

## **High-end Tri-band 4x4 Wi-Fi 6E Wireless AP WF-196 Product Datasheet**

VERSION0.3

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*Partnership for the Next Generation Broadband Solution*

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## ■ Overview

WF-196 is a tri-band 4x4 MU-MIMO 802.11ax indoor Wi-Fi AP, which is designed for high-density deployments in large offices, schools, hospitals and hotels that require premium performance. WF-196 supports 802.11ax advanced Wi-Fi technologies, OFDMA, MU-MIMO and 1024-QAM. It can provide up to 11Gbps aggregated data rates. It helps you to establish the high speed and stable wireless network. You can access to internet with the phone, pad or laptop in any place. The enhanced transmission power and receive sensitivity make it deliver the high throughput and reliable coverage required. WF-196 has perfect compatibility. It works with most wireless terminals to build a high capacity Wi-Fi network.

WF-196 supports PoE power supply or with USB type-c adapter, and is very easy to install. Just connect the Ethernet cables to the PoE interface and mount it on either ceiling or wall.



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## ■ Key Features

- Ceiling installation
- 2.4G 4x4 Wi-Fi (802.11b/g/n/ax), 20/ 40MHz
- 5G 4x4 Wi-Fi (802.11a/n/ac/ax), 20/ 40/ 80MHz
- 6G 4x4 Wi-Fi (802.11ax), 20/ 40/ 80/ 160MHz
- 4 x dual-band 2.4G/5G Integrated antennas
- 4 x 6G Integrated single-band antennas
- 1 x BLE integrated antenna
- 1 x Bluetooth 5.0
- 1 x 2.5GbE LAN
- 1 x 5GE WAN with 802.3bt PoE(Full functionality) or 802.3at PoE(USB disabled)
- 1 x Reset button
- 1 x Tri-color LEDs for visual indicators
- 1 x USB type-c 15V@2A



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## ■ Specification

Item	WF-196
Dimension (W x D x H)	225mm x 225mm x 38mm
Weight	1600g
Installation	Ceiling mount or Wall mount
LEDs	1x tri-color(Red/Green/Blue) status LED
Interface	<ul style="list-style-type: none"> <li>• 1 x RJ45 2.5GbE LAN</li> <li>• 1 x RJ45 5GbE WAN with 802.3bt Poe(PD) or 802.3at (USB disabled)</li> <li>• 1 x Reset button</li> <li>• 1 x USB type-c Jack 15V@2A</li> </ul>
Input Voltage	<ul style="list-style-type: none"> <li>• 42.5V ~ 57V, 802.3bt PoE (PD)</li> <li>• AC/ DC adapter, 15V@2A</li> </ul>
Power consumption	< 30W
<b>Environmental Specification</b>	
Temperature	Operation: 0°C ~ +40°C Storage: -30°C ~ +70°C
Operating Humidity	5% ~ 95% (non-condensing)
Elevations	86kPa ~ 106kPa altitude
Dustproof and Waterproof	IP20
Safety	<ul style="list-style-type: none"> <li>• NRTL Listed 62368 (US &amp; CA)</li> </ul>

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	<ul style="list-style-type: none"> <li>• CB with IEC/EN 62368-1 (Basic safety certificate for worldwide marketing)</li> <li>• EN 60601-1-1: 2001 (medical directive compliance)</li> <li>• UL2043 (Plenum rating)</li> <li>• GB 9254 -2008(Class B of Product) , EN55032, CISPR 32:2015 , EN55035, CISPR 25</li> <li>• Shall be RoHS 2011/65/EU compliant (RoHS 6 compliant, no Pb)</li> <li>• WEEE 2002/96/EC recyclable materials requirements</li> </ul>
<b>Chipset</b>	
SoC	Qualcomm chipset
Flash	128MB SPI Nor Flash + 1GB NAND Flash
DDR	2GB DDR3L RAM
<b>Wi-Fi Interface</b>	
Operating frequency	2.4G radio:2.4000GHz~2.4835GHz
	5G radio:5.150~5.250,5.250~5.350,5.470~5.725, 5.725~5.850 GHz
	6G radio: 5.925 ~ 7.125GHz
Maximum Transmit power (per chain)	2.4G radio:18dBm@MCS0; 16dBm@MCS7 HT40; 14dBm@MCS11 HE40
	5G radio:17dBm@MCS0; 15dBm@MCS7 HT40;14dBm@MCS9 VHT80; 13dBm@MCS11 HE80
	6G radio:17dBm@MCS0; 14dBm@MCS11 HE20;14dBm@MCS11 HE40; 14dBm@MCS11 HE80/160
Data Rate	802.11b: 1, 2, 5.5, and 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps 802.11a: 6, 9, 12, 18, 24, 36, 48 and 54Mb/s 802.11n: MCS0~MCS7 802.11ac: MCS0 ~ MCS9 802.11ax: MCS0 ~ MCS11
Receive Sensitivity	802.11g: -90dBm@6Mbps -74dBm@54Mbps

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	802.11n:			
		HT20	HT40	
	MCS0	-90dBm	-87dBm	
	MCS7	-71dBm	-68dBm	
	802.11a: -90dBm@6Mbps -74dBm@54Mbps			
	802.11ac:			
		VHT20	VHT40	VHT80
	MCS0	-90dBm	-87dBm	-84dBm
	MCS8	-67dBm	/	/
	MCS9	/	-61dBm	-58dBm
	802.11ax:			
		EH20	EH40	EH80
MCS0	-90dBm	-87dBm	-84dBm	
MCS11	-56dBm	-53dBm	-50dBm	
Antenna Pattern (Built-in Antennas)	Frequency(MHz)	2400 ~ 2500	4940 ~ 5850	
	Polarization	Vertical/Horizontal	Vertical/Horizontal	
	Gain(dBi)	≥3	≥3	

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## **Federal Communications Commission (FCC) Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generate, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## **RF exposure warning**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

FCC regulations restrict operation of this device to indoor use only. The operation of this device is prohibited on oil platforms, cars, trans, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10000 feet. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

## ■ Contact Information

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