Point Page 2 of 4

### Wi-Fi Components

Wi-Fi Component Operating System

Linux version 4.19.274

Wi-Fi Component Firmware

V5.19(ACJQ0)C0

### **RF Architecture**

Bands Supported	Transmit (Tx)	Receive (Rx)
2.4 GHz	3	3
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)**

802.11h

### **WMM®**

WPA2™-Personal 2021-01

### WPA3™-Personal 2023-12

AKM 24
Beacon Protection

## Wi-Fi Agile Multiband™

### Wi-Fi CERTIFIED 6®

4 antenna support

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)



Certification ID: WFA132136



Role: Access Point Page 3 of 4

### Wi-Fi CERTIFIED 6® (continued)

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 7™ (continued)

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

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 7™

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)

LDPC Rx

LDPC Tx

MCS 8-9 Rx

MCS 8-9 Tx

### Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU

DL MU-MIMO

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





**Certification ID: WFA132136** 

# Role: Access Point Wi-Fi CERTIFIED™ n (continued) A-MPDU Tx HT Duplicate Mode OBSS on Extension Channel Short Guard Interval STBC