

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

VERSION<sub>0.3</sub>

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Partnership for the Next Generation Broadband Solution

www.cigtech.com



## 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.

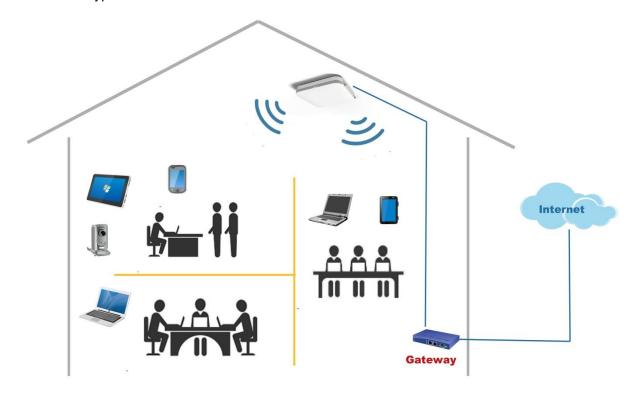


#### Notice:



# 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





# Specification

Item	WF-196			
Dimension (W x D x H)	225mm × 225mm × 38mm			
Weight	1600g			
Installation	Ceiling mount or Wall mount			
LEDs	1x tri-color(Red/Green/Blue) status LED			
Interface	<ul> <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> <li>42.5V ~ 57V, 802.3bt PoE (PD)</li> <li>AC/ DC adapter, 15V@2A</li> </ul>			
Power consumption	< 30W			
Environmental Specific	eation			
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	NRTL Listed 62368 (US & CA)			

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Item	WF-196					
	<ul> <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>					
Chipset						
SoC	Qualcomm chipset					
Flash	128MB SPI Nor Flash + 1GB NAND Flash					
DDR	2GB DDR3L RAM					
Wi-Fi Interface						
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					
	802.11b: 1, 2, 5.5, and 11Mbps					
Data Rate	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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Item		WF-196									
	802.11n:	802.11n:									
		HT20	)	-87dBm -68dBm							
	MCS0	-90dl	3m								
	MCS7	-71dl	3m								
	802.11a: -	802.11a: -90dBm@6Mbps									
	-7	-74dBm@54Mbps									
	802.11ac:	802.11ac:									
		VHT20	O VHT40 VH		VHT	<sup>-</sup> 80					
	MCS0	-90dBm	-87d	-87dBm -84		dBm					
	MCS8	-67dBm		/		/					
	MCS9	/	-61d	Bm	-580	dBm					
	802.11ax:	802.11ax:									
		EH20	EH4	0	EH8	30					
	MCS0	-90dBm	-87d	Bm	-840	dBm					
	MCS11	-56dBm	-53d	Bm	-50c	dBm					
Antenna Pattern (Built-in Antennas)		Frequency(MHz) Polarization		2400 ~ 2500 Vertical/Horizontal		4940 ~ 5850 Vertical/Horizontal					
		Gain(dBi)		AI/1 1011Z	Jinai	≥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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