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## **High performance dual-band 802.11ac Wireless AP WF-185 Product Datasheet**

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VERSION 3.0

February, 2018

*Partnership for the Next Generation Broadband CPE*

[www.cigtech.com](http://www.cigtech.com)

## ■ Overview

WF-185 is a dual-band 2x2 MIMO 802.11ac indoor Wi-Fi AP, which is designed for high-density deployments in large offices, schools, hospitals and hotels that require premium performance. WF-185 supports 802.11ac 2.4G/5G Wi-Fi access and can provide up to 1167Mbps 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-185 has perfect compatibility. It works with most wireless terminals to build a high capacity Wi-Fi network.

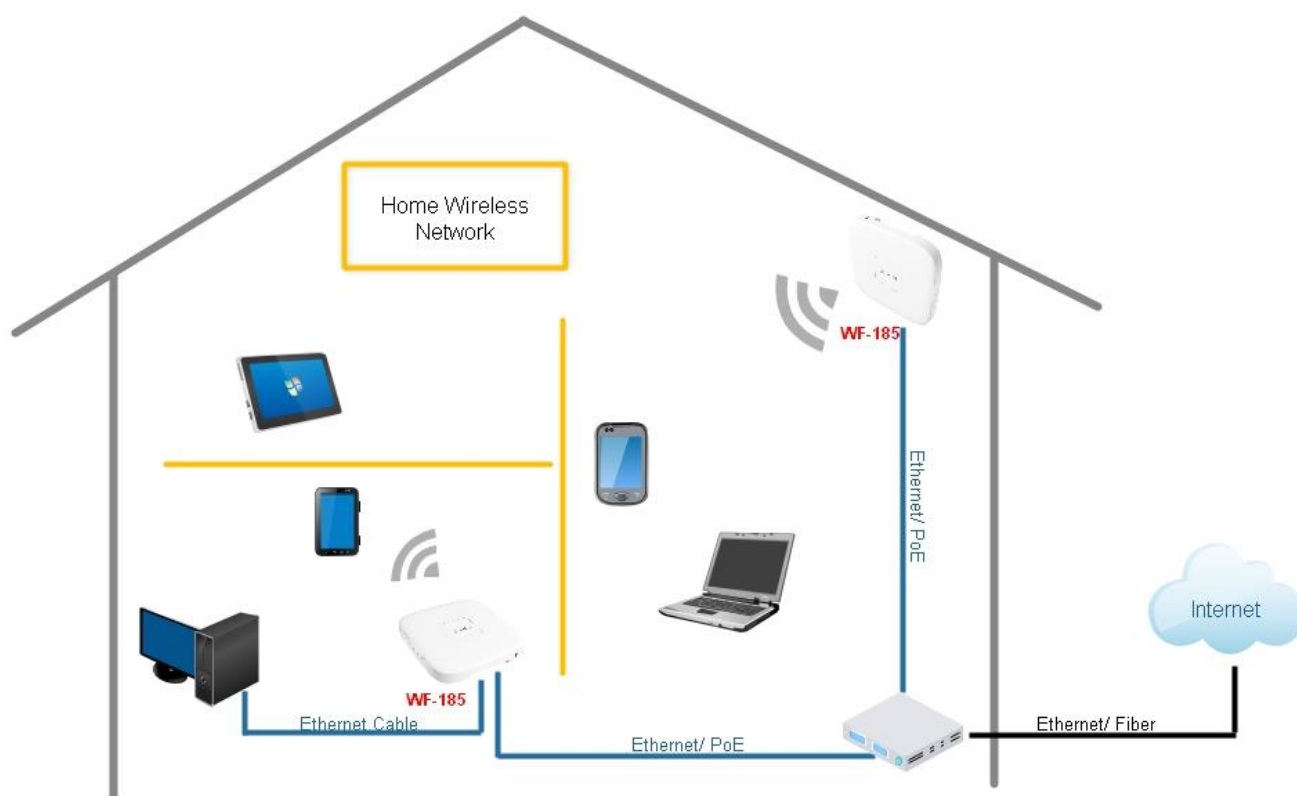
WF-185 integrates the OpenWrt development platform. This is easy for the user to develop the applications according to their customization requirement. If the users want to develop their own wireless AP very conveniently and quickly, WF-185 is a very good choice.

WF-185 supports PoE power supply and is very easy to install. Just connect the Ethernet cables to the PoE WAN and power on, and place them to appropriate place, wall or ceiling mounting. You can complete all of these in few minutes.



## ■ Key Features

- Desktop/wall or ceiling installation
- 2.4G 2x2 Wi-Fi (802.11b/g/n )
- 5G 2x2 Wi-Fi(802.11a/n/ac)
- 2 x Integrated dual-band antennas
- 1 x FE WAN (Blue RJ45)with 802.3 af PoE (PD) / non-isolated PoE
- 1 x FE LAN (Black RJ45 with no PoE)
- 1 x Reset button
- 4x LEDs for visual indicators (PWR/ WAN/ 5G/ 2.4G)



### Notice:

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## ■ Specification

Item	WF-185
Dimension (W x D x H)	158mm x 158mm x 24.5mm
Weight	300g
Installation	Ceiling mounting or wall mounting
LEDs	PWR/ WAN/ 5G/ 2.4G
Interface	1 x FE WAN (Blue RJ45)with 802.3 af PoE (PD) / non-isolated PoE 1 x FE LAN (Black RJ45 with no PoE) 1 x Reset Button 1 x Kensington Lock
Input Voltage	37V ~ 57V, 802.3 af PSE
<b>Environmental Specification</b>	
Temperature	Operation: -5°C ~ +45°C Storage: -20°C ~ +75°C
Operating Humidity	5% ~ 95% (non-condensing)
Elevations	86kPa ~ 106kPa altitude
Dustproof and Waterproof	IP20
Safety	CB with IEC/EN 60950-1 (Basic safety certificate for worldwide marketing) GB8254 – 2008(Class B of Product), EN55022, CISPR 22:2006, EN55924, CISPR 24:2010 CCC ( If required by the customer) SRRC( If required by the customer)

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Item	WF-185
	RoHS 2011/65/EU compliant ; WEEE 2002/96/EC recyclable materials requirements
<b>Reliability</b>	
MTBF	> 300,000 Hours Telcordia SR-332, Reliability Prediction Procedures for Electronic Equipment, Issue 3, Method 1, Case 3, GB/GC (Ground Benign, Controlled) environment, 25°C ambient temperature. Steady state, not including software failure.
AFR	AFR (Annualized Failure Rate) < 1.5% (in continuous operation)
<b>Chipset</b>	
SoC	QCA9531
Wi-Fi Chipset	QCA9886(5G 2x2 802.11ac)
Flash	16MB Nor flash
DDR	128MB DDR2 memory
<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
Maximum Transmit power (per chain)	2.4G radio:23dBm@MCS0; 21dBm@MCS15
	5G radio:23dBm@MCS0; 18dBm@MCS9
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~MCS15 802.11ac: MCS0 ~ MCS9
Receive Sensitivity	802.11g: -88dBm@6Mbps -74dBm@54Mbps

Item	WF-185																								
	802.11n: <table border="1" data-bbox="483 390 1032 537"> <thead> <tr> <th></th> <th>HT20</th> <th>HT40</th> </tr> </thead> <tbody> <tr> <td>MCS0/8/16</td> <td>-88dBm</td> <td>-85dBm</td> </tr> <tr> <td>MCS7/15</td> <td>-71dBm</td> <td>-68dBm</td> </tr> </tbody> </table> 802.11a: -88dBm@6Mbps -74dBm@54Mbps  802.11ac: <table border="1" data-bbox="483 695 1107 842"> <thead> <tr> <th></th> <th>VHT20</th> <th>VHT40</th> <th>VHT80</th> </tr> </thead> <tbody> <tr> <td>MCS0</td> <td>-88dBm</td> <td>-85dBm</td> <td>-82dBm</td> </tr> <tr> <td>MCS9</td> <td>-64dBm</td> <td>-61dBm</td> <td>-58dBm</td> </tr> </tbody> </table>					HT20	HT40	MCS0/8/16	-88dBm	-85dBm	MCS7/15	-71dBm	-68dBm		VHT20	VHT40	VHT80	MCS0	-88dBm	-85dBm	-82dBm	MCS9	-64dBm	-61dBm	-58dBm
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## ■ Contact Information

### **Cambridge Industries USA Inc.**

2445 Augustine Dr., 6th FL.

Santa Clara, CA 95054

Tel: +1(408)606-2200

Email: [nasales@cigtech.com](mailto:nasales@cigtech.com)

### **CIG Shanghai Co., Ltd.**

5/F, Building 8, 2388 ChenHang Road

Shanghai, China 201114

Tel: +86-21-8023 3300

Email: [sales@cigtech.com](mailto:sales@cigtech.com)

[www.cigtech.com](http://www.cigtech.com)